“Confronting Crisis through Academic Research to Conquer Economic Challenges”

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5th Annual Research Symposium in Management

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Accounting

The impact of integrated reporting on the firm performance; evidence from listed companies in Sri Lanka

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Introduction

With the release of the International Integrated Reporting Framework (IIRF) by the International Integrated Reporting Council in 2013, integrated reporting (IR) received attention as a new reporting format (IIRC). Many earlier studies have revealed a growing trend to adopt IR practice in the creation of annual reports, and these guidelines appear to have a dramatic impact on IR adopters around the world, including in Sri Lanka. It is critical in this context to measure its impact on IR users in terms of firm financial performance as well as firm market performance. IR entails providing both financial and non-financial information in addition to environmental, social and governance data, in the same document (Adams & Simnett, 2011). Although several studies have seemingly addressed this issue, these studies are constrained by their choice of method and contextual setting. Therefore, the impact of IR on firm performance is still questionable and it makes this area further investigable. However, in the Sri Lankan context, there are limited studies on this issue. For instance, in South Africa where IR adoption is mandatory, Lee and Yeo (2016) found a positive association between the quality of IR information and the firm value. Islam (2021) investigated the relationship between IR and firm's performance in terms of operational, financial and market growth performance and revealed that IR has significant positive impact on all three types of performance of companies in Bangaladesh where IR adoption is voluntary. As IR seeks to explain to financial capital providers how an entity develops value over time, this study assessed the influence of integrated reporting on company performance of Sri Lankan listed companies by filling an empirical gap.

Methodology

This research relies on secondary data which was collected from published annual reports of listed companies on the Colombo Stock Exchange (CSE). Data was collected from a sample of 50 companies listed in different sectors over consecutive five financial years from 2016 to 2020. 50 companies were selected using the stratified sampling method, which covers all 19 sectors, to create the sample for each sector. This research belongs to the positivism category which is connected with the deductive approach.

Integrated reporting was the independent variable in this study. The technique of content analysis was occupied when measuring the quality of integrated reporting. An integrated reporting index including 40 items was developed based on the International Integrated Reporting Framework (IIRF) to measure the Integrated Reporting. Return on Equity (ROE) was considered as the firm financial performance variable while Market Capitalization was considered as the firm market performance variable. Figure 01 illustrates the conceptual framework of this study.

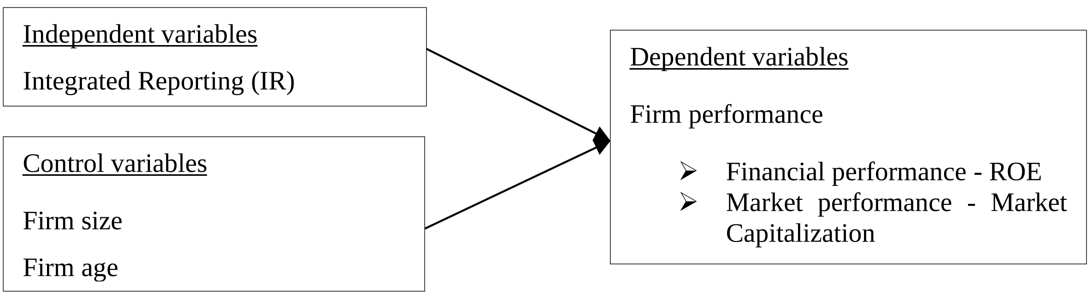

Figure 1: Conceptual Framework

To analyze the relationship between dependent and independent variables, this study will use descriptive analysis, as well as panel regression analysis with panel data to measure the impact of independent variable on the dependent variables.

Hypotheses of this study are;

H_1: There is an impact of the adaptation of Integrated Reporting on ROE

H_2: There is an impact of the adaptation of Integrated Reporting on Market Capitalization

Findings

The findings of this study revealed that the average IR quality is 77.6% confirming that the Sri Lankan listed companies are following the IIRF when they are preparing their integrated annual reports. The Hausman test was used to select the most appropriate regression model (Fixed Effect Model or the Random Effect model) to analyze the panel data. The hypotheses tested under the Hausman test are as follows,

H_0 = Random effect model is appropriate

H_1 = Fixed effect model is appropriate

When considering the **ROE**, the probability value of the Chi-Square Statistic is 0.025, which is significant at the 5% significant level. As per the Hausman test, the alternative hypothesis was accepted and rejected the null hypothesis. Thereby Hausman test concluded that the fixed effect model is more appropriate to analyze the panel data.

Table 1: Panel regression analysis (ROE)

Variable	Coefficient	t-Statistic	Prob.
C	1.660	1.364	0.1738
IGRI	-0.518	-3.087	0.0023
FZ	-0.045	-0.851	0.3957
FA	-0.0007	-0.225	0.8215
R-squared	0.901	F-Statistic	6.3360
Adjusted R-squared	0.875	Prob(F-Statistic)	0.0003

This independent variable is significant since the p-value (p=0.0023) is less than 0.05. And the t-statistic value is -3.087. According to the Hausman test, it is specific that there is a significant impact of integrated reporting on ROE. The coefficient value is -0.518. It specifies that there is a negative impact of integrated reporting on ROE.

When considering **market capitalization**, the probability value of the Chi-Square statistic is zero, which is significant at a level of 5%. According to the outcomes of the Hausman test, the fixed-effect model is the best appropriate model to assess the data set that explains market capitalization as the dependent variable of the model.

Table 2: Panel regression analysis (Market Capitalization)

Variable	Coefficient	t-Statistic	Prob.
C	21.173	10.174	0.0000
IGRI	-0.839	-2.922	0.0039
FZ	0.094	1.042	0.2986
FA	-0.008	-1.609	0.1091
R-squared	0.970	F-Statistic	164.70
Adjusted R-squared	0.963	Prob(F-Statistic)	0.0000

Based on the results of the fixed effect regression model, the coefficient value is -0.839. It specifies that there is a negative impact of integrated reporting on MC. The probability value of the coefficient is 0.0039 which is significant at a 5 % confidence level. Based on the above result, it can be concluded that there is a negative and statistically significant impact of integrated reporting on market capitalization.

Conclusion

The objective of the study was to identify the impact of the adaptation of IR on the firm market and financial performance. A regression study revealed a significant and weekly negative relationship between ROE and IR. That means IR has a significant impact on financial performance. El-Deeb (2019), also found the same result, that there is a significant impact of IR on ROE, but he stated that the relationship was positive. Because they exclusively used South American banks, Matemane and Wentzel (2019), said that there was no significant impact of IR on ROE and that the sample size was insufficient. Market capitalization and IR have a significant relationship, according to (Ghosh, 2019). The findings of the regression analysis also revealed the same result, according to this study. This result was consistent with agency theory, which stated that conflicts between managers and shareholders can be reduced if companies improve their disclosure, and this improved disclosure can help corporations achieve their goal of increasing their value. That means that IR has a significant impact on market performance.

The findings of this study will assist annual report preparation and regulators in implementing IIRF in the Sri Lankan context. Findings have several implications for annual report preparers and policy makers since IR has significant impact on both financial performance and market performance. Because this study is based on secondary data, its accuracy may be low, and the scope of this analysis and findings is constrained by the size of the sample. Future research can continue this study further by expanding the sample size and increasing the number of firm performance variables. Moreover, the regression model can be developed by using more dependent variables which other researchers have used. Overall, the present research successfully answers the research questions and the results derived from the analysis by using e-views are adequate to provide evidence on all the hypotheses testing.

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Impact of voluntary disclosure level on the value relevance of accounting information

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Introduction

Increasing stakeholder awareness and the complexity of the business environment drive organizations to be more transparent by providing more information to the relevant parties not only via Financial Statements, but also via disclosure of more corporate reporting practices. Organizations are encouraging to increase the level of transparency more toward knowledge-based industries & expanded access to a globalized-environment. Jianweiw and Chunjiao (2007) had stated that, One of the most important aspects of financial statement quality in making decisions is value relevance, which represents “ability of accounting numbers to summarize information underlying market prices” Accordingly, if accounting data is associated with company's market worth, it is deemed value relevant. The role of accounting numbers in company valuation is of fundamental interest to analysts, investors and researchers similarly. When there is a high degree of information asymmetry between investors and the firm, disclosures are turn as a way for managers to show stakeholders the value of their company.

The existing literature on voluntary disclosure offers numerous potential business motivations to encourage larger amount of voluntary disclosures. For instance, Lundhlm and Myers (2002) investigated whether greater disclosure information is reflected in Market value per share (MVPS), and Hassan et al. (2009) empirically tested association between voluntary disclosure of Egyptian listed companies and company value. Since previous researchers have looked at the impact of Voluntary disclosure level (VDL) on the value relevance of only Earnings per share (EPS) and Book value per share (BVPS), this study aims to expand on these findings.

However, empirical research on the value relevance of EPS, BVPS, and operating cashflow per share (OCFPS) influenced by voluntary disclosure in Sri Lanka after adoption of new accounting standards which focusing on fair value measuring was minimal. Thereby, this study aims to investigate this contextual gap, which hasn’t been well-researched previously, particularly in Sri Lanka. The first goal of this research is to determine whether accounting information from Colombo Stock Exchange (CSE) listed companies is relevant for investors decision making, and whether voluntary disclosure practices would improve or degrade this capability by analyzing MVPS as the proxy for value relevance was the second objective.

Methodology

This study concentrated on quantitative research methodologies and the study's research philosophy is positivism. Archival research was chosen as the best fit for this study because it allows for the collection of a large amount of data via the study of secondary data sources mostly the annual reports and as the study establish causal links between variables, nature of the research deemed to be explanatory, while analyses are presented by using descriptive approach.

This analysis used 102 publicly traded companies out of 296 CSE listed companies for a three-year period between 2019 and 2021. The study's conceptual approach is based on research on voluntary disclosure practice and company value relevance. EPS, BVPS, and OCFPS were used as independent variables to reflect accounting information that affects MVPS, the dependent variable. The first model was created to evident this impact by measuring the value relevance of accounting information.

Model 01:

$MVPS = \alpha + \beta_1\ EPS + \beta_2\ BVPS + \beta_3\ OCFPS + \mathcal{E}$

VDL influences this relationship indirectly as the moderating variable. This second model expresses MVPS as a function of EPS, BVPS, and OCFPS, with the influence of the voluntary disclosure index functioning as a moderating function.

Model 02:

$MVPS = \alpha + \beta_1\ EPS + \beta_2\ BVPS + \beta_3\ OCFPS + \beta_4\ \text{INDEX} + \beta_5\ \text{INDEX} * EPS + \beta_6\ \text{INDEX} * BVPS + \beta 7\ \text{INDEX} * OCFPS + \mathcal{E}$

Based on the conceptual framework and the existing literature following hypotheses were developed.

H1: There is an impact of EPS on MVPS

H2: There is an impact of BVPS on MVPS

H3: There is an impact of OCFPS on MVPS

H4: There is an impact of VDL on the relationship between EPS and MVPS

H5: There is an impact of VDL on the relationship between BVPS and MVPS

H6: There is an impact of VDL on the relationship between OCFPS and MVPS

Descriptive statistics and panel regression were used to analyze the data after performing the residual diagnostic tests such as normality, correlation, the VIF test, and autocorrelation.

Findings

Descriptive statistics can be used to summaries the data because it describes the key characteristics of the quantitative data. The mean value of VDL indicate that averagelysample companies have disclosed 54.85% of voluntary disclosure requirements which is a moderate level of disclosure. The voluntary disclosure index ranges from the highest value of 89% to the lowest 21%, indicating that there is a greater variation among the disclosure levels of the company.

After performing Hausman Test, the fixed effect model was identified as the best model for data analysis.

Table 01 – Fixed Effect Model Statistics for Model 01

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	50.990	41.286	1.235	0.218
BVPS	0.617	0.197	3.119	0.002
EPS	-0.691	0.451	-1.530	0.127
OCFPS	0.020	0.179	0.111	0.911
R-squared	0.877	Adj: R^2		0.814

Source: (EViews Output, 2022)

Table 01 indicates that independent variables explain the 87.7 % of the variation of the market price and BVPS has a significant positive impact on the market price of share. This will course to accept H2 by rejecting H1 & H3 to satisfy the first objective.

According to the table 02, EPS is significantly impact ($P < 0.01$) on the market price of shares. However, the relationship is negative. The interaction effect of EPS and INDEX implied that a significant positive influence of voluntary disclosures on the value relevance of EPS which represent the earnings of the company. The response to earnings increased in the presence of the voluntary disclosures. This finding support to achieve H4 but reject H5 and H6 by accomplishing the second objective. So, the study's regression model can be developed as follows.

MVPS= -176.851+0.796 BVPS+4.223 OCFPS +412.805 INDEX+12.240 INDEX*EPS+ ε

Table 02 – Fixed Effect Model Statistics for Model 02

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-176.851	248.422	-0.711	0.477
BVPS	0.796	0.558	1.425	0.155
EPS	-6.381	2.131	-2.994	0.003
INDEX_BVPS	-0.466	0.973	-0.479	0.632
INDEX_EPS	12.240	4.530	2.701	0.007
INDEX_OCFPS	-6.005	3.582	-1.676	0.095
INDEX	412.805	442.536	0.932	0.352
OCFPS	4.223	2.524	1.672	0.095
R-squared	0.884		Adj R^2	0.820

Source: (EViews Output, 2022)

Conclusion

The objective of the study was to examine the value relevance of accounting information and identify the whether the value relevance of accounting information increase or deteriorates due to the voluntary disclosures. Accordingly, BVPS is significant that positively influences on the MVPS indicating that BVPS has value implications for investors. Other researchers such as, Barth et al., (2018); Coory et al. (2020) also found that BVPS is a significant value relevant variable that demonstrates investors' confidence in BVPS when making decisions. However, when the model is incorporated with INDEX and the interaction effects EPS show a significant negative impact on the MVPS. Same finding was discovered by Coory et al. (2020) and concluded that the result caused by the macroeconomic factors such as political instability, significant depreciation of rupee against major currencies. Further interaction effect of EPS and INDEX shows a significant positive impact on the MVPS indicating VDL exhibits substantial influence on the value relevance of earnings which will ultimately help investors make better investment decisions. This study offers factual proof of the market's indirect impact of VDL. To improve the complementary nature of the reporting process, it provides support for future regulatory activity that tends to successfully monitor management. The study has implications for regulatory bodies in Sri Lanka with relation to the rules and regulations governing voluntary disclosures.

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Current status of forensic accounting education in Sri Lankan Universities: An analysis of websites

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Introduction

Economic and financial crimes have greater than before, in every corner of the economies of the world. These crimes affect all firms and the economies of nations (Maheshwari & Reddy , 2021). Following the spate of corporate scandals around the world such as Enron, WorldCom, and Global Crossing, there has been an increased demand for professionals trained in forensic accounting (Sorunke, 2018). Forensic accounting is a very important tool to detect, investigate and prevent fraud (Oladipo & Olurotimi, 2021). Sri Lanka is a developing country with critical issues of financial fraud and corruption. The increase of frauds in Sri Lanka, especially corporate financial accounting scandals such as government bond issue, Golden-Key issue, Pramuka Bank, Ceylinco group, EIT Finance issue, etc., and the rapid growth of governmental and corporate failures have created the necessity for adapting forensic accounting course into accounting education, (Peiris & Aruppala, 2021). Even though there are many governing bodies and guidelines have been issued for the ethical conduct of the businesses (Wijerathna & Perera, 2020). Forensic accounting profession is a comparatively new field in Sri Lanka where the expertise and skills are yet to be developed, (CBSL News Survey, 2020). Although the demand for forensic accounting has dramatically increased, the supply for forensic accounting education has not kept pace with it. A major obstacle facing forensic accounting is that education programs have not kept pace with the demand for service (Perera & Undugoda, 2020). With the consistently increasing demand for forensic accounting education, currently, number of Sri Lankan state universities has started offering forensic accounting courses (Uthpala & Kariyawasam, 2020). Some universities provide forensic accounting degrees, while others teach courses in forensic accounting within their accounting programs as a core or elective subject (Rathnasiri & Bandara, 2017). Therefore, this study aims to investigate what is the current status of forensic accounting education in Sri Lankan universities?

Methodology

According to the University Grant Commission there are seventeen established Sri Lankan Universities. Thereby, total seventeen Universities were considered as the population of this study. Out of seventeen universities two universities (University of the Visual & Performing Arts and Gampaha Wickramarachchi University of Indigenous Medicine) were excluded at the initial stage due to separate steams and the rest of the fifteen universities were considered as the sample of this study. Websites of Fifteen Sri Lankan universities were reviewed to ascertain the extent to which forensic accounting courses or programs of study are provided. The website analysis method has been used by researchers predominantly in the United State to explore the structure of forensic accounting curricula. The data gathering procedures started by identifying Sri Lankan universities that provide or have provided at least one course of forensic accounting. In the process of reviewing websites identified that, out of fifteen universities, only seven universities are providing forensic accounting courses and degrees (Appendix 01). Then, the final sample consists with seven universities that provide forensic accounting courses in 2022. Additionally, all Sri Lankan universities were examined to ensure the data's external validity.

Findings

Sri Lankan universities are providing forensic accounting education as one of a subject of their Bachelor's degree. Out of seven universities, only one university included the forensic accounting subject into their Master degree program “Master of Professional Accounting (MPAcc) Degree Program”. And also there is only one university providing a separate degree program relating to forensic accounting as a Bachelor of Business Management (Honors) in Auditing and Forensic Accounting in Sri Lanka. Out of seven universities, only two universities are providing forensic accounting subject as a core subject of the syllabi allocating three credits. Others are providing forensic accounting subject as an optional or elective subject. Some universities assigned only two credits for the forensic accounting subject.

Frauds

Forensic Accounting is useful for detecting such financial frauds and helps in the investigation of financial issues related (Ahamed & Sharmacharjee, 2019). So, Sri Lankan universities pay considerable attention to providing fraud-related education under forensic accounting education. Forensic accounting course contents consist with topics relating to disseminating knowledge regarding frauds, the definition of fraud, fraud triangle, the scope of fraud, fraud taxonomies, fraud tree, evolution of a typical fraud, accidental fraudsters and predator fraudsters, frauds in financial reporting, employer and employee frauds, fraudulent financial reporting, detecting frauds in financial reporting, Fraud Examination, Psychology of the Fraudster. Sri Lankan universities included these topics with the purpose of achieving their aim of "provide comprehensive theoretical overview of forensic accounting to detect, investigate, document, and prevent fraud in business".

Evidence Management, Litigation Support and Expert Witness

Evidence management, litigation support, and expert witnessing are identified as core topics in forensic accounting education. So, Sri Lankan universities incorporated these areas into their forensic accounting course content with the aim of "providing core forensic knowledge and its applicability in practice with an awareness of fraud examination, legal background and forensic criminology, forensic report preparing and interpretation". Course contents consist with disseminating knowledge regarding Gathering Evidence, Obtaining and Evaluating Nonfinancial Evidence in a Fraud Examination, Proper evidence management, General Criteria and Standards for Establishing an Expert Witness's Qualifications, Litigation support in special situations and Whistleblowing, Litigation services provided by accountants, Litigation support in special situations, Litigation services provided by accountants, Forensic Criminology and Legal Studies.

Money Laundering and Reconstructing Income

Money laundering is a hot topic in today's Sri Lankan context. So, it is an important area of study in forensic accounting education. So, most Sri Lankan universities paid attention to incorporating money laundering education into the course content. There are topics relating to money laundering such as an indirect method of reconstructing income, Money laundering and transnational financial flow, Money Laundering & Financial Crimes etc. with the aim of identification of problematic situations and inherently weak systems in organizations, designing and recommending solutions to minimize risks and the methodologies used by organizations and individuals in the management of risk associated with financial exposures.

Misappropriation of Assets & Business Valuation

Sri Lankan universities focus on disseminating knowledge on asset misappropriation, business valuation like false business valuations, legal issues, and loss valuation and business valuation, Commercial damages, computing economic damages, legal issues, and loss valuation. But, when analyzing forensic accounting courses identified that they have paid low attention to asset misappropriation. According to the data availability, out of seven universities, only two universities included this topic in the course content.

Digital Forensic

With the purpose of giving basic knowledge about evidence gathering in an IT-related environment and fraud Sri Lankan universities have incorporated digital forensic aspects into the forensic accounting course content. It mainly consists of digital forensic analysis, investigation of electronic data, computer crimes and cyber forensics, big data and tools of analyzing big data, and investigation of Electronic Data.

Table1: Different forensic accounting topics offer in different universities

Topic	University of Colombo	University of Peradeniya	University of Sri Jayewardenepura	University of Kelaniya	Rajarata University	Wayamba University	University of Jaffna
Frauds	√	√	√	√	√	√	√
Evidence Management	√	√	√	√	√	√	√
Litigation support	√	√	√	√	√	√	√
Expert Witness					√		
Business Valuation	√	√		√			
Money Laundering	√	√	√	√	√	√	√
Misappropriation of assets				√	√		
Digital Forensic	√	√	√	√	√		
Big Data	√						

Source: Developed by Researcher (2022)

Conclusion

Financial fraud and corruption are known to be critical issues in Sri Lanka. Forensic accounting will be one of the brightest professions of the future with the cost of fraud and corruption of governments and the private sector (Karabayir, 2019). This study aims to investigate the current status of forensic accounting education in Sri Lankan universities and explored the forensic accounting curricula construction within seven Sri Lankan universities websites and found that fraud, evidence management, litigation support, money laundering and reconstructing income, business valuation, and digital forensics as main components within the forensic accounting courses and program of study. Further, found that significant attention has been given to fraud which corresponds with the prior international research in this field (Tiwari & Debnath, 2017). However, there is little coverage of the role of forensic accounting in expert witnessing and asset misappropriation in which forensic accountants practice. In this regard, universities should revise their offerings to sufficiently cover the substantial legal duties of forensic accounting, including expert witness roles, preparing expert reports, and misappropriation of assets. Further, noted that courses lack topics covering bribery and corruption investigation, corporate governance and professional standards pertaining to forensic accounting which are necessary for practical forensic accounting work. The most important suggestion is that it needs to incorporate forensic accounting subjects into the curricula of other Sri Lankan universities considering the current demand of the subject. Another suggestion is to establish courses that incorporate more sociological and psychological concepts to help students better understand the social implications of fraud and the behavioral foundations of criminal activity. The current study has the following limitations. First, some university websites provide inconsistent and inadequate information about the courses. Second, the information provided herein was correct at the time of reviewing universities' websites. The consequences of these findings are significant because they give guidance for the revision of the forensic accounting curriculum, which is relevant to practitioners, standard-setters, accounting academics, and educators. However, the researchers think that this study will pave the way for other scholarly investigations in the area of forensic accounting education within the context of higher education in Sri Lanka.

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Determine the adoption of computerized accounting information systems for small and medium-scale enterprises: special reference to Nittambuwa area in Gampaha district

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Introduction

The main aim of this research is to identify & assess the factors influencing the adoption of computerized accounting information systems (CAIS) among small and medium-scale enterprises (SMEs). The. Cost; business size; availability of ICT infrastructure; government backing; and management support, ease of use all have an impact on SMEs' capacity to embrace and use ICT on an international level (Adebayo, Balogum, & Kareem, 2013), (OKechi & Kepeghom, 18-40) (Irefin, Abdu Azeez, & Tijani, 2012), But SMEs are less likely to adopt CAISs because of factors such as cost-benefit analysis, lack of government support, financial constraints, and the complexity of CAISs, according to (Edison, Manuere, Joseph, & Gutu, 2012). The computerized accounting information system is an information system that is developed to make the performance of accounting functions more effective. Computerized Accounting Information Systems (CAIS) are integrated tools in the field of Information Technology systems, developed to help manage and control issues related to financial activities. Beyond the recording figure, the CAIS will provide tracking options, higher security as well as the easiness of storing and moving data.

Traditionally, SMEs keep their records manually. That is a very slow method and takes more time and cost. Further manual accounting systems are often characterized by keeping books, documents, stationaries, and double works in recording data and are usually associated with troubles and errors. (Karunananda & Jayamaha, 2011) Underlined that issue, according that they keep a poor record, inefficient use of accounting information to support their financial decision-making, and the low quality and reliability of financial data. Incomplete records make it even harder for sound decisions to be made as they require an expert in accounting to interpret them into information, a deficiency that is often lacking in SMEs. However, failure to adopt and implement Accounting Information Systems is the reason why most companies fail to make sound decisions as their information keeping tends to be haphazard as the firm grows. This is one of the major problems in the financial management concerns of SMEs.

Research Objectives

- To find out how ease of use influences small and medium-sized businesses in the Nittambuwa area to use CAIS software.
- To identify the influence of human resources on the adoption of CAIS applications in Nittambuwa's small and medium-sized businesses.
- To identify the influence of cost on the adoption of CAIS applications in Nittambuwa's small and medium-sized businesses.
- To identify the influence of firm size on the adoption of CAIS applications in Nittambuwa's small and medium-sized businesses.
- To identify the influence of management support for the adoption of CAIS applications in Nittambuwa's small and medium-sized businesses.
- To identify the influence of infrastructure on the adoption of CAIS applications in Nittambuwa's small and medium-sized businesses.

Methodology

In this study, the researcher used a survey questionnaire that included 39 closes ended Likert scale questions categorized under two parts, research data, and demographic data. This study is based on a quantitative analytical method. The researcher was taken to consider all the micro & small businesses as the population, and 150 micro and small businesses were selected as a sample. Due to covid 19 situation, most businesses do not run or process their businesses as well as contacting them was a huge challenge; so the researcher selected a convenient sampling method and used electronic mail; the researcher sent the questionnaire to the respondents and collected data. In this research study, the regression analysis was done through SPSS, and it will generate a few numbers of outcomes such as Model summary, ANOVA table & Coefficients table.

Findings

This study focuses on examining the factors affecting the adoption of CAIS among SMEs in the Nittambuwa area in Gampaha District, Sri Lanka. Table 1 depicts the composition of the sample of the study. Most respondents were female. 36% of the respondents were 41-50 years of age. Most of the respondents fulfilled the advanced level. Nearly half of the respondents had 5-10 years of experience in the business.

Based on the Pearson correlation coefficient values, the study's results show that all the independent factors have a positive connection with the dependent variable. Firm size and infrastructure have a strongly positive relationship with the adoption of the computerized accounting system. (0.760, 0.737) Perceived ease of use, human resources, and management support has a moderate positive relationship with the adoption of computerized accounting. (0.38,0.583,0.590) The cost has a weekly positive relationship with the adoption of computerized accounting. (0.137).

According to the model's R square value, 64.7% of the variation in Computerized accounting adoption is described by six independent variables: perceived ease of use, human resources, cost; business size; management support; and infrastructure. Based on the analysis, the study objectives were examined and found the interconnection between the selected independent variables and the dependent variables. A significant amount of the relationship showed an accurate positive relationship between their variables and was found to be the most influential factors as Human resources, Firm Size, and infrastructure, which would have a highly positive impact on the adaption of computerized accounting rather than other key independent variables.

Table 1. Hypothesis Testing

Hypothesis	Significance Value	Accept or Reject
H1; There is an important influence between perceived ease of use and adoption of computerized account information systems	0.828	Reject
H2; There is an important influence between human resources and the adoption of computerized account information systems	0.043	Accept
H3; There is an important influence between cost and adoption of computerized account information systems	0.222	Reject
H4; There is an important influence between firm size and the adoption of computerized account information systems	0.000	Accept
H5; There is an important influence between management support and the adoption of computerized account information systems	0.651	Reject
H6; There is an important influence between infrastructure and adoption of computerized account information systems	0.005	Accept

An ANOVA table's 000 p-value of significance shows how well the model predicts the dependent variable when independent variables' P-values are less than 0.05. When it comes to individual predictability, human resources, infrastructure, and firm size have reasonable P-values to predict the dependent variable since they have less than 0.05 level 0f P-value based on the analysis. Accordingly, the hypotheses H2, H4, and H6 were accepted, and H1, H3, and H5 were rejected.

Conclusion

The main aim of this research is to identify & assess the factors influencing the adoption of computerized accounting information systems (CAIS) among small and medium-scale enterprises (SMEs). Based on the research findings, it was founded that the main influential factors are the adaption of computerized accounting systems in the organization as infrastructure, firm size, and human resources, rather than other independent variables of perceived ease of use, management support, and cost. As for recommendations, it can be given concern enhancing the infrastructure, firm size, and human resources of the organization will enhance the level of adaption of computerized accounting systems in the organization. The current study only investigated the context of SMEs and accounting systems. Without limiting to that area, other researchers can explore various kinds of studies in terms of their capacity to conduct in different business contexts in a different geographical locations having various cultures. Because rather than small and medium enterprises, large-scale or multinational organizations have to have adequate resources, and they can implement that kind of technology within their organization. Therefore, researchers can better go through the actual preparation of those systems within an organization and how they use them to achieve objectives and operations. In a global context, it's easy to acquire significant information, and the availability of information is high rather than in SMEs. Therefore, future researchers can explore more on that.

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Individual taxpayers' attitudes towards tax compliance behavior in Sri Lanka (A special reference to the Kandy district)

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Introduction

Taxation is a common method that policymakers in both developed and developing nations employ to generate revenue for the goal of financing public goods and services as well as the payment of governmental expenses. This action is taken to achieve the aim of paying for the expenditures associated with operating the government. Additionally, experts have recognized taxes as a tool that may stabilize an economy and lower private demand, so freeing up resources that may be employed in the public sector of a nation. This is because taxes are a kind of revenue collection. Taxes are a kind of revenue collection, which explains why this is the case. The requirement that taxes are a technique would therefore be fulfilled by this explanation. In the meantime, many developing countries are shifting their focus back to taxes to lessen their reliance on assistance or any other form of funding for development that comes from outside sources. This is being done to reduce their reliance on outside sources of funding for development. This is being done as part of an endeavor to lessen their dependency on sources of money for development. Based on these complaints, there are very few studies carried out in Sri Lanka addressing the intention to pay tax and tax compliance. There is an extreme lack of study on the people who are accountable for making tax payments in the Kandy area of Sri Lanka. "Does the attitude of the taxpayers impact the tax compliance decision in Sri Lanka?"

There have been several different attempts, both by tax professionals and academics, to define tax compliance. According to James and Alley (2002), tax compliance refers to the willingness of individuals, businesses, and other types of taxable organizations to voluntarily comply with the requirements of tax administration as well as the obligations of tax legislation. As a result, tax compliance is sometimes defined as the desire to comply with tax legislation to preserve economic stability within a country (Andreoni et al., 1998). Despite this, Kirchler, Hoelzl, and Wahl (2008) found that many people have the mentality that tax compliance is a duty and an activity that is carried out in line with the tax rules, regardless of the motives for compliance. According to the definitions presented above, it is common knowledge that taxpayers are required to file their tax returns, accurately report all sources of taxable income, and pay all taxes that are owed within the statutory time frame, without waiting for tax authorities to take any additional action (Kiow et al., 2017).

Methodology

This study used a quantitative research methodology and test established hypotheses based on accepted ideas and concepts using a deductive method. The study's target audience is the taxpayers in Kandy District. A systematic questionnaire was used to obtain primary data from taxpayers' in Kandy District. The concept and measurement served as the foundation for the questionnaire on individual taxpayers' attitudes and tax compliance behavior. Tax compliance behavior is the dependent variable of this study, and individual taxpayers'' attitude has an independent variable in this study. The three components of individual taxpayers' attitudes are tax fairness, understandability of tax law and perception of government accountability. There for questionnaire consists of two sections with thirty questions in total. Section one is named section A and it consists of covering demographic information about the taxpayers in Kandy District. Section two is named section B and it includes questions related to the tax fairness influence, Understandability of the tax law influence and Perception of government accountability influences of respondents. To make the selection process effective, probability sampling is used as the sampling strategy. 300 questionnaires in total were distributed to the participants by random sampling. 22 incomplete surveys were disregarded, leaving 278 questionnaires that were included in the data analysis.

The analysis was conducted using IBM SPSS software. The analytical techniques employed in this study were demographic analysis, correlation analysis, regression analysis, and hypothesis testing. Research quality is assessed using a reliability test. The demographic analysis was utilized to provide information on research participants and is required to determine whether the subjects in a study are representative of the intended population for generalization purposes. The relationship, patterns, noteworthy connections, and trends between the independent and dependent variables are found using correlation analysis. Regression analysis concentrates more on the relationship between changes in the independent factors and changes in the dependent variable. To determine whether a null hypothesis may be accepted or rejected, hypothesis testing is used. The following is the hypothesis:

H1: There is a significant impact between tax fairness influences on tax compliance of taxpayers in the Kandy district

H2: There is a significant impact between understandability of the law tax influence on tax compliance of taxpayers in the Kandy district

H3: There is a significant impact between perceptions of government accountability influence on tax compliance of taxpayers in the Kandy district

Findings

The founded correlation value between Tax fairness influence (TFI)) and Tax Compliance Behavior (TCB), is 0.415, which means a weak positive relationship between the two variables. According to the correlation results, there is a Weak positive relationship between Understandability of the tax law influence (UTLI)) and Tax Compliance Behavior (TCB), as the correlation coefficient equals 0.309. The correlation value between Perception of government accountability influence (PGAI) and Tax Compliance Behavior (TCB), is 0.749, which means a strong positive relationship between the two variables.

Table 1. Correlation Analysis

Variable	TCB	TFI	UTLI	PGAI
TCB	1			
TFI	.415**	1		
UTLI	.309**	.587**	1	
PGAI	.749**	.502**	.609**	1

***. Correlation is significant at the 0.01 level (2-tailed).*

The regression results show that there is a weak positive (0.237) and significant relationship between Tax fairness influence (TFI) and Tax Compliance Behavior (TCB). Therefore, H1 can be accepted. The regression analysis shows that also there is a positive (0.469) and significant relationship between Understandability of the tax law influence (UTLI) and Tax Compliance Behavior (TCB). Therefore, H2 can be accepted. its correlation value between Perception of government accountability influence (PGAI) and Tax Compliance Behavior (TCB) is 0.749, which means a positive, strong relationship between the two variables at a 5% significant level. The regression results show that there is a positive (0.203) and significant relationship between the Perception of government accountability influence (PGAI) and Tax Compliance Behavior (TCB). Therefore, H3 can be accepted. The finding of this study complies with the research conducted by Jayawardane & low (2016) about the Taxpayer Attitude and Tax Compliance decisions in Sri Lanka.

Conclusion

Finding out the relationship between Individual Taxpayers' Attitudes on Tax Compliance Behavior in Sri Lanka is the objective of this study. This research was done by using 278 samples from the individuals s have been examined empirically. Based on research analysis, this study shows a positive relationship between Individual Taxpayers' Attitudes on Tax Compliance Behavior in Sri Lanka. According to the hypothesis testing the founded conclusion is the Tax fairness influence (TFI), Understandability of the tax law influence (UTLI), and Perception of government accountability influence (PGAI) had a significant positive impact on the Tax Compliance Behavior (TCB) in Sri Lanka.

The majority of taxpayers perceive the Sri Lankan tax department (IRD) as unjust with a deficient tax administration process, according to attitudes and attitudinal characteristics. Most respondents disapproved of or disagreed with the complexity of the tax preparation process. The tax laws are complex., Refunds are easy to obtain. The IRD hasn't a strong detection rate for non-taxpayers and Government spending on welfare is not reasonable. The government does not squander a lot of money and if it is discovered that individuals have not disclosed their full income, they anticipate that the tax authority will take appropriate action.

The following recommendations are also important to improve the level of tax compliance to IRD: to be improved the level of tax compliance the tax process must be simplified and tax Law must be simplified and it must be easy to understand it can be achieved through changing Administrative Mechanism and changing Tax policy. Awareness and training programs must be conducted for officers of the tax department (IRD) to detect non-taxpayers. To improve individual taxpayers' tax compliance behavior, the findings show that the Sri Lankan government should increase tax rates, fines, and penalties. Intensifying tax awareness campaigns would also boost the beneficial effects of tax rates, fines, and penalties on specific taxpayers' tax compliance behavior. Finally, the researcher suggests for future researchers focus on a large sample and different districts in Sri Lanka to understand the relationship between individual Taxpayers' Attitudes to Tax Compliance Behavior in Sri Lanka.

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Determinants of implementing computer-based accounting information system in small and medium enterprises in Sri Lanka

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Introduction

SMEs play a crucial role in each and every economy irrespective of the development status of the country considered (Deyshappriya & Maduwanthi, 2020). As a result, they are considered as driving engines of the economies (Wijayarathna & Perera, 2018; Yogendrarajah et al., 2017; Hironaka et al, 2017). Within the Sri Lankan context, the distribution of SMEs is observable covering three major economic sectors namely; trade, services and industry with a contribution of 41%, 33% and 26% respectively (Department of Census and Statistics, 2017). Not only that, but also SMEs account for 75% of the total number of active enterprises within the country, furnishing 45% of employment, and contributing 52% to the gross domestic product (GDP) (Deyshappriya & Maduwanthi, 2020). However, SMEs have recorded a high failure rate in Sri Lanka (Lussier, Bandara, & Marom, 2016). In addition, these businesses were largely affected by the environmental calamities in the recent past including the Easter Sunday attack and the Covid 19 pandemic.

The computer-based accounting information system (AIS) is defined as a system that assists management within the planning and controlling process by providing relevant and reliable information for decision making (Iskandar, 2015). The present globalized context urges SMEs to the necessity of change to improve their competitiveness (Azizah, 2017). As a result, numerous business organizations have embraced AIS to increase productivity, product quality, service satisfaction and create confidence for consumers as well as to make relevant decisions (Noor, Politeknik and Semarang, 2020).

Though, SMEs are willing to make use of computerized information systems within their organizations, some constraints are discouraging the adoption (Munasinghe et al., 2018). Accordingly, the prior scholarly work that attempted to discover the determinants of the implementation of the AIS have revealed different conclusions (Azizah, 2017). Hence, the present study was carried out to uncover the factors influencing the implementation of AIS within SMEs in Sri Lanka.

Methodology

The present study lies within the positivist paradigm and followed the deductive approach leading to quantitative findings. Accordingly, a cross sectional survey was carried out among the sample respondents in order to collect primary data. The survey method was used since it is a low cost, quick and simple method utilized in empirical studies (Sedgwick, 2015). A self-administered structured questionnaire adopted from Rumbidzai (2014) was utilized for the fresh data collection. The population of the present study consisted of the owners of the SMEs in Sri Lanka and the sample size was determined as 384 following Krejcie & Morgan (1970) with a 95 percent confidence level (Sekaran & Bougie, 2016). Further, the simple random sampling technique was adopted in choosing the sample. Because, this method provides an identical probability for each element within the population for being picked up and included within the sample (Kothari, 2004).

The following conceptual framework has been constructed based on the research problem

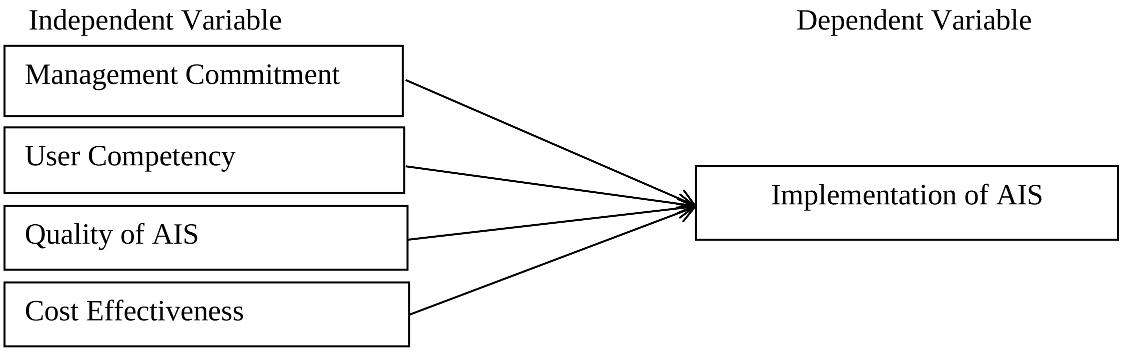

Figure 01: Conceptual Framework

As illustrated by the conceptual framework, the dependent variable of the study was the implementation of computer based AIS and there were four independent variables namely, management commitment (MC), user competency (UC), quality of AIS (QA) and cost effectiveness (CE). In order to examine the impact of the identified independent variables on the implementation of AIS in Sri Lankan SMEs, the following hypothesis were tested.

H1: There is a positive relationship between management commitment and implementation of AIS.

H2: There is a positive relationship between user competency and the implementation of AIS.

H3: There is a positive relationship between the Quality of AIS and implementation of AIS.

H4: There is a positive relationship between cost effective and implementation of AIS.

The study employed both descriptive and inferential statistical measurements for the data analysis.

Findings

The findings of the study are presented and discussed in this section. There were four independent variables (MC, UC, QA and CE) of which the impact was assessed on the dependent variable (Implementation of AIS). Table 1 demonstrates Cronbach's Alpha values of the research variables with the number of questions. Cronbach's alpha was utilized to ensure the reliability of the survey instrument. All the alpha values were well above the threshold (0.70). The highest value was 0.984 for the independent variable, MC and the lowest was 0.928 for the dependent variable, Implementation of AIS.

Table 01: Reliability Analysis

	Cronbach's Alpha	No of Items
Cost Effectiveness	0.953	3
User Competency	0.979	12
Management Commitment	0.984	5
Quality of AIS	0.974	4
Implementation of AIS	0.928	8

According to table 2, the majority of the respondents (45.8%) are Accounts clerks. And 60.7% were having work experience of 1-5 years. Further, 75% and 97.1% of respondents were trained to use computers and trained to use accounting software packages respectively.

The correlation analysis disclosed, Pearson correlation coefficient values of 0.842, 0.887, 0.789, and 0.826 for the relationships among the CE, UC, MC, QA and the implementation of AIS respectively. The results reveal that all the relationships were statistically significant at 95% confidence level. Therefore, according to the correlation coefficients obtained strong positive correlations were observable for all the considered relationships.

Table 02: Frequency Analysis

		Frequency	Percent
Job Title	Accounts clerk	176	45.80%
	Accountant	119	31%
	Other	89	23.20%
Work Experience	1-5 Years	233	60.70%
	6-10 years	147	38.30%
	Above10 years	4	1%
Professional Qualifications	Diploma	20	5.20%
	Degree	365	95.10%
	Professional Qualification	331	86.20%
	Masters	11	2.90%
	Other	3	0.80%
Trained to use computers	Yes	288	75%
	No	96	25%
Trained to use Acc. Software	Yes	373	97.10%
	No	11	2.90%

Table 3 display the output of regression analysis. Hence, the Adjusted R-Square value is 0.907, which indicates a high degree of correlation. The R2 value (the "R Square" column) indicates how much of the total variation in the dependent variable, impact of implementation AIS can be explained by the independent variables, CE, UC, MC and QA. In this case, 82.2% of the variance can be explained, which is very large. The p value of the F statistic is 0.000. It suggests that the overall model is statistically significant at 95% confidence level and the independent variables are reliably predicting the dependent variable of the study.

Table 03: Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.052	0.104		0.493	0.622
CE	0.153	0.054	0.15	2.826	0.005
UC	0.453	0.080	0.433	5.657	0.000
MC	-0.004	0.043	-0.005	-0.099	0.921
QA	0.382	0.049	0.364	7.86	0.000
R^2	0.822				
Adj. R^2	0.820				
F Value	437.87				0.000

Regression analysis was used to predict the impact of AIS and all four independent variables were put together simultaneously. There are only three independent variables of the model that are significant at the 95% significance level. Accordingly, CE, UC and QA have indicated a significant positive impact on the implementation of AIS. In contrast, MC has shown an insignificant negative impact on the dependent variable.

According to table 4, it is concluded that the hypotheses H1, H2, and H4 are supported considering the Correlation and Regression Analysis. The hypothesis H3 is not supported based on the regression analysis.

Table 04 - Summary of hypotheses testing

Hypothesis	Correlation Analysis	Regression Analysis
H1	Supported	Supported
H2	Supported	Supported
H3	Supported	Not Supported
H4	Supported	Supported

Conclusion

The aim of this study was to identify the determinants of the implementation of computer-based accounting information systems in SMEs. The researchers identified, MC, UC, QA and CE as the independent variables based on prior scholarly work.

Out of the identified determinants, user competency, quality of AIS and cost effectiveness exhibited positive and significant impact on the implementation of computer-based AIS in SMEs. This finding is consistent with the findings of prior scholars (Rumbidzai, 2014). Nevertheless, MC disclosed a negative and insignificant effect on the implementation of the AIS. This finding contradicts with the previous literature evidences (Haleem, 2016; Al- Hiyari et al., 2013). Hence, the cost, quality and user competency can be identified as the critical components that determine the implementation of AIS within the SMEs in the Sri Lankan context.

It is suggested for the future researchers to explore the study area with a qualitative perspective. Specially, the data collection techniques like in-depth interviews will discover any important considerations behind the implementation of computer-based AIS in Sri Lankan SMEs.

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Factors affecting the financial performance of insurance companies in Sri Lanka

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Introduction

The insurance sector is presently being incorporated into the larger financial industry and is important to Sri Lanka's service-based economy. Insurance companies provide life, fire, accident, causality and other types of insurance. Therefore, the financial performance of the insurance industry is important to the economy. This research investigated the factors affecting the financial performance of insurance companies in Sri Lanka. Malik (2011) identified that there is no correlation between company profitability and the age of the company, yet, there is a significant positive relationship between profitability and size. Further, the volume of capital is significantly and positively related to profitability. Alomari & Azzam (2017) found show that liquidity, leverage, and written risk have a negative and significant impact on profitability, while company size, market share, and GDP have a statistically positive and significant impact on the profitability of the Jordanian insurance industry. It also found that inflation has no significant impact on the profitability of Jordan's insurance industry.

With the advancement of technology and new trends, the performance of insurance companies is changing and the research done in the past may be largely unrelated to the present. Many studies in the commercial, financial, and banking sectors have focused on the criteria for financial performance. However, there are only a few studies on the insurance industry in Sri Lanka. This research paper seeks to examine whether internal factors such as the size of the insurance company, financial leverage, market share, growth rate of gross written premium, age of the company, and loss ratio affect the financial performance of insurance companies in Sri Lanka. This study also help to identify the internal factors that determine financial performance and help to avoid losses. In addition, there is a lack of studies investigating the factors affecting the financial performance of insurance companies in Sri Lanka. The findings of this study will help to close a blind spot in the Sri Lankan insurance sector, which will benefit the country's top insurance managers.

Methodology

Return on Assets (ROA) and Return on Equity (ROE) are dependent variables, whereas Age of the Company (AGE), Market Share (MRS), Financial Leverage (LEV), Company Size (SIZ), Growth Rate of Gross Written Premium (GWP), and Loss Ratio (LSR) are independent variables. In this study, financial performance will be measured using ROA and ROE.

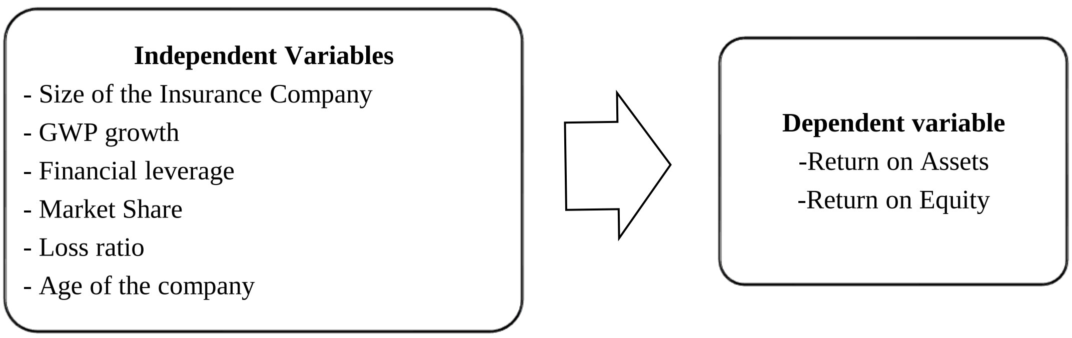

Figure 01. Conceptual Framework

Sources: Own compiled from literatures

The following econometric models provide a functional form of the variable relationships:

Model 01 - ROAit = αi + β1SIZit + β2GWPit + β3LEVit + β4MRSit + β5LSRit + β6AGEit + μit

Model 02 - ROEit = αi + β1SIZit + β2GWPit + β3LEVit + β4MRSit + β5LSRit + β6AGEit + μit

Where,
ROA = Return on Assets, SIZ = Size of Insurance Company, GWP = Growth Rate of Gross Written, LEV = Financial Leverage, MRS = Market Share, LSR = Loss Ratio, AGE = Age of the Company, β_0 = Constant, $\beta_1, \beta_2, \beta_3$= Coefficients of independent variables, μ = Error Term

To determine the relationship between the dependent variables and the entire set of predictors, all independent variables in the above regression model are introduced simultaneously. In these equations, Return on Assets and Return on Equity represent the insurance companies' financial performance (dependent variables).

The secondary data is obtained from insurance company annual reports. The data analyzed was for the period 2016-2020. This study collects annual data from 17 insurance companies from companies' annual reports for 05 years. It also uses the Insurance Regulatory Commission of Sri Lanka reports from 2016 to 2020. The relationship and impact of internal factors on the financial performance of insurance companies in Sri Lanka were examined using the Statistical Software (EViwes 8) in the study. Descriptive analysis, Correlation Analysis and Regression Analysis are conducted in this study.

Findings

All variables were subjected to descriptive analysis, and the results are shown in the below table.

Table 01 - Descriptive analysis

Variables	Observations	Mean	Median	Maximum	Minimum	Std. Dev.
Dependent Variable						
ROA	85	0.0674	0.0485	0.5422	-0.1230	0.0853
ROE	85	0.1784	0.1366	1.2014	-0.2616	0.2059
Independent Variable						
SIZE	85	16.3900	16.3395	19.4844	14.2773	1.4135
GWP	85	0.1864	0.1259	4.5390	-0.1193	0.4947
LEV	85	2.1589	1.7605	8.2322	0.0029	1.5346
MRS	85	0.0893	0.0532	0.7500	0.0058	0.1001
LSR	85	0.5347	0.5584	1.0348	0.1084	0.2186
AGE	85	19.4118	18.0000	58.0000	2.0000	13.5711

The return on assets and return on equity financial performance indicators in the Sri Lankan insurance industry have positive mean values ranging from 0.067 to 0.178, indicating the industry's average profitability level.

Table 02 - Correlation Analysis

Variables	ROA	ROE	SIZE	GWP	LEV	MRS	LSR	AGE
ROA	1.0000	-	-	-	-	-	-	-
ROE	0.9412*	1.0000	-	-	-	-	-	-
SIZE	0.1375	0.2311*	1.0000	-	-	-	-	-
GWP	0.1880	0.1601	0.0005	1.0000	-	-	-	-
LEV	-0.1727	0.0237	0.1457	-0.0534	1.0000	-	-	-
MRS	-0.0104	0.0377	0.5321	-0.0552	0.3096	1.0000	-	-
LOSS	-0.1667	-0.1068	0.2090	-0.0185	0.2266	0.2083	1.0000	-
AGE	-0.0552	0.0076	0.8467	-0.1326	-0.0279	0.4293	0.1212	1.0000

Sources: Generated from e-Views 8

** Indicates statistical significance at a 5% level of significance.*

The relationship between the various variables is shown by the correlation matrix. A correlation between ROA and ROE shows its significance and strong positive relationship. In Sri Lanka's insurance industry, ROA and ROE have a 94% positive and strong relationship. A correlation between ROE and the size of a company shows its significance. This result is similar to the result of Batool & Sahi (2019), which indicates that the USA insurance industry's size of firm was positively correlated with the financial performance indicator that are ROE.

Table 03 - Regression Analysis (ROA)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.203	3.761	1.383	0.171
SIZE	-0.317	0.220	-1.443	0.154
GWP	0.195	0.103	1.886	0.064
LEV	0.068	0.078	0.874	0.385
MRS	0.651	0.223	2.921	0.005
LSR	-0.567	0.470	-1.204	0.233
AGE	-0.155	0.227	-0.681	0.498
R-squared			0.253868	
Adjusted R-squared			0.186038	
F-statistic			3.742695	
Prob(F-statistic)			0.002892	

Sources: Generated from e-Views 8

The findings of the multiple regression model show that the regression model's R-squared is 0.254, which means that it only explains for 25.4% of the overall variability in insurance companies' performance, with the remaining 74.6% being impacted by variables beyond the scope of this study. The adjusted R-square is somewhat less than the R-square with a 19% value. The fact that the model's value of 3.742 is higher than its Prob (F-statistics) value of 0.003 demonstrates the validity of the model. This study finds that Market Share has a significant and positive impact on insurance companies' Return on Assets (ROA). These results are also in line with research conducted by Aryonindito, Yadiati & Handoyo (2020), which states that market share has a positive impact on profitability.

Table 04 - Regression Analysis (ROE)

Return on equity				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
Constant	6.972	3.502	1.991	0.051
SIZE	-0.348	0.205	-1.698	0.094
GWP	0.153	0.096	1.592	0.116
LEV	0.251	0.073	3.456	0.001
MRS	0.808	0.207	3.896	0.000
LSR	-0.412	0.438	-0.940	0.351
AGE	-0.169	0.211	-0.800	0.427
R-squared			0.396788	
Adjusted R-squared			0.341950	
F-statistic			7.235702	
Prob(F-statistic)			0.000006	

Sources; Generated from e-Views 8

According to R-square, only 39.7% of the variations in the dependent variable (ROE) are explained by variations in the six independent variables. As a result, 60.3% were impacted by factors that were not considered in this research. The adjusted R-square is somewhat less than the R-square with a 34.1% value. The fact that the model's value of 7.34 is higher than its Prob (F-statistics) value of 0.00001 demonstrates the validity of the model. This study finds that Financial Leverage and Market Share have a significant and positive impact on insurance companies' Return on Equity (ROE). These results are also in line with research conducted by Aryonindito, Yadiati & Handoyo (2020), which states that market share has a positive impact on profitability.

Conclusion

Objective of this study is to investigate the variables that affected the financial performance of Sri Lankan insurance companies that were active between 2016 and 2020. A correlation between ROE and the size of a company shows its significance. According to the findings for the firm size variable, large insurance companies are more profitable than micro insurance companies. Therefore, growth strategies should be important to insurance company managers. This study finds that Market Share has a significant and positive impact on insurance companies' Return on Assets (ROA). The results for the market share variable show that insurance firms with a high market share will do financially better than insurance companies with a low market share. Insurance providers should therefore pay close attention to their market share. This study finds that Financial Leverage and Market Share have a significant and positive impact on insurance companies' Return on Equity (ROE). Therefore, insurance company managers should balance financial leverage with financial performance.

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Mediating effect of internal control system (ICS) on the relationship between e-accounting and the financial performance (FP): Evidence from SMEs in Colombo district

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Introduction

Accounting plays a critical part in an organization because every company must keep track of financial information. It executes in a rapidly changing environment and the procedures, policies, standards, rules and framework of accounting are often changed. Nowadays, businesses are complex due to the high volume of transactions, competitiveness and global markets. According to Huang and Liu (2005), the emergence of information technology has enhanced the improvement of the accounting field. Accounting is integrated with IT to meet the growing need for accurate and up-to-date information. Business entities must keep track of their financial data in order to link it to their operations (Hla & Teru, 2015). In comparison to manual accounting, e-accounting produces more accurate results and produces more dependable information that is easier to deal with and has a lower risk of error. The lack of a proper information system is the primary factor in SME failures (Amoako, 2013; Dabor et al., 2016; Kapurubandara & Lawson, 2009). In Sri Lanka, most SMEs have not succeeded because of the inadequate accounting system and poor accounting practices (Rathnasiri, 2015). Internal control is responsible for monitoring accounting data and ensuring that it is relevant and ensures better SME FP. E-accounting is a basic component derived from technologies in general, but the main issue is whether applying E-accounting contributes to FP results. Throughout the literature, several studies have examined the impact of mediating effects of the ICS on the relationship between E-accounting and the performance of SMEs (Soudani, 2013; Alfartoosi & Jusoh, 2020; Alfartoosi et al, 2021; Oden, 2019). Oden, (2019) noted that E-accounting implementation and success have been comprehensively researched but the contemporary literature shows slight evidence of the mediating effect of the ICS relationship between E-accounting and FP measures. So, in this research, the author attempts to do a kind of examination based on SMEs in the Colombo district to fill this knowledge gap because no research can be found related to this research area.

Therefore, the problem statement of this study can also be referred to as examining whether there is:

- How does the Internal Control System mediate the relationship between E-accounting and Financial Performance of SMEs in the Colombo District?

Methodology

Research methodology is used for collecting and analyzing data that will be used for answering hypotheses and research questions in a more methodical and organized way. The survey research approach is used in the study. The researcher chooses the sample by using a random sampling method and This research selects only SMEs in the Colombo district. A total of 325 SMEs in the Colombo district in the Western Province of Sri Lanka (Perera and Samarakoon, 2021). In the study, the researcher selected a sample of 240 SMEs from the total population by using the simple random sample method. The population of the study consists of employees who engage accounts-related activities (accountants, financial managers and internal auditors) and use E-accounting in carrying out their job responsibilities in SMEs in the Colombo district. So, the unit of analysis of this study is an employee who engages with accounting-related activities by using e-accounting for SMEs in the Colombo district. This study uses primary data to collect data for the study. The questionnaire was developed based on existing literature and previous quantitative studies. All measures were graded on a five-point Likert scale. The conceptual framework (Figure 1) for the study has been developed by considering the mediating effects of the ICS on the relationship between E-accounting and FP of SMEs in the Colombo District as follows.

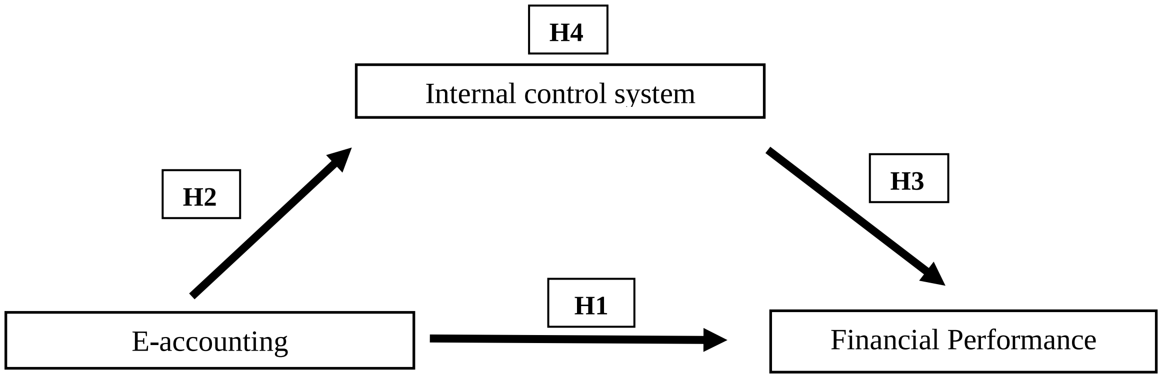

Figure 1: Conceptual Framework

The data analysis is the most crucial part of any research that summarizes collected data. According to the characteristics of the gathered data, it was analyzed as a quantitative data analysis through the statistical package for social science (SPSS) 21st version. Every variable in the research model was analysed by using a descriptive statistical method (mean, standard deviation). Decision criteria are shown in Table 1. Pearson correlation was conducted to evaluate the intensity and direction of the mediating effects of the ICS on the relationship between E-accounting and FP of SMEs in Colombo District. Multiple regression analysis provide the pattern of relationship between the set of the predictors and the outcome.

Findings

The reliability of internal consistency about independent variables is examined with Cronbach's Alpha test (Table 1). Cronbach's Alpha analysis was used to evaluate the reliability of the instrument. The As a result, the study conducted a reliability test to assess inter-item correlation in each of the questionnaire variables. As the Cronbach's alpha values ranged from 0.701 to 0.905 which is showing acceptable level. Descriptive statistics describe the behavior of the data. If the data points are close to the mean, indicating that the responses are fairly uniform, and then the standard deviation will be small.

Table 1: Descriptive Statistics

	N Statistic	Cronbach's Alpha Value	Mean Statistic	Std. Deviation Statistic
E-accounting	240	0.905	4.442	0.4472
Internal Control System	240	0.864	4.473	0.450
Financial Performance	240	0.758	4.460	0.421
Valid N (listwise)	240			

Source: Survey Data, 2022

Table 2: Pearson Correlations among Independent, Dependent and Mediating Variables

	Internal Control System	Financial Performance	E-accounting
Internal Control System	1**		
Financial Performance	0.831**	1**	
E-accounting	0.862**	0.812**	1**

Source: Survey Data, 2022

According to Table 2, shows the correlation coefficients between dependent, mediating and independent variables. Overall, due to the positive correlation between E-accounting, FP and ICS. In the analysis, every Pearson correlation value is positive and also every P value is less than 0.01, therefore, every hypothesis is accepted according to the correlation result.

The researcher develops four major models to examine the objevtive of the study. Therefore, the models of the study are as follows,

Model 01 - Effect of E-accounting on Financial Performance

$FP = a + \beta_1 EA + \varepsilon$

$FP = 0.613 + 0.866\ (EA) + \varepsilon$

Model 02 - Effect of E-accounting on Internal Control System

$ICS = a + \beta 1EA + \varepsilon$

$ICS = 0.105 + 0.983\ (EA) + \varepsilon$

Model 03 – Effect of Internal Control System on Financial Performance

$FP = a + \beta 1ICS + \varepsilon$

$FP = 0.986 + 0.777\ (ICS) + \varepsilon$

Model 04 – Effect of E-accounting and Internal Control System on Financial Performance

$FP = a + \beta 1EA + \beta 2ICS + \varepsilon$

$FP = 0.563 + 0.399\ (EA) + 0.475\ (ICS) + \varepsilon$

Researcher tried to find out the impact of the E-accounting system on FP with the mediating effects of an ICS for this purpose multiple regression analysis was used.

Mediation is a hypothesized causal chain in which one variable affects a second variable that, in turn, affects a third variable. A regression approach was used to examine whether ICS mediates the relationship between E-accounting and FP. The results of the mediation analysis by (Baron & Kenny, 1986) regression approach were reported in the following table.

Table 3: Summary of regression models

Details	Model 1	Model 2	Model 3	Model 4
R	0.812	0.862	0.831	0.852
R Square	0.660	0.743	0.691	0.727
Adjusted R Square	0.659	0.742	0.689	0.724
ANOVA – Sig.	0.000b	0.000b	0.000b	0.000b
Constant	0.613	0.105	0.986	0.563
βeta coefficient				
E-accounting	0.866	0.983		0.399
Internal Control System			0.777	0.475

Source: Survey Data, 2022

To identify the mediating role of ICS, four models were taken into consideration. according to the above-derived results, it can be concluded that ICS plays a partial mediating role in the connection between E-accounting and FP from SMEs in Colombo District. This model can be conceptualized as a causal model where E-accounting on FP is mediated by ICS as shown in Figure 2

Here,

a - Regression weight on E-accounting Characteristics when predicting ICS.

b and c'- The regression weights on ICS and E-accounting Characteristics respectively, when both are used together to FP.

c - Regression weight on E-accounting Characteristics when predicting FP.

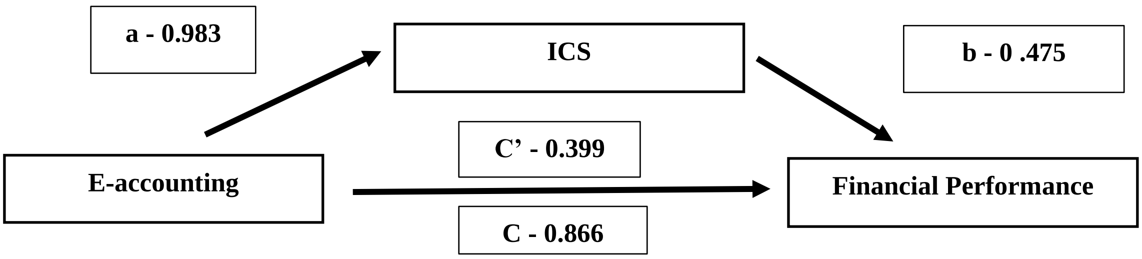

Figure 2: Coefficient Path

From these findings, three conditions have been satisfied that are necessary for mediation.

Direct effect - Impact can be measured as the reduction in the regression weight for E accounting on FP

c- c' = 0.866 – 0.399 = 0.467

Indirect Effect - Impact can be calculated as the product of the indirect paths from E-accounting to FP through ICS

*a*b = 0.983*0.475 = 0.467*

Total Impact - equal to the direct impact plus the indirect impact

*c = c' + a*b*

*0.866 = 0.399 + 0.983*0.475*

0.866 = 0.399 + 0.467

0.866 = 0.866

Table 4: Summary of Hypotheses Testing

Hypotheses	Correlation		Decision	Regression		Decision
	r	p		β	P	
H1:	0.812**	0.000	Supported	0.866	0.000	Supported
H2:	0.862**	0.000	Supported	0.983	0.000	Supported
H3:	0.831**	0.000	Supported	0.777	0.000	Supported
Hypotheses	**Decision Criteria**					**Decision**
H4:	By using the notation of mediation analysis: c- c' = a*b Here, the difference in the equation is equal to zero as per the decision criteria 0.866 – 0.399 = 0.983*0.475 0.467 = 0.467					Accepted

Source: Survey Data, 2022

Regression analysis was conducted to find the beta value of a, b, c and c'. And the model fits were shown in the appendices. As the difference is equal to zero as per the decision criteria, it could be concluded that ICS plays a mediating role. And this study accepted the formulated hypothesis too. Therefore, the researcher interprets the mediating effects of the ICS on the relationship between E-accounting Characteristics and FP. As per the literature, the researcher has mentioned ten hypotheses for all the relationships among the three variables.

Based on the results presented in Table 4, the findings also show the mediating effects of the ICS on the relationship between E-accounting and FP of SMEs in the Colombo District. Through this study, ten hypotheses are tested. The findings confirmed the study's four hypotheses. The findings are consistent with the evidence and ideas presented in the review of the literature. This study found that E-accounting has a significant positive impact on FP and an ICS. Also, significant positive relationship between ICS and FP. In contrast, the study found positive mediating effect the ICS on the relationship between E-accounting and FP of SMEs in the Colombo District.

Conclusion

E-accounting seeks to identify innovations in the competitive business environment as well as ensure the accuracy and reliability of existing financial data. This study helps the management of businesses to identify the importance of e-accounting and the necessity to face the ever-changing competitive environment and how they can contribute to increasing the FP and productivity of their businesses. Therefore, the study improves the existing literature on the subject and will help to increase the knowledge of students and scholars who are interested in this topic. Also, employees in accounting-related activities may get a rich understanding of the importance and using accounting software to increase their job effectiveness and business performance. In view of the limitations imposed on this study, it can be provided with suggestions for subsequent studies in the future. So, this study only involved the SMEs in Colombo District. Furthermore, future research should include other agencies from various industries and compare the performance of E-accounting among them. The study will generate a result that is more reliable if the research is based on island-wide SMEs. However, according to the time frame, the sample size has been limited to only 240 SMEs in only one geographical area of the Colombo district. It recommends taking a larger sample to confirm the current findings of this research and improve the validity of the study. In addition, the author uses the random sampling method to select the sample, but there are several effective sampling methods other than the random sample method. Moreover, the base of research for the topic is very few in Sri Lanka, so the existing knowledge is at a lower level. As a result, future research should look into the security risks of using E-accounting in SMEs.

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Factors affecting the quality of sustainability reporting in Banking Sector: Evidence from Colombo Stock Exchange

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Introduction

In recent decades, companies all across the world have adopted Sustainability Reporting (SR) as a common practice. Therefore, SR has been identified as a rapidly expanding area of modern corporate reporting. Moreover, SR is becoming a more popular topic in industry and academia since the late 1990s (Hahn & Kühnen, 2013). SR is widely used in organizations to communicate corporate responsibility and accountability to stakeholders (Channuntapipat, 2016). Accordingly, SR is a systematic technique for collecting and presenting sustainability data to management and stakeholders like employees, shareholders, local communities, customers, NGOs, investors, and financial analysts.

In the last few decades, although SR is not mandatory, stakeholders have begun to pressure companies to report issues of sustainability. Investors now realize that sustainability is a platform for advanced and disciplined management and a critical success factor in an organization. As a result, many businesses are voluntarily disclosing their social and environmental performance. Hence, most companies publish sustainability reports as either stand-alone sustainability reports or integrated reports (Senaratne & Liyanagedara, 2009). Further, customers, employees, investors, and other stakeholders increasingly demand that businesses be more transparent about their sustainability efforts (Meijer, 2016). Therefore, by disclosing voluntary sustainability information, companies are trying to enhance transparency, benchmark against other companies, demonstrate competitiveness, increase brand value, encourage employees, and support corporate information and control processes (Dissanayake et al. 2019). Even while the quantity of reports has increased, their quality has been questionable. It is possible to disclose sustainability information without engaging in those activities, and some disclosures may be exaggerated. This implies that such businesses do not invariably operate according to the norms and values of society (Meijer, 2016). Still, SR is mostly criticized for lack of credibility, clarity, and consistency. Furthermore, prior research revealed a steady increase in SR, although the quality and quantity of reporting are quite low. Therefore, studying the quality of the SR is vital.

As well, organizations can increase their financial performance by enhancing the quality of their SR (Uthayakumar & Puchihewa, 2018). Moreover, it is highlighted that the quality of SR is very important for the success of companies. Furthermore, sustainability information has gradually become a necessity for private and public sector enterprises (Persson & Vingren, 2017). In comparison to other parts of the world, Sri Lankan researchers have paid relatively little attention to SR (Dissanayake et al. 2016; Uthayakumar & Puchihewa, 2018), and very few studies have been conducted on this topic (Niresh & Silva, 2018). Previous research also reveals that SR is still in its early stages (Hummel & Schlick, 2016) in developing countries (Beddewela & Herzig, 2013; Dissanayake et al., 2016). Therefore, there are many avenues for further research in developing countries. The motivation of this study is to fill this empirical and knowledge gap. Further, this study gives excellent support to the expansion of knowledge in the field of SR by offering comprehensive empirical research in Sri Lanka. Hence, the objective of this study is to identify the factors influencing the quality of SR in listed companies in banking sector of Sri Lanka.

Methodology

Population and Sample Selection

The banking sector of Sri Lanka comprises 24 licensed commercial banks and six are licensed specialized banks. The study's sample was selected using the purposive sampling method. Therefore, the study sample consists of 10 domestic private commercial banks.

Data Collection

Company annual reports are a source of data and an instrument for monitoring SR. Secondary data was gathered from each commercial bank's annual reports over a longitudinal period of six years from 2016 to 2021 to perform this study. Therefore, 60 observations were made to gather data for the study.

Operationalization

Profitability, leverage, company size, and SR committee were the independent variables of the study. The quality of sustainability reporting is the study's dependent variable. The quality of the information in the sustainability report is assessed using content analysis. Balance, comparability, accuracy, timeliness, clarity, and reliability are the six principles published by the GRI G4 guidelines. A comprehensive approach developed by Permatasari et al. (2020), is the most recent instrument for measuring the quality of SR. Hence, this study applied this approach to measure the quality of SR.

The measurements of the variables are shown in table 1.

Table 1: Measurement of variables

Variables	Measurement
Quality of SR	Balance, comparability, accuracy, timeliness, clarity. reliability. Measurement by Permatasari et al. (2020)
Company size	Natural log of total assets of the company
Profitability	Return on assets (ROA)
Leverage	Total liabilities/Total assets
Sustainability Committee	Dummy Variable (1 if a firm had a sustainability committee, O Otherwise)

Source: based on the previous literature

Hypothesis Development

H1: There is an impact of company size on the QSR.

H2: There is a relationship between profitability and the QSR.

H3: There is a relationship between leverage and the QSR.

H4: The existence of a sustainability committee enhances the QSR.

The study utilized the Pooled Ordinary Least Square (OLS) linear regression method. The regression model is illustrated in equation one. It was developed to identify the impact of corporate size, profitability, leverage, and sustainability committee on the quality of SR.

$$QSR = \alpha it+\beta 1itCZ+\beta 2itPRO+\beta 3itLEV+ \beta 4itSC+€it \ldots\ldots\ldots\ldots\ldots (1)$$

In equation one, QSR denotes the quality of SR, measured by a comprehensive approach developed by Permatasari et al. (2020). α denotes a constant term, and β denotes the regression coefficient. CZ reflects the company size, profitability is represented by PRO, LEV denotes leverage, and SC expresses the Sustainability Committee. € expresses the random error term.

Furthermore, the collected data was analyzed using content analysis method to measure the quality of the sustainability disclosure. The reporting quality is determined by the score obtained from a disclosure index.

Results and Discussion

Descriptive Analysis

According to the summary statistics of variables, company size is the natural log of the company's total assets, which ranges between 4.73- 6.29 and with an average of 5.6. Considering the profitability, (ROA) ranges between 0.06-2.22 with a mean of 1.15. Further it shows that leverage ranges from 0.82-0.95 with a mean of 0.90.

Table 2 shows pearson correlation coefficients, QSR is negatively correlated with ROA. There is also a correlation between the other three explanatory variables: leverage, SR committee, and company size. It indicates that the Pearson correlation coefficients were below 0.9, and there is no evidence of extreme values. In addition, considering the Tolerance values and Variance Inflation Factors (VIF), it emphasizes that the proposed model is appropriate for multiple regression analysis.

According to the residual analysis, it indicates the results of Kolmogorov- tests to examine whether the data follows a normal distribution. Since p values >0.05, the assumption that the random errors are normally distributed is reasonable.

Table 2: Correlations

		SRQ	**Return on Assets**	**Leverage**	**SR committee**	**LCS**
Pearson Correlation	SRQ	1.000				
	Return on Assets	-0.067				
	Leverage	-0.056	0.534**			
	SR committee	0.284**	0.242**	0.448***		
	LCS	0.396***	0.472***	0.450**	0.328**	
Sig. (1-tailed)	SRQ		0.306	0.334	0.014	0.001
	Return on Assets	0.306		0.000	0.031	0.000
	Leverage	0.334	0.000		0.000	0.000
	SR committee	0.014	0.031	0.000		0.005
	LCS	0.001	0.000	0.000	0.005	

*Note: ***P<0.01, **P<0.05; N=60*

Model summary

Table 3 presents the model in which the item of interest is the R2 statistics, which is 0.34 with a statistical significance of P<.000. This result indicates that this model can explain a 34% of the total variation in QSR. It means that 34% variance of QSR is affected by company size, profitability, leverage, and sustainability committee (R2=0.34, P<0.000). The Durbin-Watson statistic was 1.225 which means that the independence of the observations has been met.

Table 3: Regression results

	R2 = 0.34, F = 6.954, P = 0.000		
Model	β	t	Sig.
(Constant)	30.98	1.49	0.140
Return on Assets	-2.27	-1.68	0.099
Leverage	-52.61	-2.20	0.032
SR committee	3.13	2.42	0.019
LCS	6.44	4.18	0.000

a. Dependent Variable: SRQ
b. Predictors: (Constant), LCS, SR committee, Return on Assets, Leverage

Further, table 3, the results of the F test, indicates whether the overall regression model provides an excellent fit to the data. The results of the F test demonstrate that the independent variables statistically significantly predict the dependent variable, F (4, 55) = 6.954 P<.000. This result indicates that the regression model is a good fit for the data.

Regression Results
Company size

The regression results of the variables from 2016- 2021 reveal a positive relationship between company size and QSR (β=6.44, P=.000). Based on the regression result, therefore, H1 is accepted. Further, this finding complies with the significant number of prior studies (Fernández-Feijóo-Souto et al., 2012) in which firm size influences the quality of SR. This finding reveals that prominent banks are paying attention to the quality of sustainability reporting.

Profitability

As illustrated in table 3, the β value for ROA is -2.27 (β=-2.27, P=0.099). This results shows that the negative relationship between profitability and QSR is statistically significant at the 10% significant level, supporting H2. According to previous studies, this result is consistent with Kiliç and Kuzey (2017) but contrary to Moneva et al. (2007) and Martínez-Ferrero et al. (2015).

Leverage

Further regression results explain that leverage has a negative relationship (β=-52.61, P=0.032 with QSR in selected commercial banks at the 5% significance level. This supports H3 since it reveals that leverage significantly impacts QSR. As illustrated in the table 3, our results differ from some previous studies. Fernández-Feijóo-Souto et al. (2012) revealed no relationship between leverage and SR quality.

Sustainability committee

Further, it illustrated that the SR committee has a positive relationship with QSR. β value for the SR committee is 3.14 (β=3.13, P=0.019). It indicates a statistically significant relationship between the SR committee and QSR at the 5% significance level. Thus, H4 is accepted. This result consists of the findings of Biswas et al. (2018), Dienes et al. (2016), Kiliç and Kuzey (2017), and (Nazari et al. (2015)).

Conclusions and Implications

Studying the factors affecting the quality of SR in developing nations is vital in the current scenario. This study confirms that company size, profitability, leverage, and SR committee significantly affect SR quality. In addition, this paper provides an excellent contribution to the current literature in SR since there is a dearth of research in this field. Furthermore, this study mainly focused on the banking sector. Therefore, conducting future research can obtain more knowledge based on different sectors listed on the Colombo Stock Exchange. Further, it can provide good findings comparing different sectors.

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Impact of audit quality on earnings management: Evidence from listed companies in Sri Lanka

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Introduction

The topic of earnings management is well-known in the business world. Earnings manipulation has increased over time in both developed and developing countries, and it has significantly weakened investors' reliance on audited financial accounts. Because of agency issues, managers attempt to manage a company's profits. The opinions of stakeholders and management may occasionally diverge. Accounting rules have little impact on accountants' judgment when used as a controlling tool. Managers make use of this problem to spread false information. As stakeholders cannot utilize incorrect information to make accurate decisions, the business then requested reasonable confidence from the independent auditor. The agency issue requires hiring an external auditor for the organization. In order to handle the agency issue and make sure that the flexibility provided by accounting standards is not used mistakenly, auditing is a monitoring technique(Alves, 2013). The current study's research problem was "whether audit quality has an impact on earnings management" The study's goal is to determine how audit quality affects Sri Lankan listed companies' earnings management methods.

The majority of current research on accrual-based earnings management produces contradictory findings. (Alzoubi, 2019) performed research on Jordan's quoted companies. The study made clear how much audit quality affects financial statements and investors' confidence. External auditors often perform crucial and extremely difficult responsibilities in ensuring the accuracy of financial reporting. The overall findings show a strong and negative relationship between audit quality and Jordanian listed companies' discretionary accruals, a measure of earnings management. Accounting literature has emphasized several audit quality indicators, including sector-based specialty, audit firm size, reputation, audit committee, audit fees, etc., (Zehari, 2010). A Sri Lankan research titled "The Impact of Audit Quality on the Degree of Earnings Management: An Empirical Study of Selected Sri Lankan Listed Companies" examines the relationship between audit quality and earnings management (Pakianathan, 2017). The study's sample period is the most recent three years, from March 31, 2013, to March 31, 2016. The sample included 423 observations on 141 non-financial enterprises that were listed on the CSE. According to this study's findings, audit quality has no appreciable influence on the management of earnings. This suggests that the audit systems need to be enhanced to stop such opportunistic conduct. The majority of research underlines that there is a considerable significant negative relation between audit quality and earnings management, according to the previous empirical review. Furthermore, there has been few research on audit quality, earnings management, and their relationship with Sri Lanka.

Methodology

The study employs a quantitative research approach that is based on the hypothetical deductive method. Data will cover the four years from 2018 to 2021. A total of 50 observations were collected from 296 non-financial organizations listed on the CSE over four years. This study employed Eviews statistical software, and descriptive, correlational, and regression analyses were performed on the data. Figure 1 depicts the conceptual framework for this investigation. Audit firm size, audit independence, and audit tenure were utilized as independent factors in the study, while earnings management was employed as a dependent variable. The study used three control variables: firm size, leverage, and return on assets, and net operating cash flow to total assets.

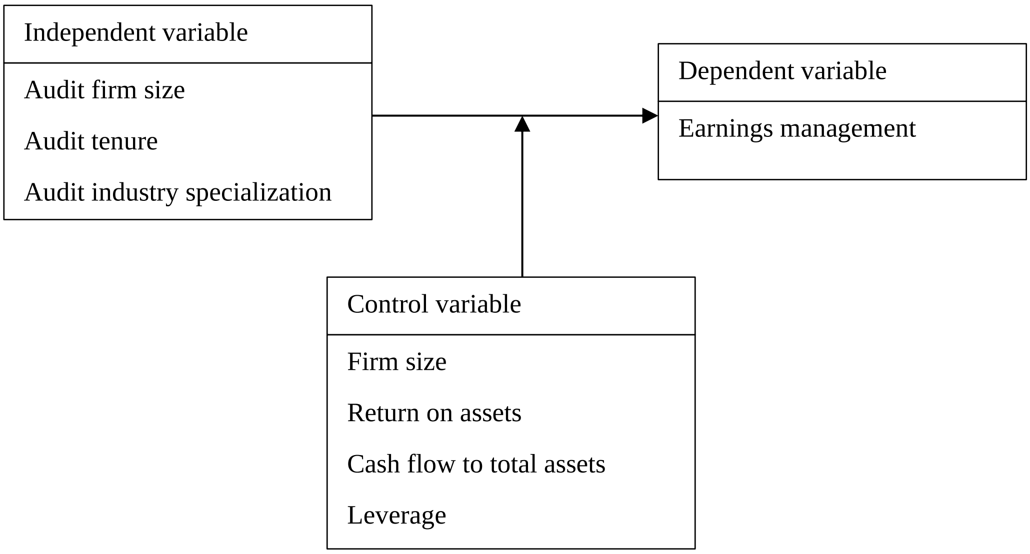

Figure 1: Conceptual Framework

Findings

According to the descriptive analysis, the mean value of earnings management described the minimal presence of discretionary accrual manipulation by the sampled companies in Sri Lanka. In terms of the audit quality proxies, it is clear that 81% of the sample companies are audited by the big four audit firms in Sri Lanka; KPMG, Ernst & Young, PricewaterhouseCoopers, and Deloitte.

Table 1: Pearson correlation matrix for variables

	EM	AFS	AI	AFT	FS	LEV	ROA	NCFTA
EM	1	-0.104	0.038	-0.083	0.040	0.290	0.228	-0.003
AFS	-0.104	1	0.088	0.760	0.173	-0.023	0.109	0.144
AI	-0.038	0.088	1	0.113	0.429	0.341	0.100	0.184
AFT	-0.083	0.760	0.113	1	0.201	0.004	0.114	0.143
FS	0.040	0.173	0.429	0.201	1	0.161	0.037	-0.108
LEV	0.290	-0.023	0.341	0.004	0.161	1	-0.036	-0.048
ROA	0.228	0.109	0.100	0.114	0.037	-0.036	1	0.702
NCFTA	-0.003	0.144	0.184	0.143	-0.108	-0.048	0.702	1

Source: Author's Constructed, 2022

According to the correlation analysis, the study tested each hypothesis:

H1: The audit firm size is a negative association with earnings management.

H2: Audit independence is significantly negatively associated with earnings management.

H3: Audit tenure is positively associated with earnings management.

It was evident from evaluating the above assumptions that they are not supported by Pearson correlation analysis. The size of the audit firm has a negative relationship with the absolute value of earnings management. The link is minimal and statistically insignificant, though. The second hypothesis holds that among Sri Lanka's listed non-financial firms, there is an insignificant but slight significant negative relation between earnings management and audit independence. A similar association between earnings management and audit tenure is clearly present. Although there is a positive linear association, it is statistically unimportant. According to the correlation study, earnings management was used less frequently by larger organizations. This can be a result of the bigger corporation having the best security. Statistically significant positive correlation between audit firm size and firm size under Pearson analysis.

Furthermore, the study conducts multivariate analysis to test the hypothesis. In performing multivariate analysis, the study does not qualify the normality assumption Pooled (OLS) regression is performed to improve the robustness of the results. The Hausman test is conducted before the regression analysis and determines the most suitable fixed effect model. The fixed-effect approach indicates a moderate level of R2. Under the model, the variables considered explaining 43% of the variation in the dependent variable. Under the panel approach (fixed-effect model), the results indicate a statistically significant negative relationship between audit firm size and the absolute value of earnings management. This support the hypothesis of the study, that the audit firm size is significantly negatively associated with the degree of earnings management. Big audit firms have an intense tendency to protect their high reputation and have a large number of credible clients who place a high value on their services.

The study support hypothesis under the regression model and it indicates that there is a negative relationship between auditor independence and earnings management. This value is statistically significant and therefore the second hypothesis also accepted and the null hypothesis is rejected. Audit tenure and earnings management have an insignificant relationship as a result of table 1. According to the results could not express which type of relationship is there and it may be to occur because most of the listed companies are engaged with Big 4 audit firms in the long term. Overall results of independent variables (audit quality proxies) and earnings management in the study supported that there is a significant negative relationship between audit firm size and audit fees with earning management but audit tenure has no significant relationship. The study uses four control variables: firm size, leverage, return on assets, and net cash flow to total assets. Firm size and earnings management have a significant positive relationship at a confident level of 99%. Leverage also reports a significant positive relationship to earnings management in the initial model. It emphasizes that the highest levered firms in Sri Lanka are likely to manage their earnings using accruals to create a flash image. The results are consistent with the debt hypothesis.

Table 2: Pearson correlation matrix for variables

Variables	Fixed-Effect	
	Coefficient	**P. Value**
C	-1.2386	0.0797
AFS	-0.1480	0.0771
AI	-0.0357	0.0388
AFT	0.00251	0.9457
FS	0.1032	0.0236
LEV	0.1383	0.0153
ROA	0.4442	0.0000
NCFTA	-0.2259	0.0470
R-squared	0.4340	
Adjusted R-squared	0.2178	
Prob. (F-statistic)	0.0005	
Durbin-Watson stat	2.3335	

Source: Author's Constructed, 2022

Conclusion

The study's goal was to determine the connection between audit quality and the extent of earnings management methods in Sri Lankan listed companies. Regarding the aim, it is evident from the findings that two research hypotheses are validated and that one hypothesis was not supported by regression analysis. Overall, the study found that two of the three hypotheses were supported, and based on these results, it was concluded that the degree of earnings management in Sri Lankan listed non-financial firms is significantly negative by audit quality. This study has provided important light on the audit quality and earnings management literature that is currently accessible. The study also has real-world applications for investors and regulatory agencies.

The scope of this study is limited to public limited companies listed on the Colombo Stock Exchange (CSE). Because of the no-availability of publicly accessible data, this study does not include non-listed (mainly private limited) companies. The study is highly dependent on the proxies involved in measuring the independent and dependent variables. This study excludes the Banking, Finance, and Insurance Sector which is a key sector of the economy due to the difference in the nature of assets and liabilities as opposed to the non-financial firms. However, Sri Lanka has some scandals from the financial sector companies (Pramuka Bank and Golden Key PLC). Hence, future studies could focus on that sector and future studies will use more proxies to measure audit quality.

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Determinants of digitalization in the accounting function: with special reference to Sri Lankan financial services industry

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Introduction

The accounting function is undeniably important in practically every organization. Generally, accounting is a method of assessing a company's performance by recording summarizing, and evaluating its financial transactions (Ghorbani, 2019). This digital transformation is taking place not just in the main operational areas of businesses. According to a survey conducted by PricewaterhouseCoopers (PWC), at the end of 2017, nearly one-fifth of organizations surveyed described their use of digital technology in their accounting function as "very progressive" or "progressive" (PWC, 2018). According to Ghorbani (2019), it is difficult to create an efficient accounting system in today's competitive corporate world without incorporating digitalization into the accounting process.

The financial services industry encompasses all services that relate to money management, insurance, banking, digital banking, etc., and financial services industries of almost all nations around the world are affected by the influence of internet-savvy customers, the impending danger of large tech corporations, and the changing views of regulators regarding new technologies (Phaneuf, 2022). Hence, the financial services sector industry is undergoing a massive digital transition that will have far-reaching repercussions on how corporations operate. When considering financial services, some outcomes of digitalization can be named as the online and mobile banking facilities which have become a convenient and quick solution for consumers, booming its usability, especially during the Coronavirus pandemic, automation through a cloud, has also enhanced the flexibility, cost-saving and secured transformation of financial services, through which financial service institutions have been able to bring services like virtual assistance, online applications, customer profiling, and almost all services of retail banking to the door-step of customers (Karadima, 2020). In relation to the accounting function, artificial intelligence, data analytics, blockchain, the internet of things, and robotic process automation are among the primary technologies the financial sector businesses are investing in.

Studies to date have been conducted to investigate the influence of digitalization on various functions of the organizations such as marketing, operations, human resources, and administration (Gupta & Somers, 1993; Kazakovs, et al., 2015; Mahmoud, et al., 2020) thus, only a little scholarly attention has been made on investigating the impact of digitalization on accounting function, especially focusing on the financial services industry of a country. Hence, keeping in view the determinants of digitalization and the level of digitalization in the accounting function, this study represents an effort to fill this gap in the literature by investigating the impact of determinants of digitalization in the accounting function with special reference to the financial services industry in Sri Lanka. Hence, this study extends to address two objectives: (1) To investigate the impact of determinants of digitalization on the level of digitalization in the accounting function in the financial services industry in Sri Lanka; and (2) To identify the level of digitalization in the accounting function in the financial services industry in Sri Lanka.

In doing so, the scope of the study is the financial industry of Sri Lankan geographics, in which the focus is on how the accounting functions of these businesses adopt digitalization, where the major focus is on their use of cloud computing, tools for visualization, interfaces to external systems, Real-time reporting, Real-time data, assets, and inventories tracking, big data, process automation, transparency, integrated consolidation system, paperless accounting, data quality, and Blockchain.

Methodology

The study used a quantitative strategy where the researcher used a survey method to test the research hypotheses developed and to validate the theoretical model identified. In addressing the research questions of the study, a conceptual framework with the dependent variable- Level of Digitalization in the Accounting Function and the independent variable- Determinants of Digitalization was developed *(Refer Figure 1)*. These two variables were measured using a 5-point Likert Scale with 10 items adopted from (Singhdong, et al., 2021) measuring the independent variable, and 13 items adopted from (Ghorbani, 2019) measuring the dependent variable.

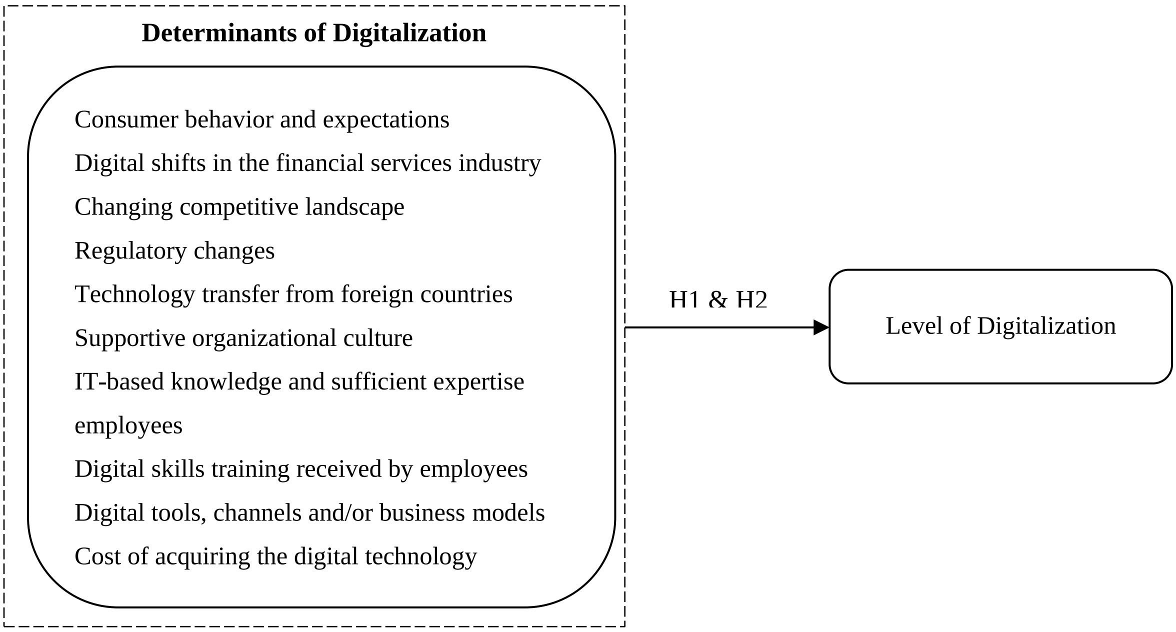

Figure 1: Conceptual Framework of the Study
Source: Author, 2022

In selecting the research approach, the deductive approach was selected for the purpose where the researcher arrives at a rational conclusion by the logical generalization of a known fact and is generally associated with quantitative research where the theory guides the study. The positivist paradigm is used in this study, in which the researcher is given an image of the real world from which to construct a model of the process under examination. In this study, the researcher studies the reality objectively, who should put a distance between themselves and what is studied, when identifying the relationship between the determinants and level of digitalization of accounting functions of financial firms in Sri Lanka. Here, the target population for this study is the accountants who are working in the financial services industry in Sri Lanka while the sample size for this study is 253 accountants selected using the convenience sample technique under non- probabilistic sampling technique for this research, which rationally suits the study given the time limitations, and the crisis that hinders probability sampling techniques, where the primary data were obtained using a self-administrated, structured questionnaire is distributed through online mediums. To analyze the data statistical software SPSS was accompanied where ANOVA, One Sample T-test, and Regressions analysis were conducted.

Findings

In addressing the first objective of the study, the Correlation analysis and the regression analysis performed showed that the determinants of digitalization have a significant (*p*-value= 0.000) *(Refer Table 1)* moderate positive impact (Standardized Coefficient takes a value of 0.600) on the level of digitalization in the accounting function in the financial services industry in Sri Lanka *(Refer Table 2 and Figure 2)*. Here, the findings showed that the technology transfer from foreign countries and the digital tools, channels, and/or business models that were a central part of the business strategy which drove digitalization in accounting functions of financial firms.

Table 1. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.169	1	70.169	141.264	.000[b]
	Residual	124.677	251	.497		
	Total	194.846	252			

a. Dependent Variable: Level of digitalization
b. Predictors: (Constant), Determinants of digitalization

Table 2. Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.157	.167		6.923	.000
	Determinants	.606	.051	.600	11.885	.000

a. *Dependent Variable: Level of Digitalization*
Source: Author, 2022

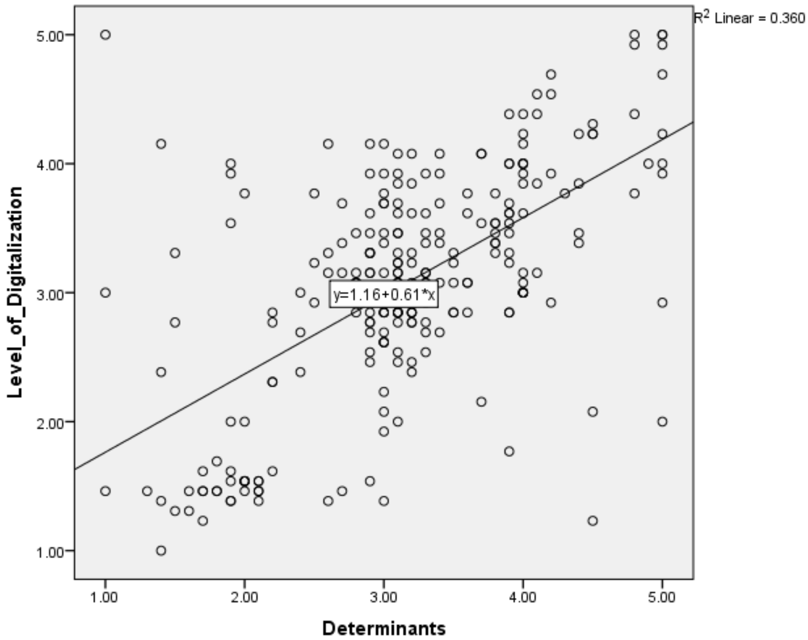

Figure 2: Distribution of Data

While in addressing the second objective, according to the One-sample T-test conducted, the level of impact of digitalization in the accounting function in the financial services industry in Sri Lanka was deduced to be of a moderate level (mean value= 3.0721 which is between the moderate range of 2.1 and 3.5) *(Refer Table 3)*. Results show the need for the accounting functions in the financial industry to be introduced to more digital transformation, as they show less usage and adoption of technologies like Blockchain technology, Cloud computing, Internet of things (IoT), etc. now, for which industries can train their employees to find such new technologies and apply them to their functions and to develop the digital transformation effectively within the industry.

Table 3. One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Level of Digitalization	253	3.0721	.87932	.05528

Source: Author, 2022

Looking through the sample of employees employed in the accounting functions of those financial service providers in the industry, the majority which accounts for 48.2% which is almost half the sample were from Generation Z (below 25 years) while 29.2% were millennials (those between ages 26-41), hence the sample shows a tech-savvy, flexible set of employees, who are growing up with technology, which could be a reason as to why the accounting function of the financial industry in Sri Lanka is currently in a transforming stage, with a moderate level of impact of digitalization in the accounting function.

Conclusion

In identifying the level of this impact digitalization in the accounting function, it was deduced to be of a moderate level, in which the majority of those working in the industry were either of Generation Z (the most closely with technology) or the Millennials (who grew up and were flexible for transforming technologies) and that the organization in the financial industry mostly used interfaces to external systems in the accounting function than adoption to internal digital transformations like Blockchain technology, Cloud computing, Internet of things (IoT), etc. this provides insights on how the industry is still under transformation. Thus, the industry requires to invest more in such features to digitalize the accounting function providing implications to the industry to be attentive to the digital transformation of their accounting functions, and in theoretical aspect, this study is a first in the context of Sri Lanka to evaluate the impact and the level of digitalization in the accounting function in the financial services industry.

The delimitations of the study were that it relied on the views of the respondents but also on a questionnaire that they self-administered as it was difficult to collect data on-site because of the pandemic and the poor economic situation in the country; as a result, an online survey was used. Additionally, the sample size was relatively small; however, more generalized findings could have been obtained if a larger sample size had been used or if other business sectors had been used. Thus, in improving the implications of this study, it can be used as a foundation for future research where the author also recommends modifications to the theoretical constructs, whereas currently the overall impact from the 10 determinants was examined, and recommendations bring light to prepare a simpler model where a selected number of determinants shall be assessed individually against the level of digitalization within the industry.

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Impact of corporate governance on firm's performance: evidence from Sri Lanka listed commercial banks

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Introduction

Corporate Governance is regarded as one of the most important factors in restoring market confidence and recruiting positive investors to the company and the economy as a whole. It is widely acknowledged that promoting effective Corporate Governance norms is critical for attracting investors, lowering risk, and improving a company's performance (Al Manaseer, 2012). Empirically it has been discussed that well governed financial institutions have a higher potentiality to show the best financial performance. Through Corporate Governance, firms spread out the principles for how the organization should be coordinated or administered in order accomplish its objectives and builds the organization's worth and advantages for all partners in the present circumstance such as directorate, the board, investors, buyers, representatives, and the society (Baghiyan, 2013). The researcher can quantify Corporate Governance by utilizing board size, board meetings, presence of female board individuals, board committee, the duality of the CEO, board balance, board individuals' schooling level, board working experience, autonomous (Outside Managers), board remuneration, board possession and block holders. Firm's performance can be measured by utilizing accounting based execution measures such as Return on Assets (ROA) and Return on Equity (ROE). (Zahor Naimidah, 2017)

During the last decades in Sri Lanka, it has observed different misconducts which happened in several financial institutions in Sri Lanka due to their poor Corporate Governance practices (Perera & Haleem, 2020). These types of misconducts in several financial institution could put the investors in a huge risk which would make them to doubt on the credibility of all the financial institutions as a whole and would demand their invested money back that would place the whole financial system in a crisis (De Silva et al, 2018). Thus, the researcher has identified the need of identifying the major Corporate Governance practices to enhance the performance of financial institutions in Sri Lanka. As per the empirical studies, researcher has identified imbalances in their findings where some of the study findings have proposed a positive impact of Corporate Governance on Firm's Performance and some have proposed a negative impact on Firm's Performance (Rui et al, 2002). To elaborate further, in some of the studies it was found that there was no significant difference between the firm performances among Corporate Governance indicators such as board leadership structure, board committee, board meeting and board balance whereas some studies have exhibited that indicators such as board balance, board size, voluntary disclosure and Chief Executive Officer (CEO) duality had a positive significant impact on performance (Nibetita, 2018) and in some studies the board composition, size of the board of directors has shown a negative impact on Firm's Performance (Dutta, 2018).Thus, the researcher has identified that this problem of identifying the impact of Corporate Governance on Firms' Performance has not been empirically solved. Accordingly the primary objective of the current study, was to investigate the impact of Corporate Governance on the Firm's Performance with a special reference to the listed Commercial Banks in Sri Lanka.

Methodology

The main independent variable of the study was Corporate Governance which has measured using four major indicators as proposed by the empirical studies which were Board Meeting (BM), Board Balance (BB), Board Committee (BC) and Board Size (BS). The dependent variable of this study was the firm's performance and it was measured by using Return on Asset (ROA) and Return on Equity (ROE). In addition to the independent and dependent variables, the researcher has used the Firm Size (FS), Firm Age (AG) and Leverage (LEV) as the control variable of the study. Figure 01 shows the conceptual framework used by the researcher to analyze the impact of corporate governance practices on the firm performance in listed commercial banks of Sri Lanka.

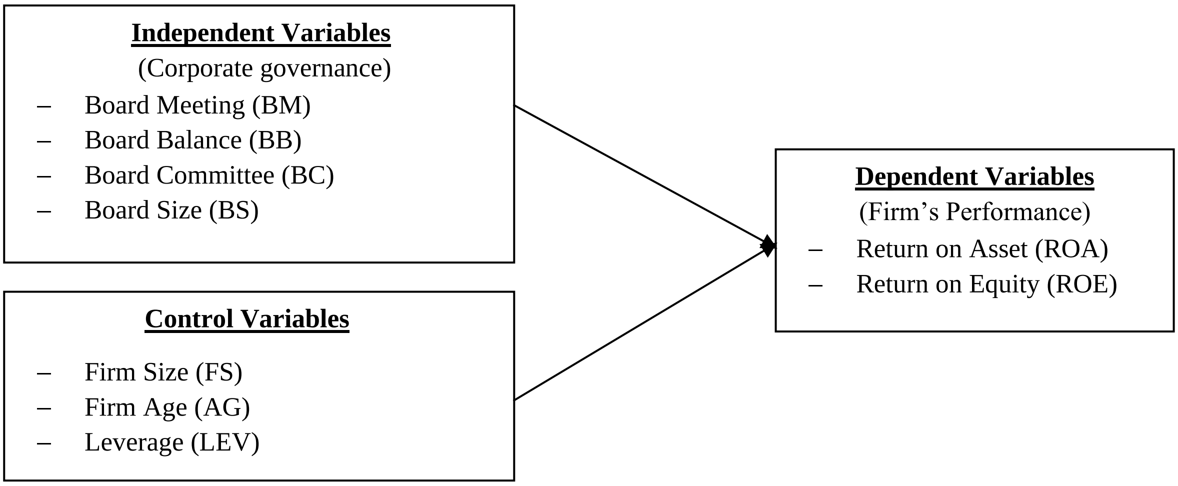

Figure 01: Conceptual Framework

The functional form of the variable relationship is provided in the following econometrics model.

$$P_{it} = \beta_0 + \beta_1 BM_{it} + \beta_2 BB_{it} + \beta_3 BC_{it} + \beta_4 BS_{it} + \beta_5 FS_{it} + \beta_6 AG + \beta_7 LEV + \varepsilon_{it} \text{ - - - - - - } (1)$$

In equation 1, P denotes a vector of performance variable such as Return on Asset and Return on Equity used by the researcher to measure the profitability of the listed commercial banks in Sri Lanka. Board Meeting, Board Balance, Board Committee and Board Size denote the Corporate Governance measures, while Firm Size, Firm Age and Leverage denote the control variables used in the research study. β_0 is the constant and β_1 - β_5 denotes the coefficient of the variables. ε_{it} represents the error term of the econometrics model.

The researcher used balance panel data set, which includes 24 listed commercial banks in Sri Lanka for a period of five years from 2016 to 2020. The researcher used Eviews statistical software package and Microsoft Excel package to analyze the gathered data as analysis tools. The study used correlation analysis to investigate the relationship between Corporate Governance practices and Firm's Performance. Two-panel regression analyzes were conducted using the model specified in equation 1 to examine the impact of Corporate Governance practices on performance measures. The Hausman test was applied to choose between the random effect model and fixed effect models.

Findings of the Study

The researcher has confirmed the normality of data using the histogram test and tested the stationary of the data using Levin Lin Chu test. According to the Levin Lin Chu test results, p-values of all variables were stationary at 5% significance level. Further, through the test of homoscedasticity as the p-value of the test was less than 0.05, researcher has achieved the assumption that the variance of the error term in the regression model is constant.

Table 01: Hausman Test

	Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Model 1 (ROA)	Cross-section random	15.687	7	0.028
Model 2 (ROE)	Cross-section random	13.709	7	0.057

The researcher has performed a Hausman test for two models as to identify the appropriate model between the fixed effect model and the random model. To identify the appropriate model using the Hausman test, two hypotheses were developed as follows;

H0: Differences in Coefficients are not systematic (Random Effect Model is appropriate)

H1: Differences in Coefficients are systematic (Fixed Effect Model is appropriate)

According to the results of the Hausman Test as presented in Table 01, the probability value was less than 0.05 of ROA model. Thus, the researcher has rejected the null hypothesis and selected Fixed Effect to run the regression model 01. As probability value was greater than 0.05 for the model 02, the researcher has accepted the null hypothesis and selected to perform a Random Effect model for ROE model. The results of the random effect panel regression model and fixed effect panel regression model for each profitability measures were presented in Table 02.

Table 02: Results of Fixed Effect and Random Effect Panel Regression Models

Variables	ROA (Model 1)		ROE (Model 2)	
	Coefficient	Probability	Coefficient	Probability
C	20.853	0.010	-26.921	0.108
BM	0.950**	0.031	2.582	0.271
BB	1.099***	0.018	4.019**	0.030
BC	0.140	0.673	-0.244	0.882
BS	-1.206	0.199	-3.538	0.445
FS	-1.131***	0.001	0.918	0.127
AG	2.009***	0.008	1.137	0.311
LEV	-0.007	0.151	0.062***	0.007
R^2	0.884		0.160	

**significant at 1% level, ** significant at 5% level, ***significant at 10% level*

According to Table 02, ROA model has 88.4% R squared value, which means 88.4% of the variation of the ROA can be explained by the independent variables taken in to the model. As per the P-values of the independent variables only the impact of Board Meeting and Board Balance were significant on firm's performance at 0.05 levels where the impact of Board Committee and Board Size were insignificant at 0.05 levels. Thus, the researcher accepted only two hypothesis in the model 01 (ROA) which say that there is a significant impact of Board Meetings on ROA and there is a significant impact of Board Balance on ROA of Commercial Banks in Sri Lanka. These findings were consistent with the investigation carried out by Bogamuwa and Karunathilaka, (2021).

According to the regression results of model 2 (ROE), the R squared value was 16% which means that only 16% variation of dependent variables can be explained by selected independent variables in the model. Further as per the P-values of each regression weights only the impact of Board Balance was statistically significant at 0.05 level where all other impacts were statistically insignificant on the performance of Commercial Banks in Sri Lanka. Accordingly, one hypothesis under the model 02 were accepted that there is a significant impact of Board Balance on the ROE of the Commercial Banks in Sri Lanka. These findings were consistent with the investigation carried out by Chua,(2012).

Conclusion

This study investigated the impact of corporate governance practices on the firm performances of listed commercial banks in Sri Lanka. Findings of the study shows that in the model 01, Board Meeting, and Board Balance have a significant impact on ROA while board balance has the highest significant impact on ROA whereas in the model 02, only Board Balance has a significant impact on ROE model. Accordingly, the researcher concludes that the best fit model to explain the impact of Corporate Governance on Performance of Commercial Banks of Sri Lanka was Model 01 (ROA). Thus, the stakeholders in the field of study including the Commercial Banks in Sri Lanka could make a consider the positive impact on the Return on Assets (ROA) of the firms or the overall banking sector mainly through maintaining a balance Board of Directors who are characterized with versatile skills, abilities and qualities and by conducting quality meetings of Board of Directors to set the policies and strategic direction to improve the corporate sustainability of a Commercial Bank.

The current study has used only the listed commercial banks in Sri Lanka for its study sample where the future researchers can include versatile organizations in the sample to make the results more representative of the population and as this study has used secondary data of only five years of period, future researchers can collect time series data of period more than that.

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The impact of self-efficacy and professional development on the audit quality of the auditors in Colombo urban area in Sri Lanka

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Introduction

This research's main objective is to find the impact of self-efficacy and professional development on audit quality. Audit quality is defined as the auditor's attitude toward doing their tasks in line with the required standards (Erlina & Muda, 2018). If some person can succeed in a given situation and if that person has beliefs that can be explained it is self-efficacy (Cherry, 2020). Professionals develop a set of tools, resources, and training sessions meant to help educators increase the quality and effectiveness of their education. It is call as Professional development and according to the studies of (Lee et al., 2016) auditors do not work in isolation.

In Sri Lanka, the increased level of resource mismanagement and low financial performance is significantly high due to factors that are being affected by political instability, unfavorable economic conditions, loopholes in the regulations, market dynamics, and the national culture. And also, the economic and financial crisis of the previous decade, as well as the resulting financial depreciation and economic circumstances, have reduced people's trust in financial information. The need of regaining that confidence has been highlighted In each of these statuses.

Not only that but also auditors are obliged to assess the factors that affect the performance of the companies and thereby their effect on the country's economy. The growth and development of an organization suggest its performance. Thus, through the improvement of Audit Quality, the possibilities of improving the efficiency of financial performance would be immense. Therefore, personal characteristics such as self-efficacy and the professional development of auditors would be important for an improved level of audit quality.

According to previously conducted research, it has a positive impact between the self-efficacy, professional development, and the audit quality of the auditors. Hence, when emphasizing the practical significance of this study, fundamentally it needs to presume that there is an impact on the self-efficacy, professional development, and the audit quality of the auditors in Sri Lanka.

Methodology

The population for this study comprises all the auditors employed in the private sector and government sector Colombo urban area in Sri Lanka. The sample selected for this study was the auditors employed in the major audit firms (Ernst &Young, KPMG, Price Waterhouse Coopers, Deloitte) in Colombo and the government auditors in Colombo. According to the 2019 National Audit Office Annual Report., As of June 2020, there were 1234 government auditors inclusive of the Auditor General himself. Colombo's leading auditing firms, Ernst & Young, KPMG, Price Waterhouse Coopers, and Deloitte, have 966 auditors. So, the research population is 2,200. According to the Morgan table, the research sample is 327. This sample size is divided into 144 government auditors and 183 private-sector auditors. It is selected based on population size.

When starting this data collection tried to use the proportionate sampling method but because of the Covid 19, the pandemic situation couldn't practically apply that method. Terefore, the convenient sampling method is applied to collect the data.

A conceptual framework is an analytical tool that helps organize and understand research. It can be used to structure a research project or to analyze and communicate the results of that research.

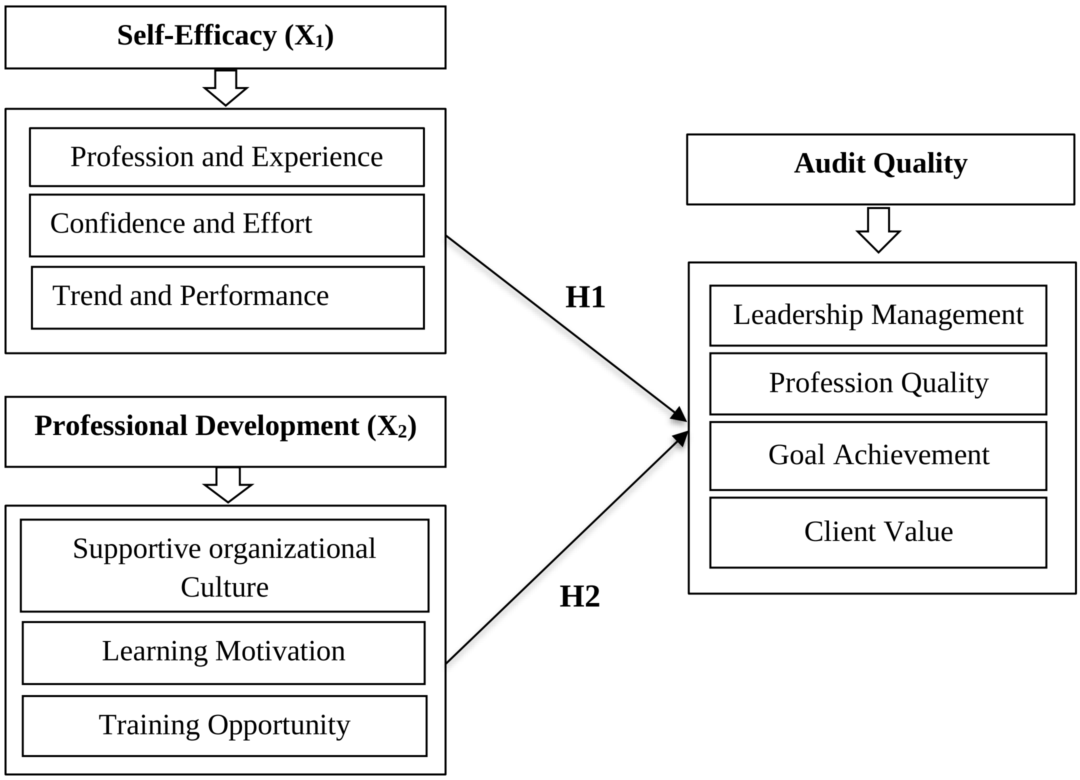

Figure 2:Conceptual framework

This study employed descriptive statistics, correlation analysis, and multiple regression to analyze the data. The regression analysis is a statistical model that assesses the impact among variables. This analysis more specifically determines the extent to which the dependent variable changes when the independent variable changes while the other independent variables are held constant. The relationship that is being extracted through a regression analysis can be presented in the formula below.

$Y = \beta 0 + \beta 1\ X1 + \beta 2\ X2 + \varepsilon$

Y=Audit Quality, $\beta 0$ = Intercept, $\beta 1$= Co-efficient of X1, $\beta 2$ = Co-efficient of X2, X_1=Self Efficacy X_2=Professional Development, ε = Error Term

Findings

According to this research findings, we can understand that audit experience and professionalization can both improve professional awareness. Furthermore, an auditor's education and abilities can significantly improve their professional judgment. Professional development (including corporate culture and training opportunities) and self-efficacy (which encompasses professionalism and experience as well as prowess and performance) were revealed to have a significant influence on audit quality. The research questions of the study could be answered as follows,

- There is a positive impact of self-efficacy on the audit quality of the auditors in Sri Lanka.
- There is a positive impact of professional development on the audit quality of the auditors in Sri Lanka.

All the results showed that the data set is normally distributed and does not contain outliers. To decide what statistics to be used it initially tested the normality of the data set. To test the Normality of the sample data it used Skewness and Kurtosis.

Correlation analysis examines the strength of the impact between two variables. The correlation between Self Efficacy and Audit Quality was statistical significance at the 0.01 level with a Pearson correlation coefficient of +.718. It shows that there is a positive and strong relationship between Self Efficacy and Audit Quality. The correlation between the Professional Development and Audit Quality was statistical significance at the 0.01 level with a Pearson correlation coefficient of +.642. It shows that there is a positive and strong relationship between Professional Development and Audit Quality. From the above results, it was obvious that job performance was more moderately positively related to Self-Efficacy than to Professional Development.

Before running the regression analysis, four basic assumptions have tested using the converted model. The first assumption is the Normality of data and the results showed that data has been normally distributed after the conversion of the model. Multicollinearity is the second assumption of regression, tested using Correlation and the results showed the absence of Multicollinearity between independent variables. The third assumption, Autocorrelation tested using the Durbin-Watson test. Durbin- Watson value for model 1. 906 showed less Autocorrelation. Fourth assumption Heteroskedasticity tested by deriving a scatter plot using the predictive value of the independent variable with residue. The results proved that no Heteroskedasticity in the model.

Hypotheses Test

In statistics, hypothesis testing is a method of determining whether the results of a survey or experiment are relevant. The primary purpose of statistics is to test theories.

H1 - There is a significant positive impact of Self-efficacy on the Audit Quality of auditors in the Colombo urban area in Sri Lanka.

H2 - There is a significant positive impact of Professional Development on the Audit Quality of auditors in the Colombo urban area in Sri Lanka.

Table 1. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.254	0.082		3.113	0.002
	Self-Efficacy	0.676	0.076	0.573	8.891	0.000
	Professional Development	0.183	0.066	0.180	2.789	0.000

Source: Authors constructed, 2022

There has a significant impact on independent variable 1 one dependent variable and there has a significant impact on independent variable 2 one dependent variable. The results indicate that total Self-efficacy and Professional Development have a significant positive impact. Since the regression model coefficients depict the percentage change in the dependent variable due to a percentage change in the independent variable increase in Audit Quality. when causes a 1% increase in Self Efficacy, Audit Quality increases by 0.676%. Moreover, when causes a 1% increase in Professional development, Audit Quality increases by 0.183%. But the R Squared 0.527 indicates that self-efficacy and Professional Development explained 52.7% of the Audit Quality.

Conclusion

The findings revealed that both Self-Efficacy and Professional Development had a positive, moderate influence on Audit Quality, and the two variables were substantially associated with Audit Quality. After surveying approximately, the sample of all government and private sector auditors in the Colombo Urban Area in Sri Lanka obtained, we found that audit experience was the most important factor. Audit experience and specialty improve professional awareness, and the auditor's knowledge and competence can help the practitioner make better decisions.

Among the findings of this study are that professional development should be developed further, and audit authority should create an appealing future vision that emphasizes feedback and learning inside an organization to retain auditors. Self-efficacy, as well as professional experience, leadership management, professional quality, mission aim, and audit quality, were found to have a strong positive influence on client value. Our studies show that output and outcome evaluations, performance, and values depend on the self-efficacy, profession, and experience of the evaluator. Furthermore, to successfully convey the audit results to the audited business, the auditors or audit firm must have a solid and professional connection with the audited entity.

Overall, the findings indicate that self-efficacy and professional development have a significant impact on Audit quality. Employers should continue to focus on improving professional development to improve the performance of individuals and organizations. Incentive programs, mentoring programs, job enrichment, appropriate leadership training, development programs, challenges, automated work, and rewards can improve employee self-efficacy. Organizations should organize frequent meetings to discuss and share information and experience, in addition to creating an internal network.

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Impact of corporate governance mechanisms on adoption of Integrated Reporting

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Introduction

Why do companies prepare annual reports? Generally, annual reports are the main source of information to get a whole idea regarding the companies. So, the main purpose is to express an overall picture regarding the company. However, the content and scope of annual reports have changed with time in accordance with varying expectations of people. The traditional annual reports have given much concern for the financial information through the main financial statements. But it is not enough to understand the actual picture of the company. So, time to time people realized that the non-financial information of a company is as important as the financial information of the company. With that viewpoint, the demand for non-financial information related to companies has increased rapidly along with the increasing complexity of the financial markets. In many research studies there are several reasons for growing demand for non-financial reporting. One reason is the growing relevance of intangible assets, not properly captured by financial reporting, but constantly taking on the role of tangible assets in the total amount of a firm's invested capital (Lev, 2001). As there was no common rules or regulatory body for reporting non-financial information, it was based on voluntary disclosure. In such kind of situation, the concept of "integrated report" came out by combining both financial and non-financial information into one report. With that this integrated reporting was spread rapidly throughout the world. As a result, in 2010, International Integrated Reporting Council (IIRC) was founded. So, the main responsibility of disclosing firm's information to its stakeholders is with the managers/directors of the company. In the empirical literature, some researchers have evaluated the impact of corporate governance mechanisms on the decision to adhere this IR and concluded that there is an impact of corporate governance on the decision to adopt IR (Fiori et al., 2016; Garcia-Sanchez et al., 2020; Girella et al., 2021). Although there are previous studies which have been done based on corporate governance and the decision to adopt IR, it is difficult to find such studies related to Sri Lankan context in the existing literature. But both corporate governance and IR are practicing in Sri Lanka also. Therefore, this study has been done to assess the relationship between corporate governance mechanisms and the decision to adhere IR related to Sri Lankan listed companies.

Methodology

This study has examined the impact of corporate governance mechanisms on the decision to adhere IR in Sri Lankan listed firms for the period of three years (2019-2021). For this, six corporate governance mechanisms as independent variables called, board cultural diversity, board gender diversity, board independence, board ownership and CEO duality and two control variables called firm size and firm age. The study has performed under deductive approach. Sample for the study have been selected from 285 companies listed in Colombo Stock Exchange (CSE). It was included 35 companies which have adopted IR and 35 companies which have not adopted IR. To maintain the consistency and comparability, annual reports throughout three consecutive years which were prepared by 70 companies have been considered, for the analysis. The sample has been selected using convenience sampling method. When selecting the sample under two categories, the industry wise balance between IR adopted companies and companies which had not adopted IR have been maintained to some extent. The secondary data related to above mentioned variables have been collected through annual reports of respective companies. The analysis of data has been done using E-views software.

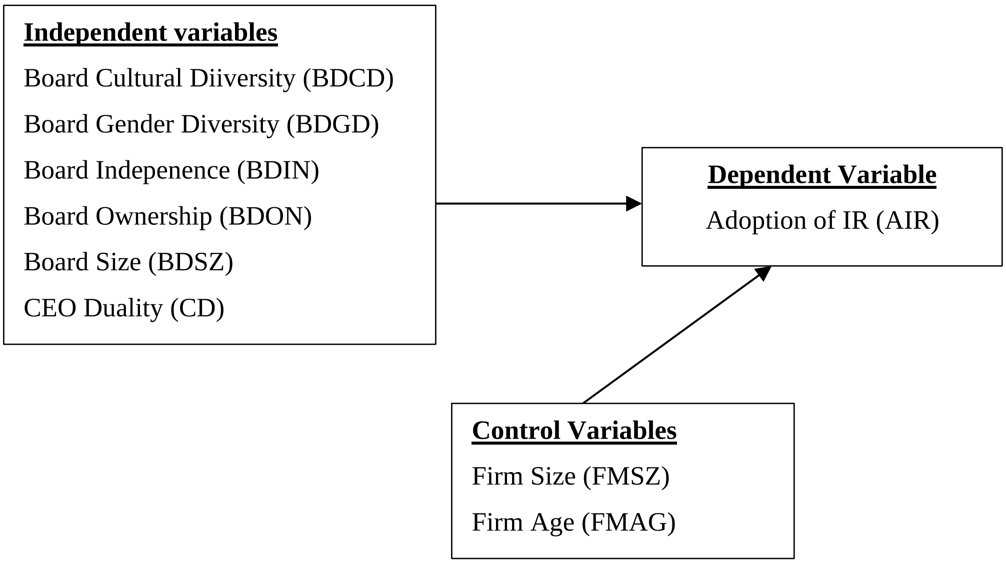

Figure 1. Conceptual Diagram

Hypotheses Development

Based on the previous studies in the existing literature (Fiori et al., 2016; Garcia-Sanchez et al., 2020; Leuz & Wysocki, 2008), the following hypotheses were developed relevant to the research question and objective.

H1: There is an impact of board cultural diversity on adoption of IR.
H2: There is an impact of board gender diversity on adoption of IR.
H3: There is an impact of board independence on adoption of IR.
H4: There is an impact of board ownership on adoption of IR.
H5: There is an impact of board size on adoption of IR.
H6: There is an impact of CEO duality on adoption of IR.

Research Model

$$AIR_{it} = \beta_0 \pm \beta_1 BDCD_{it} \pm \beta_2 BDGD_{it} \pm \beta_3 BDIN_{it} \pm \beta_4 BDON_{it} \pm \beta_5 BDSZ_{it} \pm \beta_6 CD_{it} \pm \beta_7 FMSZ_{it} \pm \beta_8 FMAG_{it} \pm \varepsilon_{it}$$

For AIR, BDCD and CD, dummy variables (1,0) have been used. BDGD has been calculated as a proportion of women directors in the board. BDIN has been calculated as a proportion of independent non-executive directors in the board. BDON has been taken as a percentage of shareholding by Board of Directors out of total shares. Total number of members in the director board is considered as BDSZ (Fiori et al., 2016). Further, FMSZ and FMAG has been measured based on the natural logarithm of total assets (Fiori et al., 2016) and number of listing years (Deegan, 2014) respectively. All the required data for the calculations have been taken from the annual reports of the selected companies. Descriptive statistics, correlation matrix and logit regression model are used to analyze the collected data.

Findings

According to the descriptive statistics, the presence of women in board of IR adopted companies are less than the companies which hadn't adopted IR. On the other hand, BDIN have given two contradictory ideas in relation to AIR. Based on mean values, BDIN in IR adopted companies is higher than in the companies which hadn't adopted IR. But when it comes to median values, opposite idea has been given. BDON of the IR adopted companies are less than the BDON of the companies which hadn't adopted IR. Other than that, FMSZ of IR adopted companies are larger than the FMSZ of companies which hadn't adopted IR while FMAG of IR adopted companies are less than the FMAG of the companies which hadn't adopted IR according to descriptive statistics.

When considering about the **correlation** between dependent and independent variables, there is a positive relationship between AIR and BDCD. The correlation between AIR and BDGD is negative, while it is positive between AIR and BDIN. The association among AIR and BDON is negative, whereas AIR and BDSZ have positive correlation. Further, the correlation between AIR and CD is negative. On the other hand, correlation between AIR and FMSZ is positive and correlation among AIR and FMAG is negative.

Table1: Logit Regression Results

Variable	Coefficient	e^{β} Value	Prob.
BDCD	0.5370	1.7109	0.2132
BDGD	-0.2717	0.7621	0.8969
BDIN	-1.2733	0.2799	0.3946
BDON	-0.0109	0.9891	0.3596
BDSZ	0.2782	1.3207	0.0017**
CD	1.4173	4.1259	0.202
FMSZ	1.7591	5.8075	0.000**
FMAG	-0.0260	0.9743	0.0109**

***Significant at 5% level*

As per the regression results, there is a statistically significant ($P < 0.05$) impact of Board Size (BDSZ) on AIR. The regression coefficient of BDSZ was +0.278. It means, an increase in BDSZ by one member is associated with an increase of nearly 32% in possibility of adopting IR (AIR). This positive impact is empirically proved by many researchers before related to foreign contexts (Fiori et al., 2016; Pearce & Zahra, 1992; Dalton et al., 1999). However, other independent variables have no significant impact on adoption of IR.

On the other hand, both firm size and firm age which are control variables n the study have statistically significant impact on AIR. The results of hypotheses testing are in the table 2.

Table 2: Hypotheses Testing

Hypotheses	P-value	Accepted/Rejected
H1	0.2132	Rejected
H2	0.8969	Rejected
H3	0.3946	Rejected
H4	0.3596	Rejected
H5	0.0017	Accepted
H6	0.202	Rejected

Conclusion

The objective of the study was to test whether there is any impact of corporate governance mechanisms on the decision of adopting IR in Sri Lankan CSE listed companies. Accordingly, board size (BDSZ) is significant, which has statistically significant positive impact on the decision to adhere IR. Many previous researchers (Fiori et al., 2016; Pearce & Zahra, 1992; Dalton et al., 1999) have also found that BDSZ impacts on firms' decision to adhere IR. Therefore, the most important result of this study is the number of members in the board (board size) is influencing the decision whether to adhere the IR framework or not. This finding has contributed to the empirical literature in confirming the importance of the size of the board in good corporate governance practices and, it confirms the importance of the size of the board in maintaining better relationship between the board and firm's stakeholders. Accordingly, I suppose the firms to have about ten members in their director boards to maintain good corporate governance practice, to maintain better relationship with stakeholders, and to make better decisions. Furthermore, firm size is positively impacts on the decision to adhere IR, while firm age is negatively impacts on the decision to adhere IR. It can be identified as the comparatively larger firms have higher possibility to adhere IR than smaller firms in terms of total assets and the possibility of adhering IR framework by new firms is higher than the older firms.

This study provides an empirical proof to the professionals who are practicing in the firms to understand the impact of corporate governance mechanisms on their decisions regarding IR and how to implement those mechanisms to have good impact on firm's decisions. Apart from that, this is useful for the academics who are interested on the impact of corporate governance on the firm's decision to adopt IR and also important for the theory developers to understand theoretical background of Agency Theory related to practical world as well as for future researchers.

However, there are limitations as well like small sample, considering only listed firms and only Sri Lankan firms, considering only six corporate governance characteristics etc. Therefore, I recommend future researchers to conduct further studies by eliminating them as much as possible.

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Impact of the quality of accounting information on cost of capital: evidence from top manufacturing companies in Sri Lanka & India

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Introduction

Corporate disclosures comprising monetary information are pivotal for the success of the contemporary business. It helps in minimizing the information asymmetry between the interest parties and the firm. Further, these practices enable businesses to develop trust and confidence among the capital providers towards the business by reducing the risk of their investment decisions. In turn, it aids the firms to ease access to the required funds and enables them to expand their operations as they anticipated (Brav, 2009).

Enhancing the business performance creates permanent and easy access to financing through a wide range of interest parties comprising both internal and external sources (Didler et al., 2021). As the business grew larger, the inner sources will be insufficient to continue operations; encouraging them to raise funds through external parties in the form of equity investments or long-term debt; in turn making companies obligated to pay in return for each capital source (Myers, 2001).

The larger the business, the larger the opportunities for manipulation! Since the ownership of the listed companies is highly detached from the management, managers may attempt in manipulating the financial information, raise more funds superfluously, or lessen the capital cost to be paid (Rajgopal & Venkatachalam, 2011). Once the earnings are managed to hide the real outcomes, the quality of accounting information reduces as it misguides the decision-makers (Ramadan et al., 2022). Convincingly, the management might impact the accounting quality (Frankel, 1995). Therefore, this study profoundly explores the effect of accounting quality on the cost of capital with special reference to the manufacturing companies among the top listed manufacturing companies in Sri Lanka and India.

The research study has a broader empirical significance since it fills the empirical gap in the existing literature by being the pioneer study that compares and contrasts the effect of accounting information quality on the cost of capital of companies operating in the two South Asian countries [India, Sri Lanka] that are politically and economically connected. Moreover, the study is practically noteworthy for managers and policymakers to take initiatives to enhance accounting quality and control capital costs. The elimination of the information unevenness aids to eliminate the uncertainties faced by the fund providers, thus causing them to reduce their expected return due to the more profitable capital allocation. However, the study is limited to the notion of accounting quality instead of the existence of numerous factors which affect the firms' capital cost while the existence of the disparity in measuring the accounting quality in the literature is another boundary of this study.

Accounting information quality: according to Hribar et al. (2010), is the degree to which a firm's information accurately represents its current operational performance, allowing for the prediction of future performance and the evaluation of the firm's worth. Further, Francis et al. (2005) assert that dependability, relevance, conservatism, timeliness, smoothness, predictability, and persistence are some characteristics that are connected to the quality of accounting information. In this study, we will look into three aspects of the quality of accounting information, namely Quality of Earnings (QE), Accruals Quality (AQ), and Accounting Conservatism (AC), which are the most popular issues and the subjects of substantial research by contemporary scholars (Eliwa, 2016; Lara et al., 2011; Francis et al., 2008).

However, most prior research studies which investigate the connection between the accounting quality and cost of capital concentrated on firms that operate only in a single country and there are few studies carried out in the South Asian context. Therefore, the researcher exercises an effort to recognize the effect of the quality of accounting information on the cost of capital through this study alongside the intention of emphasizing the common or varying outcomes of the above association in Sri Lanka & Indian context.

Methodology

The researcher adopted a quantitative design under the deductive approach which is merely based on the positivist philosophy to carry out this research study. The population of the study comprises all the quoted public limited corporations operating in India and Sri Lanka out of which selected the manufacturing companies that are included in the top 20 list of the stock exchange of each country. Accordingly, the sample of this study comprises 13 quoted manufacturing companies out of the top 20 listed companies operating in Sri Lanka and 12 quoted manufacturing companies out of the top 20 listed companies operating in India.

Following a thorough examination of the preceding literature, the research is merely concentrated on three proxies: earnings quality (as measured by the Jones Model (1991) and DeAngelo (1986) models), accruals quality (as measured by the modified Dechow & Dichev (2002) Model), and accounting conservatism (as measured by the earnings per share to share price ratio) to measure the quality of accounting information while the cost of capital is simply computed using the weighted average cost of capital (WACC) of the selected enterprises (Givoly & Hayn, 2000). This research relied on secondary data to accomplish the study objectives since the required inputs were calculated using the figures gathered through the published and audited annual reports of the sampled companies from 2012 to 2021. A regression analysis was performed under the following model to determine the impact of accounting quality on the cost of capital of the respective firms.

$$WACC_{it} = \alpha_{it} + \beta_{1i}\mathrm{QE}_{it} + \beta_{2i}AQ_{it} + \beta_{3i}AC_{it} + \varepsilon_{it}$$

Where, WACC = Cost of capital, QE = Quality of Earnings, AQ = Accruals Quality, AC = Accounting conservatism, e = error term. Under the above regression model, the researcher is anticipated to test the following hypotheses which are constructed after a deep literature analysis.

- H_a - Quality of earnings (QE) is negatively significant to determine the cost of capital. (Francis et al., 2008)
- H_b - Accruals quality (AQ) is positively significant to determine the cost of capital. (Francis et al., 2005; Eliwa et al., 2016).
- H_c - Accounting Conservatism (AC) does negatively significant determining the cost of capital (Lara et al., 2011)

Findings

The researcher used panel data regression analysis to achieve the objectives while using the random effect model recommended by the Hausman Test (Table 1).

Table 1: Hausman Test

	Chi – Sq.	d. f.	Probability	Random / Fixed
Sri Lanka	0.33	1	0.9547	Random
India	0.03	1	0.9984	Random

The regression outcome confirmed that the Quality of Earnings (QE) has a negative coefficient value of less than 0.10 alongside a significant value which is less than 0.05 in both countries, indicating that there is a substantial and inverse association between earning quality and cost of capital. This shows that once the quality of earnings increases, the cost of capital of the respective firms will be dropped.

The Accruals Quality (AQ) showed a positive coefficient value greater than 0.06 alongside a significant value which is less than 0.05 in both countries, indicating that there is a substantial and constructive association between accruals quality and cost of capital. This shows that once the accruals quality increases, the cost of capital of the respective firms will also be increased.

The accounting conservatism showed no substantial impact on the cost of capital of the respective firms in both countries as the regression outcomes reported a significance value greater than 0.05 for both countries.

Table 2: Regression Analysis

	Sri Lanka			India		
	Coefficient	**Std. Error**	**Probability**	**Coefficient**	**Std. Error**	**Probability**
constant	-0.0113	0.0571	0.843	0.1103	0.0098	0.000
AC	0.0005	0.0011	0.625	0.0519	0.0367	0.158
AQ	0.1365	0.0472	**0.004**	0.0689	0.0367	**0.032**
QE	-0.0699	0.0358	**0.050**	-0.0423	0.0187	**0.024**

Source: Survey results 2022

Conclusion

We intended to uncover the truth behind the relationship between accounting information and cost of capital while using top-listed manufacturing companies. The findings of the study revealed that QE is negatively significant to determine the cost of capital in Sri Lanka and India. Besides, manufacturing firms in both countries that are focusing on efficient management of the cost of capital can derive their strategies to enhance the quality of earnings that will be beneficial to achieving the organizational goals.

Moreover, the AQ is positively and significantly impacting to determine the cost of capital which supports the findings of Francis et al. (2005). Further, when comparing the coefficient of QE and AQ, the quality of earnings and accruals quality of Sri Lankan firms have a strong influence on their cost of capital than the Indian companies. Finally, the findings confirmed that there is no substantial association between accounting conservatism and the weighted average cost of capital among manufacturing companies in Sri Lanka and India. The outcomes of this paper will encourage managers to maintain a high earnings quality to reduce the cost of capital. However, having a rigid policy to manage accruals quality could be resulted in creating a high cost of capital for the firms. Thereby, the management has to be attentive when making policy decisions related to accruals quality. Further, the findings widen the avenues for investors, analysts, or bankers who have an interest in financial data with the ultimate objective of earning a return, to consider the quality of the financial information when making investment decisions in the future.

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Cash flows and the financial performance of food, beverage and tobacco companies listed on the Colombo Stock Exchange (CSE)

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Introduction

The study examined the impact of cash flow on the performance of food, beverage, and beverage companies in Sri Lanka. Today, improving firm performance is the main objective of all commercial entities in order to enhance their earnings. One important factor that enhances a company's operations is its cash flow. The ability of a corporation to select an appropriate source of funding to support its activities affects both strong cash flow control and poorly managed cash flows. Cash flow is a measure of how much money a company really receives in or spends over a given period of time. Operating, investing, and financing cash flows are represented by cash flows. The cash flow statement contains information on this cash flow.

Though the companies make profits out of their operations, such profits are not indeed mean a pool of cash. Yet, the calculation of profits includes non-cash items such as depreciation, inventory deduction and revaluation. Therefore, while financial statements are being prepared, non-cash items, that affect profits are adjusted. Additionally, some businesses report high levels of profit, while their cash flow is in danger. On the other hand, some companies report losses in terms of performance and nevertheless generate positive cash flows. Since, Cash flows are a more accurate indicator of liquidity that affect financial performance, neglecting that in evaluating financial performance is a considerable shortcoming. This circumstance made the research work necessary, which is intended to look at how cash flow affects the performance of listed companies. The previous researchers have provided different opinions related to this topic. And there are limited studies related to this topic and empirical research in Sri Lanka (Thevaruban, 2016).

Thus, the present study was carried out with the objective of examining the impact of cash flows on the financial performance of listed food, beverage and tobacco companies in Sri Lanka. And the was grounded on the theoretical tenet that cash flows have an impact on business performance, and the magnitude of that impact is determined by the factors such as financing, investment, accounting, etc. (Ikechukwu, Nwakaego and Celestine, 2015).

Methodology

The methodology refers to the procedures that were used accomplish the objectives of the study. The study has its roots within the positivism philosophy. And the deductive approach was followed in order to generate the quantitative outcomes. The population of the study comprised from 51 companies which were listed within the Food, Beverage & Tobacco sector and 30 companies out of them were chosen as the sample by employing the systematic sampling technique under the probability sampling method. The first company was randomly selected and other companies were selected according to the fixed interval computed. The sampling period consisted from five (05) years from 2017 to 2021. Three independent variables and one dependent variable were identified based on the prior literature. The independent variables are cash flow from operating activities, cash flow from investment activities and cash flow from financing activities and dependent variable is firm financial performance. Return on Assets (ROA) was used as the measure of the dependent variable. In addition, firm size was employed as a control variable. The potential relationships among these variables are depicted by the figure 1.

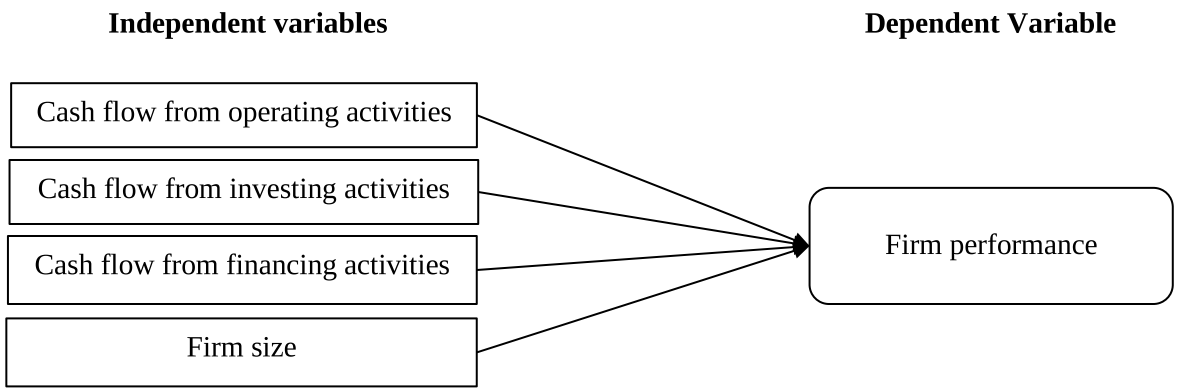

Figure 1: Conceptual Framework

The following hypothesis were tested within the study.

H_1: There is an impact of operating cash flows on the financial performance of food, beverage & tobacco companies in Sri Lanka.

H_2: There is an impact of investing cash flows on financial performance of food, beverage & tobacco companies in Sri Lanka.

H_3: There is an impact of financing cash flows on financial performance of food, beverage & tobacco companies in Sri Lanka.

The following regression model was estimated in order to determine the impact of the cash flow variables on the financial performance of the selected companies.

$$ROA = \alpha + \beta_1 FCF + \beta_2 ICF + \beta_3 OCF + \varepsilon$$

Secondary data collected from the annual reports were analyzed using the e-views software package. Both descriptive and inferential statistical techniques were adopted for the data analysis.

Findings

Preliminary analysis carried out to ensure the normality and detect any multicollinearity issues. The results of this analysis indicated the normal distribution of the gathered data. Further, there was no multicollinearity among the explanatory variables. Table 01 presents the descriptive statistics (mean and standard deviation) of the variables considered. Accordingly, ROA records a mean of 5.5% with a standard deviation of 29.4%. Average financial and investment cash flows amount to (Rs. 877,434.00) and (Rs.890.002.70) respectively. In contrast, the average operating cash flows indicate a positive figure of Rs. 1,945,323.00. However, all the cash flows exhibit a high variation in terms as per the reported standard deviation.

Table 1: Descriptive statistics

	Mean	**Std. Dev.**
FCF	(877,434.00)	3,738,746.00
ICF	(890,002.70)	3,217,071.00
OCF	1,945,323.00	3,636,846.00
ROA	0.055	0.294
TOA	20,528,655.00	41,241,724.00

The results of the correlation analysis are furnished in the table 02. The reported outcomes revealed a significant positive correlation (0.884) among the ICF and the ROA. And, a significant negative association (-0.268) was observable in between the FCF and ROA. Yet, an insignificant positive correlation (0.071) was identified between the OCF and ROA.

Table 2: Correlation analysis

	FCF	OCF	ICF	ROA	TOA
FCF	1	-0.167*	-0.055	-0.268*	-0.147*
OCF		1	-0.088	0.071	0.357*
ICF			1	0.884*	-0.101
ROA				1	0.017
TOA					1

**Significant at 95% confidence level*

Within the present study a sample of 30 companies was studied over a five (05) year period ranging from 2017 to 2021. Since there were five (05) cross sections a total of 150 observations were subjected to the analysis. The panel regression analysis was employed and the selection of the suitable model out of the random effects and fixed effects models was done based on the results of the Hausman test carried out.

Table 3: Hausman test

Test cross-section random effects			
Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	6.97	4	0.1373

As per the results of the Hausman test, the null hypothesis of the "random effect model is appropriate". was failed to reject (p-value >0.05). Hence, the regression output generated by the random effects model is presented in table 04. The outcomes of the regression analysis uncovered a significant positive impact of ICF (0.190) and a significant negative impact of FCF (-0.014) on the ROA respectively. However, the effect of OCF on the ROA was noted as insignificant. In addition, the R^2 was reported as 91.28%. This indicates that the independent variables identified were explaining the 91.28% of the variation of the dependent variable. Moreover, the F value was statistically significant ($p < 0.05$) reflecting the significance of the overall model.

Table 4: Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.360	0.176	-19.073	0.0000
FCF	-0.014	0.004	-3.278	0.0013
ICF	0.190	0.004	49.262	0.0000
OCF	0.006	0.004	1.262	0.2090
TOA	0.048	0.019	2.507	0.0133
R^2	0.9128			
Adjusted R^2	0.9104			
Durbin Watson Stat.	2.078			
F-statistic	379.67			
Prob. (F-statistic)	0.000			

The regression results supported the H2 and H3 hypotheses. Nevertheless, H1 was not supported.
As a result, the research model can be expressed as,

$$ROA = \alpha - 0.014\,FCF + 0.190\,ICF + \varepsilon$$

Conclusion

The present study was carried out to examine the impact of the cash flows on the financial performance of the food, beverage and tobacco companies listed in the CSE. The statistical analysis revealed a negatively significant effect of FCF on the ROA. This finding is consistent with the prior empirical evidences (Percy & Munasinghe, 2015). However, ICF indicated a positively significant impact on the

ROA. In contrast, the impact of OCF on the ROA was positive but insignificant. Yet, Rahman & Sharma (2020) have disclosed a positive and significant impact of OCF on both ROA and ROE. Consequently, it can be concluded that the present study has generated mixed results. Therefore, it is suggested for the future researchers to further explore the impact of cash flows on the financial performance of the listed companies in CSE expanding the sample period and selecting different samples (sectors) and also considering all the listed non – financial companies.

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How accounts receivables management effect the profitability of capital goods companies in Sri Lanka.

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Introduction

Accounts receivables arise in the day-to-day running of any company. This is where companies sell goods to customers on credit with the premise that the customers will pay within an agreed period. This can lead to an increase in sales and also profits. However, if the accounts receivable is not collected within the agreed period, it will lead to bad and overdue debt, which will eventually result in a reduction in profit. Receivables are one of the three primary components of working capital, the other two being inventory and cash. Receivables are the second most important place after inventories and thereby constitute a substantial portion of current assets in several firms. Effective accounts receivable management is important. It affects the financial performance of a firm and a firm's value (Mbula, Memba, & Njeru , 2016). The goal of accounts receivable management is to maximize shareholder wealth. Receivables are large investments in firm assets which are like capital budgeting projects measured in terms of their net present value. The Study has mainly focused on the effect of accounts receivable management on firms' financial performance.

Accounts receivables, according to the theory, are used as a sales tool to differentiate the company's product from its competitors so that consumers prefer to buy that firm's products rather than a competitor's. Various studies (Blazenko & Vandezande, 2013) have suggested that through an extended accounts receivables policy, most companies are able to convince their customers that their products are worth the value of their money. This study may give some perception to the financial managers and managerial decision makers, what should be done for managing accounts receivable at an optimum level which leads the organization towards the profitability.

Methodology

This study focused on the Capital Goods Companies in Sri Lanka. The total number of companies is 29, as per the Colombo Stock Exchange. The sample of this study includes 26 Capital Goods Companies over the period of 5 years between the years 2017 – 2021.

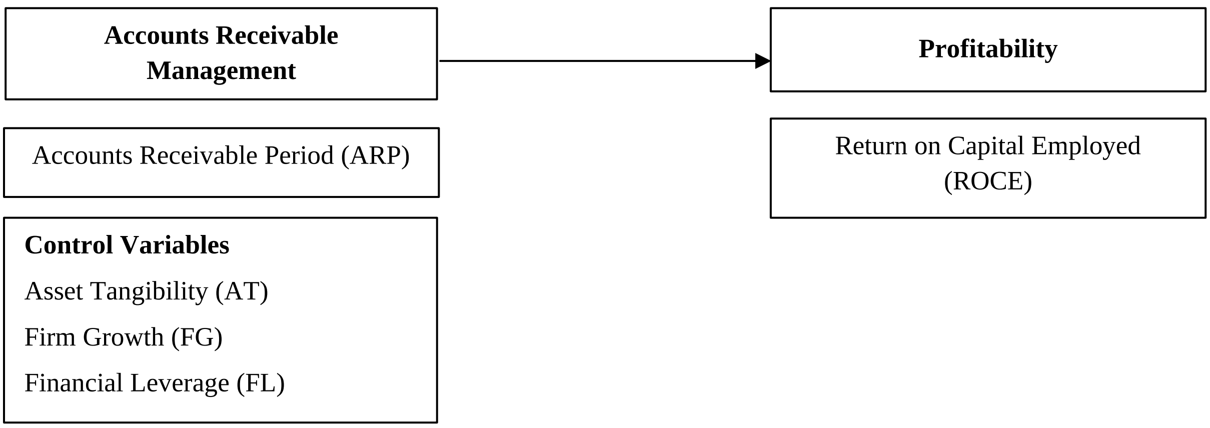

Figure 1: Conceptual Framework

Source: (Shah & Altaf, 2018)

This study focuses on descriptive statistics, correlation analysis, and multiple regressions to analyze the data. To test the hypotheses, the following multiple linear regression model is developed.

ROCE = β0 + β1ARP + β2AT + β3FG + β5FL + ε

β0 = The Intercept, β1 – β6 = The Slope Coefficients, ROCE = Return on Capital Employed, ARP = Account Receivable Period, AT = Assets Tangibility, FG = Firm Growth, FL = Financial Leverage, ε = Error Term

Findings

Analysis technique has been extensively used to examine the relationship between accounts receivables and the Profitability of the Study, univariate analysis is made for every variable in the research model. Further, bivariate analysis and multivariate analysis are applied to find out answers to the research questions.

The main analytical tools used for analysis are descriptive analysis, correlation, simple regression and multiple regression analysis. The univariate analysis has been done for each and every independent and dependent variable. The variables are analysed by using descriptive statistics. The descriptive statistics analysis procedure displays a summary of several variables for each year in the different tables and consists of 26 Capital Goods Companies in Colombo Stock Exchanges of Sri Lanka. It refers to the following items as mean, minimum, maximum and standard deviation.

The relationship between the Control variable of asset tangibility ratio and the dependent variable of return on capital employed has a -0.0089 correlations point and the significance level (p-value) is 0.9192. It refers there is weak negative and statistically insignificant (0.9192 > 0.05) relationship between asset tangibility ratio and returns on capital employed. Considering the relationship between the control variable of firm growth ratio and the dependent variable of return on capital employed variable has 0.0075 correlation points. That refers to return on capital employed having a weak positive correlation with firm growth ratio. The significance level (P-value) is 0.9318 refers it is statistically insignificant (0.9318 > 0.05) relationship between return on capital employed and firm growth. Considering the relationship return on capital employed ratio and financial leverage ratio; these variables -0.2557 have correlation points. It refers to the return on capital employed having a weak negative correlation with financial leverage. The significance level (P-value) is 0.0033 for Capital Goods Companies in Sri Lanka.

Table 1. Fixed-Effects Regression Model

ROCE	Coef.	Std. err	t	P > | t |	R2
ARP	0.0016	0.0012	1.3280	0.1872	
AT	0.1856	0.2485	0.7471	0.4568	
FG	0.0126	0.0142	0.8912	0.3749	0.4284
FL	-0.1019	0.0253	-4.0247	0.0001	
Cons	0.1382	0.1236	1.1175	0.2664	

Table 1 shows the impact of independent variables on the dependent variable of return on capital employed. The coefficient of multiple regressions is 0.0016 representing the accounts receivable period, indicating a positive relationship between the two variables. Also, assets tangibility, firm growth, and financial leverage represented respectively 0.1013, 0.0126, and -0.1019. According to those, R-squares are 0.4284. It means that 42.8% of the variation of the dependent variable of profitability can be explained by the variation of independent variables. The remaining 57.2% is influenced by factors other than independent variables of accounts receivable management.

Based on that, the result of multiple regressions between independent variables and profitability, the regression equation is,

ROCE = 0.1382 + 0.0016(ARP) + 0.1856 (AT) + 0.0126 (FG) – 0.1019 (FL)

Results show that independent variables are negatively related to net return on capital employed without firm growth. Hence, conclude that the significantly negative effect on Profitability regarding the Capital Goods Companies in Sri Lanka.

Table 2. Simple Regression Analysis

ROCE	Coef.	Std. err	t	P > [t]	R^2
ARP	0.0019	0.0009	2.1771	0.0362	0.0338
AT	-0.0111	0.1093	-0.1016	0.9192	0.0008
FG	0.0012	0.0149	0.0857	0.9318	0.0005
FL	-0.0453	0.0151	-2.9925	0.0033	0.0653

Hypothesis 01
H1 – ARP significantly affects on ROCE of Capital Goods Companies in Sri Lanka.
According to the simple regression analysis, the significant table value is 0.0362, and it is less than the significant value (P) of 0.05. It can be concluded that there is a significant effect of the accounts receivable period on return on capital employed at the 95% level of confidence level.

Hypothesis 02
H1 – AT significantly effect on ROCE of Capital Goods Companies in Sri Lanka.
According to the simple regression analysis, the significant value is 0.9192, and it is greater than the significant value of 0.05 ($P > 0.05$). It can be concluded that there is no significant effect of Assets tangibility on return on capital employed at the 95% level of confidence level.

Hypothesis 03
H1 - FG significantly affects on ROCE of Capital Goods Companies in Sri Lanka.
According to the simple regression analysis, the significant value is 0.9318, and it is greater than the significant value of 0.05 ($P > 0.05$). It can be concluded that there is no significant effect of FG on ROCE at 95% level of confidence level.

Hypothesis 04
H1 - FL significantly affects on ROCE of Capital Goods Companies in Sri Lanka.
According to the simple regression analysis, the significant table value is 0.0033, and it is less than a significant value (P) of 0.05. It can be concluded that there is a significant effect of the ARP on ROCE at a 95% level of confidence level.

Conclusion

This study has been completed with the important objectives of what is the impact of accounts receivable management on the profitability of Capital Goods Companies in Sri Lanka and to what extent accounts receivable impact the financial performance of the Capital Goods Companies. It refers to analysis showing that accounts receivable period and financial leverage have a significant effect on return on capital employed. Asset tangibility ratio and firm growth have a non-significant effect on return on capital employed.

So, it can be concluded that the pattern of accounts receivable management of the firms is changing due to other factors in the Capital Goods Companies in Sri Lanka. Finally, to conclude, there is both significant and insignificant effect of accounts receivable management on the profitability of Capital Goods Companies in Sri Lanka.

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The impact of corporate social responsibility on the corporate reputation of licensed commercial banks in Sri Lanka: With special reference to Kandy district

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Introduction

Nowadays, the idea of corporate social responsibility (CSR) is becoming more and more significant. It has developed into a tradition and a trend that an organization should to follow. It does not totally fall under the guidelines of any official laws or legal agencies. As a result, the majority of both public and private organizations currently engage in various CSR practices. The banking industry, one of the most vulnerable to the effects of the global financial crisis and intense competition in the financial market, plays a significant role in supporting the country's economy and motivating the nation to engage in CSR. The CSR differs from place to place, from industry to industry and over time.

Carroll (1991) Suggested that CSR should be divided into four levels as economic, legal, ethical and philanthropic responsibilities.

Corporate reputation serves as an intangible asset for the business and is the key factor in determining competitive advantage, particularly in situations where product differentiation is challenging to create in accordance with organizational expectations.

Frynas (2006) suggested that most research on CSR is either generalized about all developing countries, or focused at a national, rather than regional level. Rahman and Iqbal (2013) found that CSR practices are not diversified, particularly in Asia, as banks are only concerned with some specific areas of CSR. In Sri Lankan practices also there are various kinds of CSR programs launched by the banks as well as other financial institutions. According to the opinions and ideas of the bank managers and other related parties they have a dilemma whether CSR can significantly influence their reputation.

Behalf of these gaps in the Corporate Social Responsibility arena this study is conducted to investigate the impact of Corporate Social Responsibility practices on the corporate reputation of licensed commercial banks in Sri Lanka with special reference to Kandy District.

Research questions

- Is there an impact of Philanthropic activities on Corporate Reputation of Licensed Commercial banks in Sri Lanka?
- Is there an impact of Ethical activities on Corporate Reputation of Licensed Commercial banks in Sri Lanka?

CSR has the power to influence perceptions as well as contribute towards maximizing the earning potential of corporate reputation (Unerman, 2008). Most of the literature proves that there is strongly affected relationship between CSR and corporate reputation (Husted & Allen, 2009).Perez (2015) Agreed that the overall reputational impact of CSR is likely to be jointly contingent upon which CSR dimension is under consideration.

Ghahround et al. (2020) Suggested that banks in Iran have increased their CSR activities, which also have a positive impact on the performance of the business, apart from improving their reputation and goodwill.

Methodology

This study is an exploratory study and it is of a deductive kind since it formulated the hypotheses based on the theoretical framework. A quantitative approach is the best choice for carrying out this study because its aims are to evaluate the effect of CSR on corporate reputation and measure different relationships between selected variables. The researcher has used multiple regression method to observe the behavior of statistical units across time.

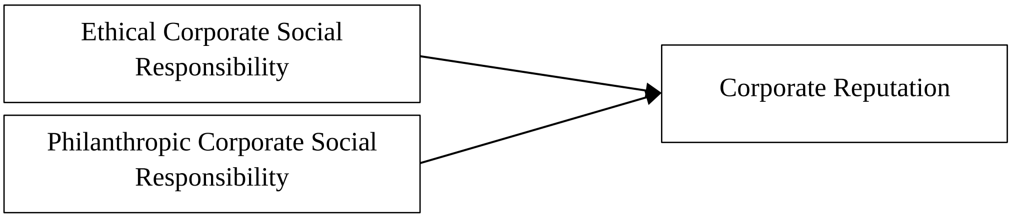

Figure 1: Conceptual Framework

Boulstridge and Carrigan (2000) Suggested that consumer perceptions of an institution's ethical activities, as well as company's philanthropic activities, have a positive effect on its reputation. The contributions of companies to social welfare charitable are positively linked with the corporate reputation (Rehbein et al., 2013)

According to the above mentioned empirical studies, the researcher developed the hypothesis for the study as follows.

- H1: There is a significant impact of philanthropic activities on corporate reputation.
- H2: There is a significant impact of ethical activities on corporate reputation.

Respondents included banking customers residing in the Kandy District of Sri Lanka those who represent the study's target population. The sample of the study is two hundred (200) customers from Licensed Commercial banks in Kandy District. The sample is selected by using convenience sampling method. Self-completed questionnaires were the primary method of data collection in this study.

Findings

Table 1 : Correlation Analysis

		PCSR	ESCR	CR
PCSR	Pearson Correlation	1		
	Sig. (2-tailed)			
ECSR	Pearson Correlation	0.682**	1	
	Sig. (2-tailed)	0.000		
CR	Pearson Correlation	0.732**	0.770**	1
	Sig. (2-tailed)	0.000	0.000	

**. Correlation is significant at the 0.01 level (2-tailed).
Source: SPSS output

Philanthropic Corporate Social Responsibility (PSCR) is positively varied 0.732 with the corporate reputation and significant under 5% significance level (p value is 0.000). It exhibits that corporate reputation and PCSR have a strong positive relationship (0.732). Also, the Correlation between Corporate reputation and Ethical Corporate Social Responsibility (ECSR) is 0.770, and the significance value is less than 0.05 which is reported as 0.000 which means, that there is a significant positive relationship between ECSR and Corporate reputation.

According to the coefficient analysis the beta value is reported as 0.258 which mean when philanthropic activities are increased by 1, corporate reputation is increased by 0.258. Hypothesis one (**H1**) of the study can be accepted since the p-value is below 0.05. Therefore, it is evident that there is a positive impact of philanthropic activities on corporate reputation.

Table 2: Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.886	.199		4.459	.000
	PCSR	.258	.102	.237	2.526	.012
	ECSR	.539	.090	.562	5.998	.000

a. Dependent Variable: CR

For ethical activities, the beta value is reported as 0.539 which mean when corporate activities are increased by 1, corporate reputation is increased by 0.539. Hypothesis two (**H2**) of the study can be accepted since the p-value is below 0.01. Therefore, ethical activities have a significant positive impact of philanthropic activities on corporate reputation.

Finally, the regression equation can be derived as follows.

$$CRi,t = \beta 0 + \beta 1(PCSR)i,t + \beta 2(ECSR\ )i,t + \mathcal{E}$$

$$CR = 0.886 + 0.258\ (PCSR) + 0.539\ (ECSR)$$

Conclusion

Though Sri Lankan industries carry on CSR practices they really do not know their actual influences and outcomes. Therefore, the study's challenge is to determine whether CSR activities actually have an impact on corporate reputation. This research only consider two dimensions: ethical and philanthropic responsibilities. More Sri Lankan customers expect and are aware of them than the other two dimensions (legal and economic social responsibilities). According to the coefficient analysis the beta value is reported as 0.258 which mean when philanthropic activities are increased by 1, corporate reputation is increased by 0.258. Hypothesis one (**H1**) of the study can be accepted since the p-value is below 0.05. Therefore, it is evident that there is a positive impact of philanthropic activities on corporate reputation. For ethical activities, the beta value is reported as 0.539 which mean when corporate activities are increased by 1, corporate reputation is increased by 0.539. Hypothesis two (**H2**) of the study can be accepted since the p-value is below 0.01. Therefore, ethical activities have a significant positive impact of philanthropic activities on corporate reputation.

The four dimensions of CSR are philanthropic, ethical, economic, and legal. But this research only considers the two independent variables, Philanthropic and Ethical CSR. The reason is that it is difficult to gather data from relevant parties who are related and really know about the implementation of Economic and Legal CSR of the organization. This research only considering about the CSR practices in particular bank industry. Most individuals in Sri Lanka believe that filling out questionnaires is a waste of time because of the culture and practices there.

The results show that although CSR has a great impact, it is not believed to have a much significant impact on CR. As a result, it should have a greater impact on both variables and a stronger relationship with them. It might lead to successful outcomes from CSR expenses. Both business organizations and stakeholders need to have a better awareness of CSR practices if they are to have a positive impact on one another.

The banking sector should be more knowledgeable and aware of CSR practices. The CSR practices extend beyond customers and stockholders. Given that it consider all of the corporation's stakeholders, it ought to cover a large area. Therefore, all industries should be aware of CSR practices and procedure s, not only the banking sector.

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Taxpayers' attitudes and tax compliance decisions in Sri Lanka: A research among individual taxpayers in Kurunegala district

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Introduction

Sri Lanka has been classified as a developing country as well as a low-tax country in international rankings. In addition, being a developing country, Sri Lanka's government revenue is mostly derived through taxation. Raising taxes in a low-income country like Sri Lanka, however, is a huge task. Income tax, on the other hand, has been demonstrated to be a significant source of revenue not just for developing countries but also for industrialized countries (Teera & Hudson 2004). Every person of the country benefits from taxes, which serve to increase the country's level of living. The willingness of taxpayers to obey the tax laws and regulations can be identified as tax compliance. All tax authorities across the globe have the responsibility to achieve maximum tax compliance results, that is, to guarantee that taxpayers follow tax regulations (OECD, 2004). In Sri Lankan context, the contribution of direct taxes to the total tax income is lower than the contribution of indirect taxes. By obtaining awareness about the taxpayers' attitudes, the government will be able to reduce this difference. A better understanding regarding the taxpayers' behavior and attitudes will be helpful for tax authorities in order to design strong and more effective compliance risk treatments and improve customer service programs (Walsh, 2012). The taxpayers' attitudes about tax compliance decisions in Sri Lanka are analyzed throughout this study based on taxpayers' ethical beliefs, perceptions of tax fairness, level of comprehension of tax laws. In addition, the research is carried out among individual taxpayers in the Kurunegala district.

The main objective of the research is to 'identify the impact of taxpayers' attitudes on tax compliance decisions. And also this study aims to achieve the following objectives in addition to its core objective.

- To identify the impact that taxpayers' ethical beliefs on tax compliance decisions.
- To identify the impact that perceptions of taxpayers' on tax compliance decisions.
- To identify the impact that the level understanding of tax laws on tax compliance decisions.

The research problem is identifying 'how taxpayers' attitude impacts tax compliance behavior?

Taxpayer attitudes are more important than implementing penalties and enforcing other stringent processes in deciding tax compliance behavior (Cummings *et al*., 2004). According to the Kirchler *et al*. (2008), persons with a favorable attitude toward tax evasion may expect less tax compliance while persons with a negative attitude toward tax evasion may expect greater compliance. As a result, rather than studying the influence of economic variables on tax compliance, research studies should be conducted to assess the impact of taxpayer perceptions on tax compliance behavior.

The tax compliance can be identified as a multi-faced measure which consists with three types of compliances as payment compliance, filing compliance, and reporting compliance. Tax compliance means that the taxpayer complies with all legal obligations set out in tax law. This means adhering to tax laws such as registering the taxpayer, keeping necessary records, filing taxes on time, and paying taxes on time (Chattopadhyay and Gupta, 2002). Ajzen and Fishbein (1991) refer to the term "attitude" as one's own feelings regarding a particular behavior. As of the theory an attitude consist with three components as affective component, cognitive component, and behavioral component (Robbins, 2002). According to research, taxpayers' attitudes vary greatly. Regardless of whether the authority is actively auditing them or their sector, some taxpayers comply with the utmost degree possible.

Methodology

The dependent variable of the study is tax compliance which is the willingness of taxpayers to obey the tax laws and regulations. The main independent variable of the study is taxpayers’ attitudes and it is classified into three as taxpayers’ ethical belief, taxpayers’ perception of tax fairness, and taxpayers’ level of understanding tax laws. Three hypotheses have been developed in order to identify the relationship between these independent and dependent variables.

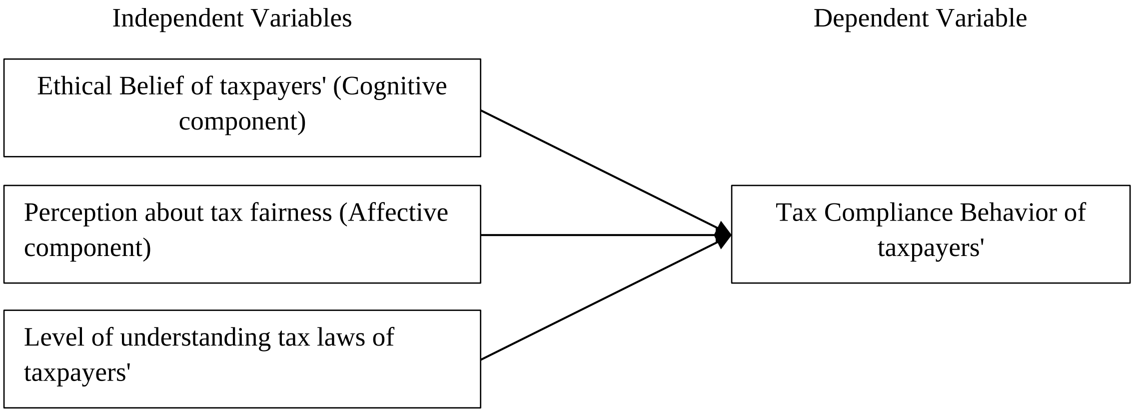

Figure 1: Conceptual framework

H_a1: Ethical beliefs of taxpayers’ have an effect on the tax compliance behavior.

H_a2: Perceptions of tax-fairness has an effect on the tax compliance behavior.

H_a3: Taxpayers’ level of understanding on the tax laws has an effect on tax compliance behavior.

This can be identified as a quantitative study and also this describes the casual relationship between variables, this can be identified as an explanatory purpose research. Also, the data need for explanation is gathered through questionnaires. And also the deductive approach is used to test the existing theory. Here we develop hypotheses and test hypotheses using statistics. The positivism research philosophy can be identified as the research philosophy of this study because here we generalize the sample results to the population and theory testing is also applicable in here. Because of the large number of taxpayers in Sri Lanka, this study focuses on individual taxpayers in Kurunegala District. Since there is overwhelming number of taxpayers in Kurunegala district, the sample size has been set at 100 to further focus the research. The entire population of the study has divided into five clusters. Those clusters are five main cities in Kurunegala district. So the cluster sampling approach is used to the sample. Initial data was obtained through the use of a structured questionnaire.

It also proposes to employ extensive statistics to summarize demographic data such as age, gender, educational background, monthly income, and tax payment period. Furthermore, data on taxpayer sentiments is evaluated using correlation and multiple regression analysis approaches. When it comes to data analysis, the data was examined using SPSS in this case.

Findings

The data analysis of this research was done based on descriptive analysis, correlation analysis and regression analysis.

Correlation Analysis

According to the table 01, the Pearson correlation between taxpayers’ ethical belief and tax compliance is 0.695, the Pearson Correlation between taxpayers’ perception and tax compliance level is 0.724 and the Pearson Correlation between taxpayers’ level of understanding on tax laws and tax compliance is 0.666. Since all these are greater than 0.5 levels it can be concluded that there is a strong and positive relationship between these independent and dependent variables.

Furthermore, the significance level between these independent and dependent variables is 0.000 and since it is lesser than 0.05 levels, it can be concluded that there is significant correlation among taxpayers' perception and tax compliance.

Table 1: Correlation Analysis

	Tax Compliance	**Taxpayers' Ethical Belief**	**Taxpayers' Perception**	**Taxpayers' Understanding Tax Laws**
Tax Compliance	1	.695**	.724**	.666**
Taxpayers' Ethical Belief	.695**	1	.857**	.642**
Taxpayers' Perception	.724**	.857**	1	.846**
Taxpayers' Understanding Tax Laws	.666**	.642**	.846**	1

***. Correlation is significant at 0.01 levels (2-tailed).*

Regression Analysis

When considering the tax compliance, there are several variables which determine the tax compliance. But in this study, the major consideration is given to taxpayers' ethical belief, taxpayers' perception and taxpayers' understanding on the tax law. Table 02 shows the extent that tax compliance (dependent variable) is explained by those three independent variables.

Accordingly, the R square value is 0.568 or 56.8% and this value indicates the goodness of fit among independent and dependent variables. So it can be concluded that 56.8% of the variation of the dependent variables is explained by the independent variables.

These results summarize that there is a positive, strong, and significant relationship between dependent and independent variables. The significant value of coefficients for taxpayers' ethical belief, perception, understanding of tax laws are 0.007, 0.443, and 0.026. Accordingly, the taxpayers' ethical belief and level of understanding tax laws have a significant impact on tax compliance behavior. Since the significant level of taxpayers' perception is greater than 0.05, it can be concluded that there is no significant impact on tax compliance.

Table 2: Regression Analysis

R	R Square	Adjusted R Square	Std. Error of the Estimate
.754	.568	.554	.438

Table 3: Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.985	.263		3.747	.000
	Taxpayers' Ethical Belief	.327	.119	.374	2.738	.007
	Taxpayers' Perception	.152	.197	.151	.771	.443
	Taxpayers' Understanding Tax Laws	.294	.130	.298	2.259	.026

Conclusion

By considering the findings of the research study, there can be seen a significant and positive affect of taxpayers 'ethical belief and taxpayers' level of understanding on tax compliance behavior. But the results show that there is no any significant impact of taxpayers' perception on tax compliance behavior. The prior research studies also found that there is an impact of taxpayers' attitudes on tax compliance behavior. So, it can be concluded that the tax compliance can be enhanced by increasing the ethical belief of taxpayers and the level of understanding of tax laws. However, by enhancing the taxpayers' perception of tax fairness, the tax compliance behavior cannot be altered. Therefore, the following recommendations are made by the research in order to enhance the level of tax compliance behavior among taxpayers. Those are creating a simple and fair tax system, offering necessary education and knowledge regarding taxation, creating a very efficient tax system within the country with use of newest technologies in the world, paying constant attention to taxpayers and monitoring them regularly, and identifying the taxpayers' ideas.

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Level of corporate social responsibility disclosure and its impact on financial performance in local banks in Sri Lanka

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Introduction

Corporate Social Responsibility is a management concept where, companies integrate social and environmental concerns in their business operations and interactions with their stakeholders. The disclosure of CSR initiatives is a volunteer activity in Sri Lanka, while it's an obligatory action in international view. Among the Sri Lankan organizations that disclose their CSR initiatives the local Banks in Sri Lanka have a significant place than other organizations. A common idea among the public is that CSR disclosure affects reputation of an organization. At the same time studies have been conducted with the objective of identifying the effect of the CSR disclosure on the other variables rather than the reputation of the organizations. (Kostyuk *et al*, 2012). However, there is research gap in the studies related to the corporate social Responsibility disclosure and its impact on the financial performance of the local Banks in Sri Lanka. According to that the research problem was developed as the impact of level CSR disclosure on the financial performance in local banks in Sri Lanka. The objective of the study is to identify the effect of the CSR disclosure level for the financial performance of local banks in Sri Lanka.

The literature review of the study analyzed work of Kostyuk et al, (2012) studied about Corporate Social Responsibility in banks in an international view of identifying the distinctive features of CSR banking business in the different countries. Nishi Sharma, (2011) stated that the adoption of CSR practices through quite slow in India. Dhungel et al (2008) studied Corporate Social Responsibility practices in banking sector in Nepal. This study found that CSR is not mandatory in Nepal all banks have made the disclosure of CSR have done it in voluntary basis. According to the Wijesinghe et al (2011) researchers who explored about disclosure of Corporate Social Responsibility on Corporate Financial Performance in banks, finance and insurance sector in Sri Lanka stated that overall level of CSR disclosure was at a low level and a significant positive relationship between disclosure of CSR with Return on Equity and Return on Assets. According to the above researches it revealed that there were several research were about the corporative social responsibility within the international level. However, in Sri Lankan context the studies on the topic were comparably less than the international concern on corporative social responsibility as it is a voluntary activity. Also, there are a minimum number of researches about the corporative social responsibility of the banks in Sri Lanka while the lack of researches which considering the financial performance of the banks in Sri Lanka with relation to the corporative social responsibility. Therefore, this study focuses on the level of Corporate Social Responsibility and the impact on financial performance in banks in Sri Lanka.

Methodology

The study conducted to find the answer for the impact of level of Corporate Social Responsibility disclosure on financial performance in local banks in Sri Lanka. The conceptual frame work was developed with CSR as an independent variable and financial performance as a dependent variable as shown in Figure 1.

The Level of CSR disclosure's effect on financial performance is identified through the Return on Assets and Return on Equity. At the same time the CSR disclosure of the banks were categorized into three categories such as Economical CSR, Environment CSR and Social Cultural CSR and its impact on the financial performance of the local banks in Sri Lanka through ROA and ROE. Thus the total CSR disclosure and above three categories of CSR were consider as independent variable and to find its impact on financial performance, Return on Assets and Return on Equity was identified as the dependent variables.

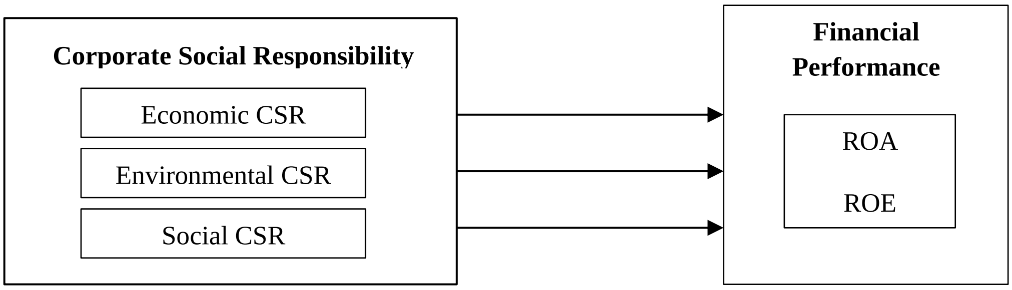

Figure 1: Conceptual Framework

The objectives of the study achieved by using the quantitative research method. The quantitative measurement of CSR activities and actions was the only aspect of this study. Qualitative CSR initiatives are not the subject of this study. There are 24 Commercial banks & 6 specialized banks in Sri Lanka. Among the total local banks in Sri Lanka the disclosure of their Corporate Social Responsibility and its expenditure in quantitative form within a time period of 2015 – 2021, had to be found to analyze the effect of the CSR disclosure and its impact on the financial performance. However, 7 commercial banks were selected to collect the data as the convenience sampling. The collected secondary data was analyzed using the multiple regression model,

$$\textit{Financial Performances} = \beta_0+\beta_1 EC+\beta_2 EN+\beta_3 SO + e_i$$

Findings

The level of CSR disclosure was computed under descriptive statistics mean, maximum, minimum, and standard deviation as a percentage of total assets of the relevant banks. The mean values of total CSR disclosure 0.389677%, Economical CSR 0.002630%, Environmental CSR 0.000713% and Social Cultural CSR 0.000713% its represents a lower level of CSR disclosure of the local banks in Sri Lanka. The findings showed that local banks in Sri Lanka had a lower level of CSR disclosure. There was a declining tendency when looking at the level of CSR disclosure over the previous seven years. Additionally, the CSR's social and cultural subcategories (economic, environmental, and social) saw a decline and the level of corporate social responsibility disclosure has no bearing on the financial performance of Sri Lankan local banks.

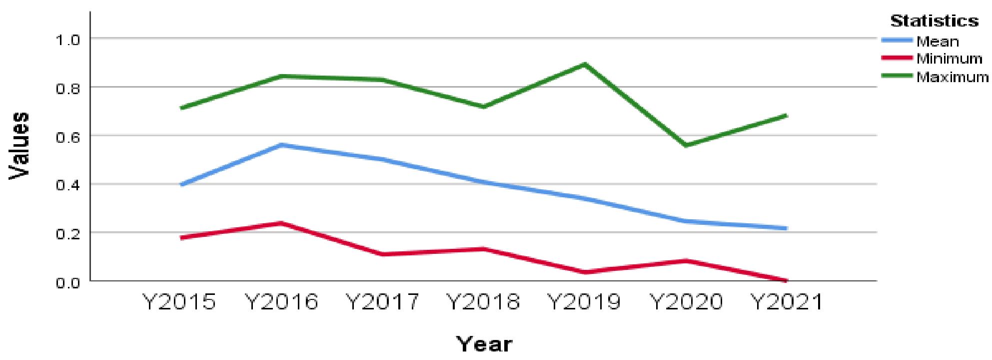

Figure 2. Trend of CSR disclosure

The findings showed that local banks in Sri Lanka had a lower level of CSR disclosure. There was a declining tendency when looking at the level of CSR disclosure over the previous seven years. Additionally, the CSR's social and cultural subcategories (economic, environmental, and social) saw a decline and the level of corporate social responsibility disclosure has no bearing on the financial performance of Sri Lankan local banks. Financial performance of local banks in Sri Lanka revealed no significant association with the level of disclosure of CSR subcategories (social, environmental, and economic).

The regression output of total CSR and ROA were identified as R value was 0.109, R Square change 0.012 and standard error for predicting ROA is 0.45380 %. As the same time ANOVA f value 0.465 and coefficients output B value was -0.194. According to that the null hypothesis were accepted. The regression output of total CSR and ROE were identified as R value was 0.061, R Square change 0.004, standard error for predicting ROE 5.64466%. As the same ANOVA f value 0.686 and coefficients output B value was -1.3361. According to this the null hypothesis accepted. Accordingly the level of CSR disclosure does not show a significant relationship with financial performance of the local banks in Sri Lanka.

Table 1: Regression Output

	Total CSR : ROA	**Total CSR : ROE**
R value	0.109	0.061
R square change	0.012	0.004
Anova F value	0.465	0.686
Coefficients output B value	-0.194	-1.3361

The multiple regression output for categorical CSR; Economical CSR, Environmental CSR and Social Cultural CSR and ROA were computed as coefficient output B value were -186.2, 62.1 and -115.7 respectively and R square change was 0.058 and ANOVA F value was 0.456. According to the findings the model constrained shown below**.** Further the regression output of the catogarical CSR and ROE were computed as coefficient output B value were 510.51, -2987.55 and 2489.18 respectively and R square change was 0.085 and the ANOVA F value was 0.426. According to the findings the model constrained shown below. The study finds that there were no significant relationships between the categories of CSR and the financial performance of the local banks in Sri Lanka.

$$ROA = 1.329 - 186.206\ Soc\ CSR + 62.082\ Eco\ CSR - 115.688\ Env\ CSR$$

$$ROE = 15.564 + 2489.181\ Soc\ CSR + 510.512\ Eo\ CSR - 2987.557\ Env\ CSR$$

Conclusion

The study was done with the quantitative data collected from the annual reports of the local banks within the years 2015 to 2021. The findings reveal that the CSR disclosure of the local banks in Sri Lanka was in Lower level as a percentage of the total assets of the relevant banks. It's simply lower than the 1% and the trend line of the CSR shows a decreasing CSR disclosure after 2016. Further the relationship between the CSR disclosure and the financial performance of the Local banks in Sri Lanka was identified as insignificant. Further the categorical CSR analysis also identified the same result as insignificant in the study. The Economic, Environmental and Social CSR disclosure does not explain the variation in ROA and ROE. Therefore, the suggested regression equation is not a good fit to predict financial performance of local banks in Sri Lanka.

The findings may vary from the findings in other studies. (Wijesinghe *et al*, 2011). However, the CSR in a concern to achieve the societal goals in an economy and the CSR contribution is the grater help for the development of the economy as well as the organization development which used as a strategy for the reputational risk management.

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Corporate governance perspectives of Buddhist philosophy

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Introduction

Corporate governance is the structure of rules, processes, and practices used to direct and control corporations. A company’s operations are governed by a set of laws, regulations, and other actors, known as corporate governance (Gillan* & Starks, 1998). Corporate governance is essential because it establishes a set of guidelines and procedures that govern a company's operations and ensures that the interests of all its stakeholders are aligned. Good corporate governance promotes ethical business practices, encouraging financial health. In the current complicated and global business environment, corporate governance has merged as a critical component of corporate management (Abdullah & Valentine, 2009).

Buddhist philosophy is not only a worldwide religion; it also offers guidelines for leading honest, decent, and pleasant lives for all people (Weerasinghe, 2014). The Gautama Buddha offered numerous sound opinions relating to this area of corporate governance. Therefore, the primary goal is to explore the corporate governance perspective (theories, principles, and aspects) in light of Buddhist philosophy. And also, it is worth examining the societal perspective (Stakeholder theory) in sight of Buddhist teaching. Another goal is to identify the Ten Royal Virtues (*Dasa Rāja Dhaṁma)*, their nature, and how they impact the corporate governance context.

As described in Buddhist teaching, understanding the corporate governance context is crucial. Consequently, the study points toward investigating the corporate governance viewpoint concerning Buddhist philosophy. In light of Buddhist philosophy, this study attempts to determine whether the corporate governance perspective makes perfect sense. It is essential to have in-depth knowledge of the corporate governance viewpoint of the inspirational thoughts of Gautama Buddha.

The review of the literature clearly illustrated that the inspirational teachings of Gautama Buddha provide some crucial direction that modern corporations could adhere to. Previous scholars could do empirical studies considering Buddhist philosophy and the business arena. They researched Buddhist philosophy and good governance, the Buddhist perspective of management, Buddhist teaching on decision-making, and Buddhist teaching as a guide for the business processes.

Buddhist practices address social morality by putting the Buddha's encouraging teachings on the Ten Royal Virtues to use (Barua & Barua, 2019); Buddhist philosophy holds that the conduct of their rulers determines a people's evil or good that the benefit of the population, rulers must uphold the Ten Royal Virtues; *Dasa Rāja Dhaṁma* (Ratwatte, 2014). Some previous scholars’ investigations found the good governance concept with the Buddhist teachings; however, they failed to extract the corporate governance perspective in sight of the Buddha’s way of thinking. Therefore, by reviewing the previous literature on the related contents, we found a vast knowledge gap to fulfil to conduct an empirical study to recover the corporate governance that perfectly fits with the inspirational thoughts of the Gautama Buddha.

Methodology

The research methodology provides a detailed explanation of research approaches, designs, and methods, highlighting those employed throughout the research. Research methodology is a strategy for systematically addressing the research problem (Patel & Patel, 2019). Simply research methodology is “how” a scientific research study is conducted in practice.

This study explores how well Buddhist philosophy fits with the corporate governance context in theories, principles, and different aspects and examines how it impacts the ten royal virtues and their nature to corporate governance. Furthermore, the study explores how the societal perspective (stakeholder theory) describes in inspirational thoughts of Gautama Buddha. This study is qualitative and uses the secondary data collection method. This research study is archival research. Information has been collected from Buddhist discourses, mainly *suṫta Pitaka,* numerous published books, published research papers, renowned published articles, journals, and websites related to this field. This research study employed a qualitative approach to explore the corporate governance perspective of Buddhist teachings. The qualitative research approach individually evaluates attitudes, views, and behavioural patterns (Kothari, 2004).

This method begins with specific observations to develop generalized theories and concepts and generate research-based conclusions. A research design is a strategy that outlines the methods to gather and analyze the data and the sources and categories of information pertinent to the research problem. Since this study employs documented information and analyzes that documented information, the study applies Textual analysis as the research design. Textual analysis was done to determine which Buddhist discourses and related materials were compatible with the context of corporate governance. This was done with the help of knowledge of the corporate governance subject area, and based on the results of the textual analysis, it was investigated how well the beliefs of the Buddha would have related to the currently debated topic of corporate governance.

The research problem implies that the study wants to identify the corporate governance concepts, theories, principles, and aspects compatible with Buddhist teachings. Throughout the study, with the help of textual analysis, identify that agency theory, stakeholder theory (societal perspective), and corporate governance principles, aspects in light of the Inspirational thoughts of the Gautama Buddha. Therefore, the employed textual analysis method is very beneficial to the come up with expected findings.

Findings

This investigation can explore the corporate governance perception insight of the Buddhist teachings. For that purpose, the qualitative, inductive secondary research method applies with the help of textual analysis. To extract the Buddha's related corporate governance teachings, initially identify the problem, then consult secondary data sources. Buddhist philosophy provides essential lessons relating to the business side. This study also pointed outs the Buddhist perspective on a Business corporation and leadership. And also, most importantly, findings prove that corporate governance aspects, processes, OECD principles of corporate governance, and characteristics of good corporate governance are best fitted with the Buddha's inspirational teachings. Buddhists address widespread morals by combining the Buddha's lessons on the Ten Royal Virtues with good corporate governance characteristics and proposing a proactive model of a decent governance framework (Barua & Barua, 2019).

The Buddhist middle-way approach and the *bhramṁmavihāra*; are perfectly match some aspects of the corporate governance context. In everything we do corporation, it is critical to upholding the moral precepts of right livelihood, right action, and right intention in the middle-way approach (Burton, Vu, & Cruz, 2022). And also explored the Ten Royal Virtues *(Dasa Rāja Dhaṁma)* connection between the OECD principles through the characteristics of good corporate governance and their nature. Ten Royal Virtues is a Buddhist expression of the principle of the rule of law and good corporate governance (Ratwatte, 2014). Explored the societal perspective (stakeholder theory) aspects of Buddhist philosophy with the help of the *anaṫta* concept (no self-concept) and *Samānāṫtata;* one principle of *Satara saṅgahavaṫtu*.

Furthermore, an empirical study finds out that Buddhist teachings on corporate governance by discussing the duties and responsibilities between employer and employee in *sigālōwāda suṫta* and *saṫta aprihānīya Dhaṁma* are perfectly matched with the various aspects of agency theory. Depending on the amount of work that needs to be done, the executive board should need to meet two to three times per month (Nikomborirak, 2001) it can be matched with the one principle of *saṫta aprihānīya Dhaṁma;* meet frequently and in harmony. Suppose a governing body and all other stakeholders follow up on this decent and respectable teaching of the Gautama Buddha. In that case, it may be more beneficial to successfully maintain the business corporation and direct and control it in the most ethical, transparent, and fair.

Conclusion

The study's objective is to explore corporate governance from the perspective of the Buddha's inspirational sayings, preached over 2600 years ago but still relevant to today's business world. This study investigated the Ten Royal Virtues *(Dasa Rāja Dhaṁma)* concerning corporate governance, societal perspective (stakeholder theory) extracted from the Buddha's lessons, and Buddhist teachings on agency theory and other related theories, concepts, and aspects of corporate governance subject context. This empirical study explores the Ten Royal Virtues, one of the inspirational thoughts of Gautama Buddha that perfectly demonstrates the corporate governance context, OECD principles, and good corporate governance characteristics. This empirical finding provides evidence that the *anaṫta* concept and *samānattatā*; one element of *Satara saṅgahavaṫthu;* are the critical inspirational thoughts of Gautama Buddha that can perfectly demonstrate the societal perspective (stakeholder theory/stakeholder philosophy). According to the exploration of agency theory with *saṫta aparihānīya Dhaṁma* of Buddhist philosophy, some principles can apply to board meetings, board gender composition, and the stewardship theory of the corporate governance subject, and also the empirical findings provide evidence on the middle-way approach, which is the central teaching of Buddhist philosophy, offers essential direction for day-to-day life as well as a guiding light for corporate

The recommendations for future research include exploring stakeholder value maximization in light of Buddhist philosophy, board characteristics related to the Buddhist philosophy, societal perspective, and the function of the board of directors following Buddhist teachings.

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Banking

Relationship between credit risk and profitability of selected commercial banks in Sri Lanka

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Introduction

This chapter initially deals with background of the research study that gives basic understanding of the research and the chapter also deals with research problem, research objectives and significance of the study. Further, it presents the limitation of the study and organization of the study. In this study considered only 4 banks among commercial banks in Sri Lanka such as Bank of Ceylon, People's Bank, Sampath Bank, Hatton National Bank to include this study. And also, researcher selected specific time period from 2011 to 2020 for collecting data. Credit risk is the one of major risk of banks by the nature of their activities. And through effective management of credit risk exposure banks not only support the viability and profitability of their own business but also contribute to systematic stability and to an efficient allocation of capital in the economy. (Psillaki, Tsolas, and Margaritis, 2010). Credit risk is the risk of default, which happens when the customer avoided to repay the loan. Very common reason for the is, financially stressed situation (Gestel and Beasems,2008). The banks of Sri Lanka as well as the other countries are required to follow Basel II capital adequacy from 2007. And Basel II aims to build on a solid foundation of prudent capital regulation, supervision, and market discipline, and to enhance further risk management and financial stability. The Banking sector has become the more complex over the last decades due to the development of capital market and Covid-19 pandemic. So, the risk being side gets blurred and risk exposure splits on everybody. This cause systemic failure the economic system of the countries breaks down. Government of Sri Lanka influences the situation and tries to stabilize economy through the regulatory mechanism. Based on the information I have studied in the previous part; I have realized that it is of great interest to study the relationship between credit risk and profitability of commercial banks in Sri Lanka. And there is no research that could clearly explain the relationship of credit risk and profitability of commercial banks. Another factor leads me to the topic is that research in the Sri Lanka, as a complicated and stable financial market, has not been developed until now. In order to acquire the knowledge of impact of credit risk and profitability of commercial banks, researcher made the following research question.

- How does credit risk affect the profitability of some selected commercial banks in Sri Lanka?
- What is the relationship between the credit risks on profitability of commercial banks in Sri Lanka from 2011 to 2020?

Through above information, researcher aim to analyze how the credit risk will influence the profitability of commercial banks in Sir Lanka and to identify if there is exists a relationship between the credit risk and Profitability of commercial banks in Sri Lanka from 2011 to 2020. Saeed and Zahid (2016) analyzed the impact of credit risk on the profitability of five large U.K commercial banks over the data from 2007 to 2015. They measured profitability using the return on assets and return on equity, while credit risks included a net charge off (or impairments) and NPLs. The study concludes that NCOR positively responds to the profitability of banks in the U.K. Almazari (2014) tested whether credit risk measured in terms of CAR has explanatory power on Profitability in Saudi Arabian Commercial Banks for six years. The study revealed that there is a significant relationship between CAR and bank profitability. Charles and Kenneth (2013) in their investigation of the impact of credit risk management on capital adequacy and banks financial performance in Nigeria, recommended that for banks to earn sustainable interest income streams, appropriate credit risk strategies to be instituted. Banks were also recommended to facilitate the functioning of credit bureaus; this could ensure that financial creditworthiness of lenders are analyzed when loan requests are made. Profitability is an indicator of banks' ability to generate positive cash flows and maintain sustainable earnings. It signifies banks' competitive strength and measures the caliber of stewardship. The determinants of commercial banks' profitability can be identified into two categories, namely, those that are management controllable (internal determinants) and those are beyond the control of management (external determinants) (Nicolae, Bogdan, & Iulian, 2015). Marozva (2015) studied the relationship between liquidity measured using the proxies of current ratio, long-term deposit rate, and provision for NPLs and banks' profitability in South Africa throughout the period from 1998 to 2014. The study reveals that proxies of liquidity and profitability of banks are significantly and positively related. Crowe et al. (2014) examined the performance measurement and profitability of regional banks in the U.S with the GMM estimator technique and the yearly data of those variables during the period 1994 to 2011. Both NPLs and net charge-off ratios were utilized to quantify the performance measurement. The study claimed that performance measurement had a significant negative relation to the banks' profitability.

Methodology

The conceptual framework of the study has been formulated by considering the relationship between the dependent variable (Profitability) and independent variables that are used as the fundamental basis for the study. The focal point of our framework is to examine the main effects of each of eight independent variables in profitability of commercial banks in Sri Lanka. Main purpose of the study is to gain a better understanding of the relationship between Credit risk and profitability of commercial banks in Sri Lanka.

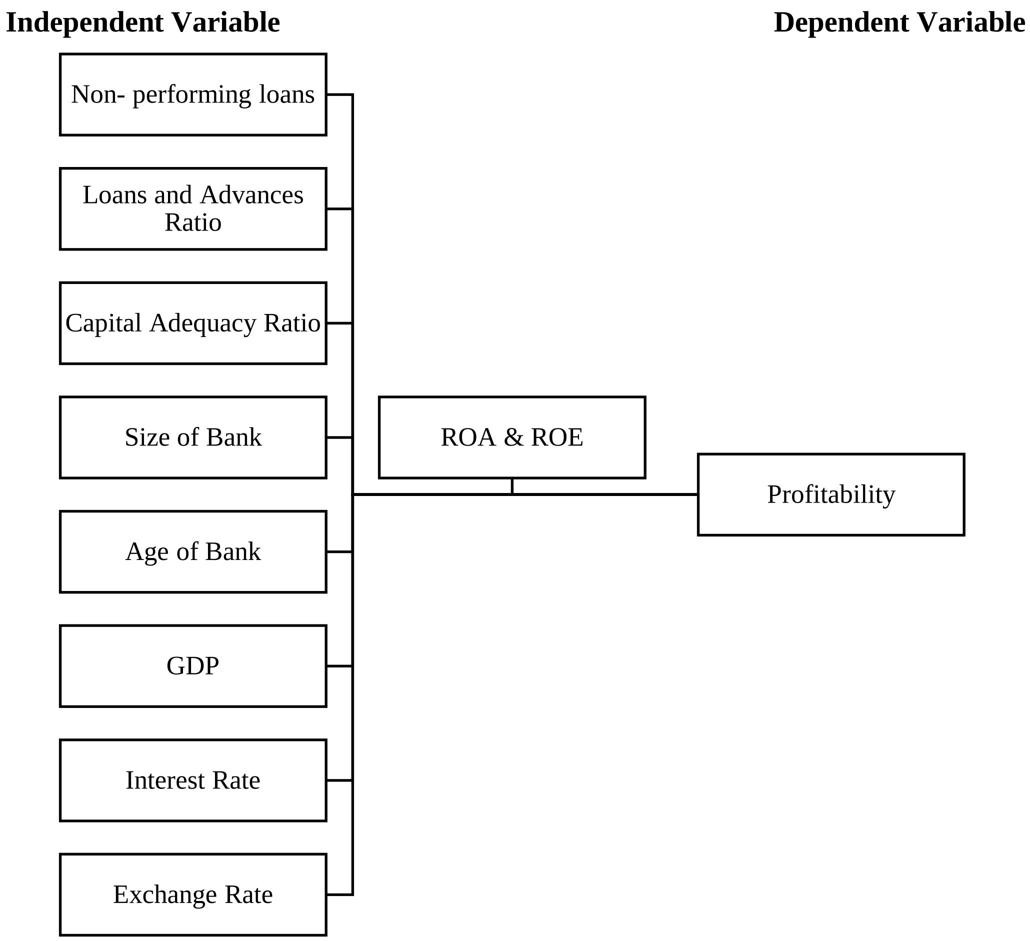

Figure 1: Conceptual Framework

Findings

The first model which used ROA as a measure for profitability revealed that all variables employed as a measure of credit risk on profitability of banks. The results indicated that, credit risk measures like

Capital Adequacy Ratio have positive impact on profitability, nonperforming loans which is also a measure of credit risk has an inverse relationship with profitability. This means as the deterioration in the quality of assets rises, the profitability of banks also decreases. Using ROE as a measure of profitability, the effects of the credit risk measures were different from the results of the model with ROA (Model -1). NPLR have a negative impact on profitability. As well as Loans and Advances Ratio also have a negative impact on profitability measured by ROA and ROE. This means when banks give out more loans without fear and without considering total deposit it creates high risk to bank, because if borrower cannot repay the loan bank would have to face it which is reduce the profitability. In the case of ROE, LAR was statistically insignificant even though it had a positive effect on ROE and ROA.

The inclusion of the one external factor (GDP) has positive significant impact to profitability. According to that researcher has identified two control variables (NPLR and Bank Size) which affect to the financial performance. The size of bank measured by total asset increase the profitability as well as the researcher found that firm GDP has significant impact to profitability. All together the researcher can conclude that Sri Lankan GDP ratio have a big issue in banks.

Table 1. Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics				Sig. F Change
					R^2 Change	F Change	df1	df2	
1	.720[a]	.519	.395	.2944063	.519	4.181	8	31	.002

a - Predictors: (Constant), Exchange Rate, Age, Interest Rate, Loans and Advance Ratio, Capital Adequacy Ratio, Gross Domestic Products, Non-Performing Loan Ratio, Bank Size.

The model summary table reports the strength of the relationship between the model and the dependent variable. R, the multiple correlation coefficient, is the linear correlation between the observed and model-predicted values of the dependent variable. Its large value indicates a strong relationship. According to the results, there is a strong relationship between observed and model-predicted values of profitability of selected commercial banks is Sri Lanka.

Conclusion

This paper aims to investigate the impact of credit risk on the profitability of the banking sector in Sri Lanka. The profitability is measured with Return on Assets. At the same time, credit risk is quantified with four indicators: non-performing loan Ratio (NPLR), Loan to Deposit Ratio (LDR), Net Charge off Ratio (NCOR), and Capital Adequacy Ratio (CAR). Data from thirteen banks over eight years from 2010 to 2017 was analyzed using panel data regression analysis. The finding shows that the Profitability of the Banking Sector in Sri Lanka has been determined by important determinants such as credit risk. The study further finds that non-performing loans have negative and significant return on assets. However, the net charge-off ratio and the loan to deposit ratio are not important variables for expanding the bank's profitability. On the other hand, the CAR positively impacts returns on assets. The study suggested the need to strengthen the management of credit risk in order to preserve Sri Lankan banks' current profitability.

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The Impact of non-performing loans on the bank performance special reference to Bank of Ceylon

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Introduction

Bank of Ceylon (BOC) is Sri Lanka's first state-owned commercial bank, predicated in 1939 under Bank of Ceylon Ordinance No. 53 of 1938. Banks and many financial institutions earn generous profits from the interest of loans and then they provide loans to firms and people. Non-performing loan is any loan in which interest and principal payments are more than 90 days overdue or more than 90 days' worth of interest has been refinanced (IMF, 2004). Hennie (2003) defined Non-Performing Loans as those loans which were no longer generating income. (Hennie, 2003). NPL also has been identified as one of the major reasons for the failure of banking and non-banking financial institutes. Financial performance means how well an organization have the ability to generate revenue from an asset. If a loan becomes default it will fail to generate revenue to a bank, which will adversely affect the bank's financial performance. Hence, this study tried to examine the impact of Non-Performing Loans on the financial performance of the Bank of Ceylon. The main objective of this study was to Identify the impact of non-performing loans on the performance of BOC.

Previous studies were done related to this topic area of Non-Performing Loans and financial performance. A study conducted by Nigeria (Ozurumba, 2016) has found a negative relationship between Non-Performing Loans and financial performance. Further, a study (Bhattara, 2017) found a negative relationship between Non-Performing Loans and financial performance. (Bhattara, 2017). Further, in a study (Kingu, 2018) Commercial Banks in Tanzania have found that an increase in non-performing loans is associated with a decrease in ROE. These results of exposure to credit risk measured by NPLs are normally associated with an increase in operating costs and lead to decreased financial performance. The purpose of this research paper that I am conducting is to examine the impact of Non – Performing Loans on the Bank Performance in BOC.

Methodology

In this study, quantitative research method was used to identify the influence of selected independent variable on the dependent variables. And also the purpose of this study was testing hypothesis. the researcher tried to identify the relationship between the dependent variable and independent variables. This study was a cross-sectional study since the data in this study were gathered just once. This study followed deductive research approach. In this study, the researcher mainly depended on the source of secondary data. Researcher used SPSS software program as the data analysis tool and also used Correlation and regression analysis and descriptive statistics as the statistical data analysis method. This study aimed to answer for four questions which were; "What is the impact of the non-performing loan ratio on ROE in the Bank of Ceylon?", "What is the impact of the non-performing loan ratio on ROA in the Bank of Ceylon?", "What are the causes of poor loan recovery in the Bank of Ceylon?", and "What are the determinants of NPL in the Bank of Ceylon?".

The conceptual framework represents the relationship among the variables. To measure the effectiveness of NPL on the bank performance in BOC it should be developed using the conceptual framework. In this study, the independent variable is a non performing loan ratio and dependent variables are Return on Assets (ROA), Return on Equity (ROE). Based on the empirical and theoretical justifications, the researcher developed the conceptual framework of this study as follows;

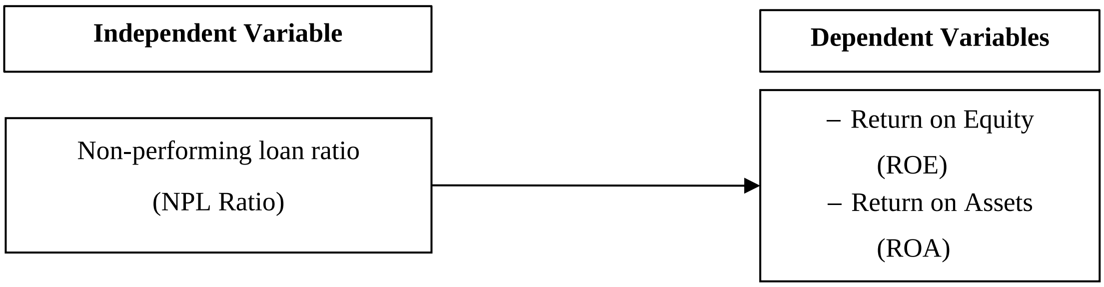

Figure 1: Conceptual Framework

Findings

Table 1: Model summary

Model	R	R^2	Adjusted R^2	F-Statistic
1(ROA)	0.294[a]	0.086	0.069	4.909
2(ROE)	0.430[a]	0.185	0.169	11.79

Source: Research Findings

The model 01, the adjusted R2 value, in this case, is 0.069, which is slightly less than the value of 0. 086.And Model 01 produces statistically significant results. And the model 02 adjusted R2 value is 0.169, which is slightly less than the value of 0.185. The F-statistics and significance level indicate that Model 02 produces statistically significant results. According to the Result of regression analysis (ROA), The NPL ratio has a ß value of -0.063, which means that every unit increase in the NPL ratio results in a 0.063 percent decrease in ROA (If the other factor is constant). That indicator of Non-Performing Loans (NPL ratio) has a significant and negative impact on ROA. According to the Result of regression analysis (ROE), The NPL ratio has ß value of -0.953. This explains that a one-unit increase in NPL ratio (while other things are held constant) will result in a 0.953% decline in ROE units. The analysis states indicator of Non-Performing Loans (NPLs ratio) has a significant and negative impact on ROE.

Table 2: Correlation matrix of Variables

Variables	NPLs Ratio	ROA	ROE
NPLs ratio	1.000	-0.294	-0.430
ROA	-0.294	1.000	0.593
ROE	-0.430	0.593	1.000

Correlation is significant at the 0.01 level(2-tailed)

The results also show that the correlation between NPLs ratio and ROA is -0.294. It clearly describes the insignificant correlation between NPLs ratio and ROA, which is at the 5% significance level. Meanwhile, the correlation between NPLs ratio and ROE is -0.430, as indicated by the low negative correlation between NPLs ratio and ROE and the relationship at a 1% significance level. According to the findings, there is a negative and statistically significant relationship between the indicator of non-performing loans (NPL ratio) and financial performance as measured by ROA and ROE.

Table 3: Result of regression analysis - (Dependent variable = ROA)

Independent Variable	B	Std. Error	T	Sig.
Constant	1.652	0.136	12.10	0.0000
NPL Ratio	-0.063	0.029	-2.21	0.031

The NPL ratio has a ß value of -0.063, which means that every unit increase in the NPL ratio results in a 0.063 percent decrease in ROA. According to the findings, the indicator of Non-Performing Loans (NPL ratio) has a significant and negative impact on ROA.

Table 4 Result of regression analysis - (Dependent variable = ROE)

Independent Variable	B	Std. Error	T	Sig.
Constant	18.583	1.324	14.035	0.0000
NPL Ratio	-0.953	0.278	-3.435	0.001

The NPL ratio has a ß value of -0.953 this explains that a one-unit increase in NPL ratio (while other things are held constant) will result in a 0.953% decline in ROE units. The analysis states indicator of Non-Performing Loans (NPLs ratio) has a significant and negative impact on ROE.

Conclusion

This study investigated the impact of Non – Performing Loans on the Bank Performance in BOC. Based on the above findings, the research concludes that non-performing loans have a significant and negative impact on Financial Performance and there is a significant and negative relationship between non-performing loans and the financial performance of BOC in Sri Lanka. These studies have considered ROA and ROE to be used to measure the performance of the bank. According to the information gathered, found that the bank's net income has declined and the NPL ratio has become to increase during the past 5 years (from 1st April 2017 to 31st March 2021).

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Impact of bank specific and macroeconomic factors on bank performance of commercial banks in Sri Lanka

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Introduction

The purpose of this study is to ascertain whether there is a connection between Sri Lankan bank performance, macroeconomic variables, and bank-specific elements. The question under investigation is whether we can identify how macroeconomic and bank-specific factors affect bank performance. In here researcher choose factors that are affecting to the bank performance, these are manly divide in two parts, bank specific factors and macroeconomic factors. Under the bank specific factors, researcher choose capital adequacy, bank size, liquidity management, management efficiency. Under the macroeconomic factors inflation, exchange rate, GDP growth rate, interest rate were considered and examine how those are factors effect on bank performance in Sri Lanka. in the research bank performance was measured using Return on Assets (ROA) and Return on Equity (ROE).

We create two specific objectives to help reach main objective.

- To investigate the impact of bank specific factors on bank performance.
- To investigate the impact of macro-economic factors to bank performance.

This study's main purpose is to examine the possibilities for answers to the question "How can bank specific factor influence bank performance? Is it possible for the macroeconomic factor to have an impact on the banks' performance?" This research issue has been the subject of numerous different sorts of investigation. Considering the findings of these studies conducted in other nations and by Sri Lankan researchers, Author chose any additional parameters to determine their influence. According to the (Swarnapali, 2014) that banks' performance in Sri Lanka only affects by the operating expenses and the bank size. and (Akhtar et al., 2017)In ROA model, capital adequacy, asset quality, earning ability and inflation are significant to bank profitability. In the model of ROE capital adequacy and earning ability have significant impact on financial performance.

Methodology

The data has been collected from secondary data which are from annual report of banks. The data used in this study is collected from the financial statements which are presented by the respective banks' website from the period starting from 2014 to 2021. Deductive approach is employed to test the validity of developed hypotheses.

H1: There is a significant impact of Bank specific factors on bank's performance.

H2: There is a significant impact of external factors on bank's performance.

Research Framework

The conceptual framework conveys the dependent and independent variables of research in a methodical way. The author develops the framework as shown in Figure 1 to convey an accurate picture of this research.

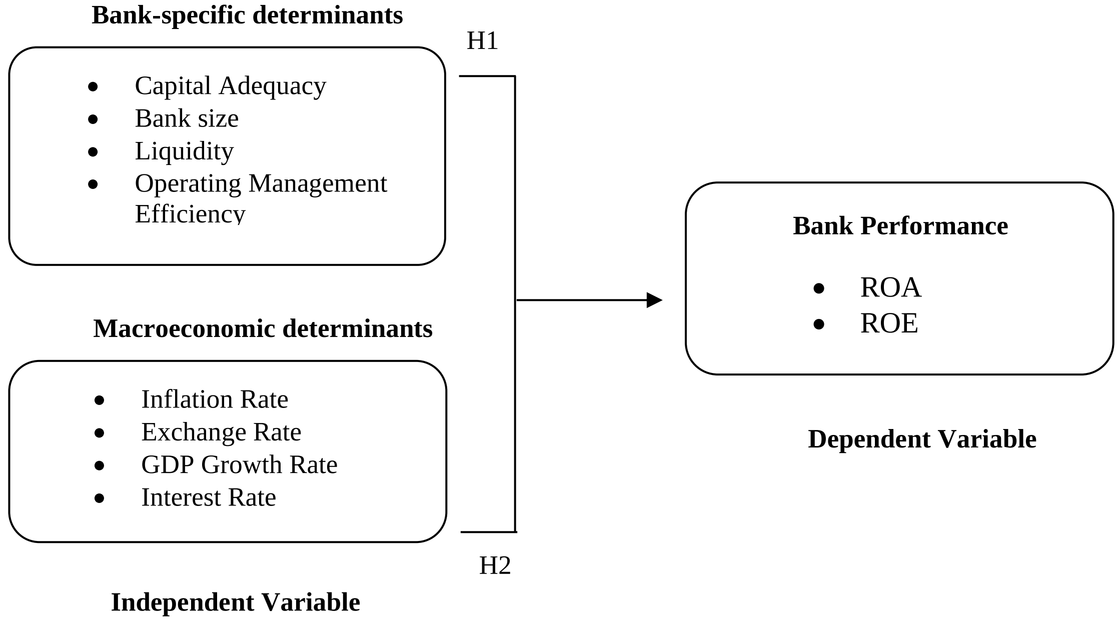

Figure 1: conceptual framework

Research Population and Research Sample

There are twenty-three registered commercial banks in Sri Lanka currently functioning under the CBSL authorization. In here used licensed commercial bank as a target population for the analyses. Author gets twelve Domestic LCBs and three foreign LCBs used to get sample for this research. To conduct this study, a commercial bank was selected as a population. Data from the annual report presented for eight years from year 2014 until 2021 being used to measure all the independent variable. So, there is a total of more than 120 sample. Eight years of an annual report are gathered to use the information related to calculate the level of financial indicator for. each bank such as capital adequacy, liquidity, cost to income ratio. For macroeconomic factors, there are four variables referred to as GDP growth rates, inflation rates, interest rates and exchange rates.

Data Analysis and Findings

Based on information that was gathered using secondary information gathering techniques and analyzed using e-views version 09 and excel software. In this study, ordinary least squares regression (OLS) was used to analyze the data and formed the basis of other techniques. A multiple regression analysis was used to determine the effect of independent variables on the dependent variable. To ensure stationarity and that the assumptions of the OLS were not violated, several diagnostic tests were performed. Regression analysis and descriptive statistics were used. The results of the regression analysis and the hypothesis testing indicated that the chosen factors indeed affect the performance of the bank in Sri Lanka. Four models can be used to categorize the data:

1) Model 1- relationship between ROA and bank-specific determinants

2) Model 2- relationship between ROA and macroeconomic determinants

3) Model 3- relationship between ROE and bank-specific determinants

4) Model 4- relationship between ROE and macroeconomic determinants

The author considers below the regression results according to research models. According to the regression results, R squared for Model 1 is 52.066%. This indicates that the chosen independent, bank-specific factors account for variation in the dependent variable (ROA). All-probability values are less than significance level 5%, (0.05). Therefore, it can conclude that there is statistically significant relationship between the ROA selected specific organizational factors of commercial banks in Sri Lanka. R squared for Model 2 is 57.2676 and all-probability values are less than significance level 5%, Therefore, it can conclude that there is statistically significant relationship between the ROE selected specific organizational factors of commercial banks in Sri Lanka.

R squared for model 3 is 88.4874. and Probability of t-statistic of the organizational variables. 0.0303. the three probability values are less than significance level 5%, (0.05) but is not lower than significant value of the study. It shows by insignificant impact regression and that variable is GDP growth. It means there is no relationship between ROA and GDP growth rate. But it can conclude that there is statistically significant relationship between the ROA selected macro environmental factors of commercial banks in Sri Lanka. Model 4's R squared is 0.7298 and three probability values are less than significance level 5%, (0.05) but is not lower than significant value of the study. It shows by insignificant impact regression and that variable is GDP growth. It means there is no relationship between ROE and GDP growth rate. But in short, it can conclude that there is statistically significant relationship between the ROE selected macro environmental factors of commercial banks in Sri Lanka.

Findings

Summary of that results all models statistically significant and GDP is not statistically significant in ROE and ROA and Cost to income ratio shows negative relationship with ROA and ROE other all factors show positive relationship. F-statistics were employed to determine the overall significance of the statistical model, and this statistic may also be described as a measure of the model's strength. According to regression result all model's probability of F- statistic is lower than significance level 5% (0.05), it can conclude that overall model best fits the population.

Conclusion

This paper examines the impact on bank specific and macro-economic factors on bank performance in Sri Lanka. Researcher used ROA and ROE as the fundamental measures of bank performance, all bank specific factors CA, Cost, Size, Liquidity and four macro-economic factors. The objective of the study was to find out if the selected internal and external factors influence the bank's performance of Licensed commercial banks Sri Lanka. Descriptive statistics, regression analysis was applied. The regression analysis and hypothesis testing showed that the selected factors do influence the bank performance. However, the level of significance of the independent variables was varied. The results showed that the capital adequacy ratio, bank size, liquidity ratio, exchange rate, inflation rate and interest rate are significant effect on banking profitability; cost to income ratio, has a negative and significant effect on Banking Profitability; GDP is not statistically significant with bank performance.

Limitations of the study

This study is limited to only for bank in Sri Lanka. Furthermore, the limitation of this study can also be seen based on the selection for one bank which limited to the licensed commercial bank Sri Lanka. In addition, this study only covers up to eight years annual report which means only 8 years financial statement from 2014 until 2021 are used.

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Evaluation of financial performance of licensed commercial banks in Sri Lanka (with special reference to CAMEL analysis)

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Introduction

Financial markets consist of buyers of financial instruments (who invest excess) and sellers of financial instruments (who need funds). Commercial banks are the main intermediaries in financial market. Gul, Irshad, and Zaman (2014), note that the Banking sector acts as the lifeblood of modern trade and commerce to provide them with a major source of finance. The banking sector is important in Sri Lanka as in other countries. The banking system of Sri Lanka consists of the Central bank of Sri Lanka (CBSL), Licensed Commercial banks (LCB), Licensed Specialized Banka (LSB), and special purpose banks. According to the Central Bank report (as at 30th September 2021) there are 24 licensed commercial banks, 09 private domestic commercial banks and 13 foreign banks.This study highlights the CAMEL factors which are known as Capital adequacy, Assets quality, Management capability, Earning quality and Liquidity. These variables are closely related to the performance of commercial banks.

The Bank's performance has significant effects on investment, business growth, industry expansion, and economic development. Analyzing determinants of bank performance is identified as an interesting area in the banking research Bekana, 2020; Dissanayaka, Kethmi (2021); Bandaranayaka, Jayasinghe (2013); Frederic (2014). In the Sri Lankan context also,researchers used CAMEL rating for their studies to investigate bank performance. But most researchers have taken only government banks to investigate the performance. (Weersainghe & Perera, 2013). Olweny & Shipho, 2011, find determinants of bank performance varies in different countries on economic conditions and their financial system. This indicates each variable does not affect the same way in each economy. To fill this research gap, the study used CAMEL s and get 10 commercial banks including government and private sector banks and recent 10-year time period (2012 – 2021). The problem addressed here is “What is the impact of CAMEL ratings on the performance of Licensed Commercial banks in Sri Lanka?”

The main objective of the research is to investigate the determinants of bank performance in commercial banks of Sri Lanka. The study builds sub-objectives; to assess the effect of capital adequacy on the performance of the commercial banks; to assess the effect of Assets quality on the performance of the commercial banks; to assess the effect of management capability on the performance of the commercial banks; to assess the effect of earning quality on the performance of the commercial banks, and to assess the effect of liquidity on the performance of the commercial banks. The study includes the existing literature related to determinants of performance of commercial banks and CAMEL factors. To measure the performance used return on assets ratio (ROA) and return on equity ratio (ROE).

Nguyen, 2021 shows the capital adequacy and the financial stability of the Vietnamese commercial banks have positive correlation. Sugeng, (2021) examine the effect of the capital adequacy ratio and return on assets. Researcher used 2016 – 2021 time period and showed capital adequacy ratio has an effect on ROA. Sanathanee (2020), find the impact of assets quality on profitability (2008 – 2016) using 9 commercial banks of Sri Lanka and found that assets quality had a negative impact on bank profitability and asset quality does not solely determine the profitability of banks. It links with capital adequacy, management efficiency, earning performance and liquidity also.

Banks should focus on management efficiency as management is the only criterion by which all other aspects of performance can be managed. (Pushpa,2018) According to Jean (2021), management efficiency has negative Correlation of the bank performance. Asian (2017), found there is a linear relationship between earning quality and ROE. But there is negative relationship between ROA and earning quality. Ibrahim 2020, shows relationship between bank performance and earning quality and found positive relationship between earning quality and return on assets.

Klara, Givil (2018) study the relationship between liquidity and profitability in Georgian banking sector. They used 1997-2017 time period and found there is a positive relationship between bank profitability and liquidity. But Jean (2020), found negative correlation in between liquidity and ROA. The present study used several theories to build the study. Such as Basel III capital framework, market power theory, commercial loan theory, anticipated income theory and managerial efficiency model. Most researchers focus on bank performance and CAMEL components. But only few researchers had found the relationship between bank performance and CAMEL. (Tharanga, Ariyasena (2021), (Singhal, Gupta (2020). Most researchers selected some components such as, capital adequacy, assets quality and liquidity(Dissanayaka, Kethmi (2021). To fill this research, gap the study used 10 commercial banks, last 10-year data (2012-2021) and all CAMEL components.

Methodology

The researcher used quantitative research methodology and deductive research approach. The study has been conducted using secondary data, collected from annual reports and get recent 10-year time period. Currently there are 24 commercial banks in Sri Lanka. Those banks get as population and out of these population select 10 commercial banks include both private and government banks based on bank's assets value.

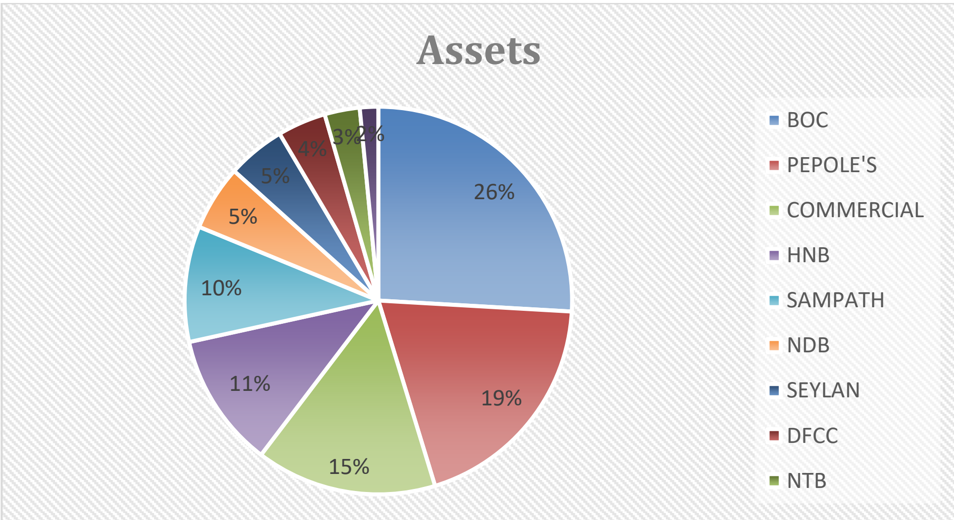

Figure 1: Ranked Commercial banks of Sri Lanka based on assets value

Source: KPMG Sri Lanka Banking report 2021

The researcher used descriptive analysis, correlation analysis and regression analysis to measure relationship between CAMEL and ROA and ROE. Under regression analysis Hausman test and Wald test were used and also tested the multicollinearity and autocorrelation.

Findings

Based on descriptive analysis results ROE, ROA, AQ and L has positive skewness and CA, MC and EQ has negative skewness. In correlation analysis there were negative correlation in ROA with assets quality and management capability. ROA positively correlated with earning quality, liquidity and capital adequacy. ROE negatively correlated with capital adequacy, assets quality, management capability and liquidity but positively correlated with earning quality.

In regression analysis Hausman test and Wald test were used. In Hausman test ROA accepted alternative hypothesis. It means it appropriate fixed effect model. But ROE accepted null hypothesis and it appropriate random effect model. In Wald test also ROA accepted fixed effect model and ROE accepted random effect model.

Table 1: Regression Analysis Results between CAMEL and ROA

Variable	Coefficient	Prob.
CA	0.028542	0.1678
AQ	-0.108888	0.0087
MC	-0.015311	0.012
EQ	0.147936	0.0204
L	0.025647	0.0005
C	1.045998	0.0308
R-squared	0.390916	
Adjusted R-squared	0.358518	
F-statistic	12.06603	
Durbin-Watson stat	1.346096	

Source: Author's Estimation

Under multiple regression results, the model explains 39.09% of the independent variables as capital adequacy, assets quality, management capability, earning quality and liquidity to dependent variable of ROA. The model as follows.

$$ROA = 1.045 + 0.028CA - 0.108AQ – 0.015\,MC + 0.147EQ + 0.025L$$

The regression analysis of ROA that explained by independent variables use CAMEL. The coefficient of multiple regressions is 0.028542, -0.108888, -0.015311, 0.147936, and 0.025647 in capital adequacy, assets quality, management capability, earning quality and liquidity respectively. ROE model explains 26.65%.

$$ROE = 27.14 – 0.026CA - 0.521AQ – 0.113MC + 1.537AQ – 0.153L$$

The regression coefficients -0.026254, -1.5219, -0.113962, 1.537255, -0.153508 of CA, AQ, MC, EQ and L respectively. From above result can interpret earning quality have positive relationship and capital adequacy, assets quality, management capability and liquidity have negative relationship with ROE.

Conclusion

The central bank of Sri Lanka update capital adequacy ratio at 16.7% in December 2021. Based on 2021 CA ratios, some banks not reach this limit. Such as Seylan bank, Pan Asia bank NDB, commercial bank and DFCC bank. In indicate that there is no enough capital. So, the bank may concern to raise its capital. If the assets quality ratio is high, the performance of the bank may low. Seylan, BOC, DFCC and NTB have significantly high value in assets quality. It is not appropriate for bank performance.

Used the management capability ratio can evaluate the efficiency and capability of the bank management. The highest value got Pan Asia bank and Seylan bank. Highest ratio of management capability is good and satisfactory level for the bank. Then banks may focus on the management capability because it is the only criteria which can manage all the other elements of the performance.

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Liquidity ratios on the profitability of the banks: evidence from the Sri Lankan banking sector

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Introduction

Banks are one of the most popular financial institutions that contribute to economic development and progress. Banks play an important role in the competitive environment. Nowadays, many sections of society prefer to invest in banks to earn higher interest rates and to get additional benefits like leasing, loans, mortgages, and mortgages (Kajola & Sanyaolu, 2019). According to the Central Bank of Sri Lanka (2022) Sri Lanka's banking sector with 24 Licensed Commercial Banks (LCBs) and 6 Licensed Specialized Banks (LSBs) dominates the financial system and holds the largest share of total assets. In the financial system and this crisis situation, the central bank's main objective is to maintain the financial stability of the economy. To do that, maintaining financial sector stability through liquidity and profitability of the banking industry are important and critical factors. Liquidity management, in particular, has a significant impact on a bank's ability to expand and become profitable. Bank liquidity management has become more critical as both too little and too much liquidity can hamper the bank's ability to operate profitably. Several studies in the literature have developed as their primary emphasis (Zaineldeen, 2018). As the nature of economic activities and economic conditions in industrialized countries are different from those of developed and developing countries, the results cannot be applied to the Sri Lankan context (Edirisuriya, 2017). The relationship between liquidity and profitability in the banking sector has received little academic attention in Sri Lanka. The researcher was able to find few studies regarding the issues of liquidity and profitability in the Sri Lankan context. According to Nishanthini & Meerajancy (2015) the study found that insignificant correlation between liquidity and profitability for both State Banks and Private Banks. And regression shows the negative impact of liquidity on profitability in selected Banks in Sri Lanka. And also. As a key finding of Madhuwanthi & Morawakage (2019) study, the liquidity risk positively affects the top line performance indicators, whilst negatively affecting the bottom line performance indicators. The key issue of the researcher's research background leads to the main query in this examination. "How do liquidity ratios influence the profitability of Sri Lankan governmental and private sector banks?"? This study investigates the relationship between banking sector profitability and liquidity. Many studies are based on other countries, such as Pakistan, Jordan, Indonesia, Ghana, Palestine, and Bangladesh. Various researchers found a significant impact between Liquidity and profitability such as Nishanthini & Meerajancy (2015), Eljelly(2004), Kajola & Sanyaolu, (2019), Zaineldeen(2018), Moussa & boubaker(2020), Anandasayanan & Subramaniam(2020) and others. The studies that can be found in the Sri Lankan context such as Nishanthini & Meerajancy(2015) and Madhuwanthi & Morawakage (2019) are largely influenced the continuation of the Literature Review section

By considering the background and introduction, the researcher can identify the Following Research Questions. Main research Question: “What is the impact of Liquidity ratios on the profitability of banks in Sri Lanka?”

Sub Questions:

- What is the impact of the Loans to Deposits Ratio on the Return on Asset?
- What is the impact of the Cash to deposit Ratio on the Return on assets?
- What is the impact of the Deposit to Total Assets ratio on the Return on Asset?

For the researcher's problem, the two main variables are liquidity and profitability.

The researcher defines the Objectives as follows**.** Main Objective: To find out the impact of the Liquidity ratio on the Profitability of Banks of Sri Lanka.

Sub Objectives:

- To find the impact of the Loans to Deposits Ratio (LDR) on the Return on Asset (ROA),
- To find the impact of Cash to Deposit Ratio (CDR) on the Return on Asset
- To find the impact of the Deposit to Total Assets ratio (DTR) on the Return on Asset.

Methodology

In this study, the dependent variable is profitability and the independent variables are liquidity ratios. According to the above classification, the three liquidity ratios are LDR, CDR and DAR are the independent variables of liquidity, and the ROA ratio is under the dependent variable of Profitability. The following figure shows the Conceptualization framework of the research,

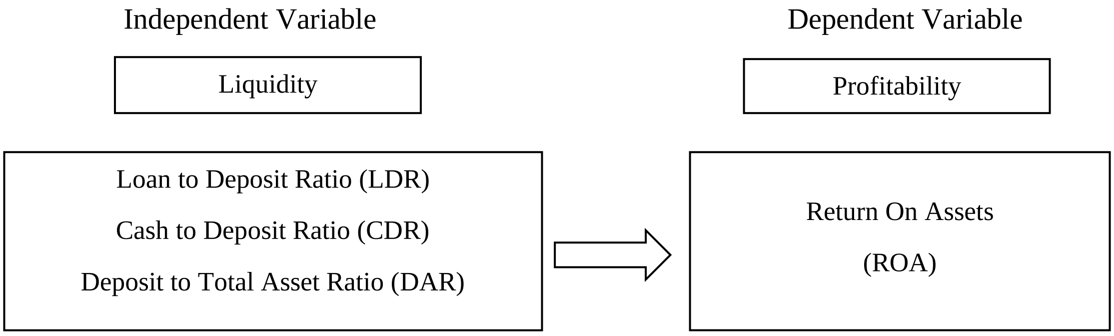

Figure 3*:* Conceptualization Framework of the study

Considering this study the researcher has conducted an exploratory study and a deductive approach. The choice of research is the quantitative method and the researcher has used secondary data as the main sample source. Through this study, the liquidity and profitability variables of State Banks and Privet Banks of Sri Lanka were mainly focused. The study used secondary data extracted from the published financial statements of selected banks for the ten-year period from 2012 to 2021. The research population of Sri Lanka was recorded as all licensed public and private banks in Sri Lanka. According to the Central Bank of Sri Lanka (2022), Sri Lanka now has 24 registered commercial banks and six specialized banks operating under CBSL approval. Since the distribution of the selected research population is reported around Sri Lanka, the researcher has taken the sample from 15 randomly selected banks. The study used the financial highlights report, income statements, and statements of financial position of the selected banks to obtain information.

Findings

Author found the following things in order to analysis techniques. The descriptive analysis mainly describes each variable's mean, median, maximum, minimum and standard deviation. So that it tested statistical results for ROA, LDR, CDR and DAR. According to Regression analysis, coefficients gave the positive outcomes for C, LDR and the DAR. It means those variables have positive coefficients with the ROA. And also CDR has negative coefficient with the respective of ROA. R squared was very lower level and it define the low explanatory power of the model. Durbin Watson value was also good and Probe (F – statistic) value was sufficient level. As well as researcher used Hausman test to test of misspecification. Between fixed effect and random effect model Hausman test shows fixed effect model were most appropriate to explain the impact. Following tables shows the findings of analysis technique,

Table 3: Regression analysis

Variable	Coefficient	t-Statistic	Prob.
C	0.008262	2.116391	0.0360
LDR	0.005565	3.949818	0.0001
CDR	-0.003371	-0.680204	0.4975
DAR	0.000607	0.154478	0.8774

R squared value of Regression analysis is 0.144518 (14.45%). It is very lower and it defines the lower explanatory level of independent variables to dependent variable. In addition, Adjusted R squared value equals to 0.1269409 (12.69%).

Table 4: Correlation Analysis

	ROA	LDR	CDR	DAR
ROA	1.00000			
LDR	0.375755	1.00000		
CDR	-0.44338	0.042432	1.00000	
DAR	-0.201178	-0.605521	-0.310636	1.00000

All VIF values are less than 5.So that Multicoliniearity problem does not exist in the Model.

According to the significant results of multiple regression analysis and Correlation analysis results, the summary of findings shown below,

H_1: There is a significant relationship between LDR and ROA - Accepted

H_2: There is a significant relationship between CDR and ROA - Rejected

H_3: There is a significant relationship between DAR and ROA - Rejected

The findings of the study prove that there is a positive significant impact from loans to deposits as a proxy for liquidity risk on the performance of banks at a 5% of significance level due to the H_1 Accepting. In order to the rejecting H_2, CDR is negatively related to the asset but the level of significance was critically low. Therefore, CDR has no significant impact on the ROA. The last findings of the study prove that there is no significant impact from deposits to total assets as a proxy for liquidity risk on the performance of banks at a 5% of significance level because the H_3 is rejecting.

Conclusion

Finally, it can be said that the considered liquidity ratio of LDR has a significant impact on the profitability ratio of ROA. But CDR and DAR do not have a significant impact on ROA. In the Sri Lankan context, state and private Bank profitability (ROA) and Liquidity ratio of loan to deposit ratio (LDR) has a significant impact and positive relationship with the ROA, in order to receive results of analysis methods. And other liquidity ratios of Cash to deposits (CDR) and Deposits to total assets ratio (DAR) has no significant impact and it has a negative correlation with ROA in the state and private Banks in the Sri Lankan context. As a limitation, in this sample, some banks are internationally owned banks that operate in Sri Lanka as commercial banks. In some cases, financial statements are presented in USD and millions of amounts. As well as, At the Literary Review section continues, it was more difficult to find articles and previous studies on the liquidity and profitability of the banking sector in relation to Sri Lanka. Due to this matter, many studies by foreign authors related to developing countries were used.

In order to final results, the researcher recommended that banks with a high ratio of LDR cause less funding to cover withdrawals and unexpected situations. A very lower ratio of LDR is not maximizing the spread between their cost of funds and interest on the Assets. The bank should pay valuable attention to the cash reserve strategies and regulations implemented by CBSL. Depositors have a big influence on liquidity since they are the primary consumers in the banking industry. As a result, researchers recommend that every financial sector bank should make a special consideration about important depositors. Furthermore, commercial banks' surplus funds should be invested seasonally in short-term money market securities.

In the Sri Lankan context, the researcher calculated bank liquidity ratios and profitability ratios using their annual reports. The researcher recommends for future studies that other liquidity ratios also will effect on the profitability such as current ratio, investment ratio, capital adequacy ratio, loan to total asset ratio and etc. It will help to track the impact of liquidity ratios on the Profitability of banking sector. And also researcher recommend that the increasing sample size and expanding data gathering time period will help to get the more robust results regarding the research area. Similar studies insurance companies, microfinance companies, pension funds, other finance companies and etc.

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Impact of new normal banking initiatives on customer satisfaction: with special reference to licensed commercial banks in Sri Lanka

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Introduction

Banks are undergoing rapid changes as a result of innovative and constantly changing technological services, as well as the global Covid 19 pandemic condition (Khatoon, Zhengliang, & Hussain, 2020). During the COVID-19 epidemic, the financial industry around the world faces a significant challenge; yet, the need to address the demands of financial service consumers is driving the adoption of novel banking solutions in both rural and urban areas (Bala et al, 2021). A new normal has emerged as a result of the COVID-19 pandemic, which has forced people, communities, organizations, and even countries to alter their regular lifestyles and behaviors. As a result, the banking industry must alter its service strategy in order to avoid a drop in client satisfaction and a loss of loyalty. Within the concept of new normal banking, various initiatives can be identified; online banking, mobile banking, virtual banking, artificial intelligence, etc. These initiatives have different features (trust, ease of use, privacy etc) and these features are experienced by the customers when they obtain facilities through new-normal banking. Thus, the total customer satisfaction on banking services depends on how customers satisfy with the features of those services.

The main objective of the study was to examine the impact of new normal banking initiatives on customer satisfaction of new normal banking, with special reference to licensed commercial banks in Sri Lanka. Then the study intended to address the main research question: “How do new normal banking initiatives impact on customer satisfaction?”. The study introduces features of new-normal banking initiatives as; trust, ease of use, security and privacy, service quality, reliability, social distance concerns of customers and green concerns of customers.

In Sri Lankan context, there are still limited studies in the area of new normal banking and this is an emerging area of study (Buddhika & Gunawardana, 2020). According to Wahyuni, Pujiharto., Azizah, & r Zulfikar (2021), Sihotang & Hasanah (2021), Asiya, Khasanova., Adel, & Daryakin., (2017), Many studies are based on new normal banking and COVID-19, but they are not concerned with how this new normal banking situation and new normal banking initiatives affects customer satisfaction. According to above factors, the intention of this study was to investigate the features of new normal banking initiatives and identify the Impact of new normal banking initiatives on customer satisfaction. Further, the present study proposes green concern features and social distance features of new normal banking initiatives, which add novelty to the study.

Methodology

After reviewing the previous literature, the following conceptual framework (figure 1) and hypothesis were constructed. Features of New normal banking initiatives: trust, ease of use, security and privacy, service quality, reliability, social distance concerns and green concerns were taken as independent variables and customer satisfaction was taken as dependent variable.

H1; There is a significant impact of trust (TR) on customer satisfaction on new normal banking.

H2; There is a significant impact of ease of use (EC) on customer satisfaction on new normal banking.

H3; There is a significant impact of security and privacy (SP) on customer satisfaction on new normal banking.

H4; There is a significant impact of service quality (SQ) on customer satisfaction on new normal banking.

H5; There is a significant impact of reliability (RE) on customer satisfaction on new normal banking.

H6; There is a significant impact of social distance concerns (SD) on customer satisfaction on new normal banking.

H7; There is a significant impact of green concerns (GC) on customer satisfaction on new normal banking.

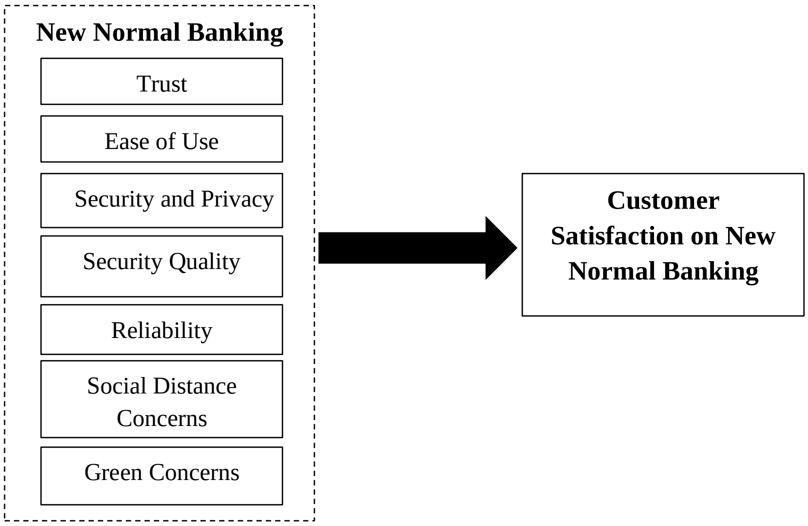

Figure 1: Conceptualization

Research was quantitative and deductive study. Digital banking users in twenty-four license commercial banks in Sri Lanka was the study population. The unit of analysis was one of the customers who use new normal banking initiatives in licensed commercial banks in Sri Lanka. The sample was 250 customers and convenience sampling technique were used.

A structured questionnaire was developed as the research instrument. The first part of the questionnaire contained demographic factors. The second part contained close-ended questions to measure the study variables. Response to individual items was scaled according to a five-point Likert scale ranging from 1(strongly disagree) and 5 (strongly agree). Data were statistically analyzed using Descriptive statistics, correlation analysis, and multiple regression analysis using the Statistical package of Social Sciences.

Findings

Total 270 questionnaires were administered to the respondents, out of which 250 were completed and returned, this gave a response rate of 92.5% (250/270*100). This research examined the data using reliability analysis, validity analysis and normality test. Reliability analysis assured that the instrument measures the concept and helps to assess the goodness of a measure. Cronbach's Alpha values reported more than 0.7. which indicated good internal consistency of study variables. The validity was measured by performing two tests; Kaizer-Mayer olking (KMO) and Bartlett's Test of Sphericity (BTS). According to validity results, the variables have a KMO value greater concluding the fact that all variables have ensured convergent validity. According to the normality test, all independent drivers as well as dependent driver of the Customer Satisfaction are approximately normal due to the skewness value of the variables (drivers) are within the range of -2 and +2. This result leads the study with the parametric for individual driver analysis.

According to descriptive statistics, Mean values are the average values of set of observations. The mean values for trust, ease of use, security and privacy, service quality, reliability, social distance concerns, green concerns and customer satisfaction are 3.987, 3.859, 3.974, 3.728, 3.897, 3.748 and 3.835

respectively. Accordingly, Trust feature has a higher mean value comparatively to other dimensions. Lowest average taken by service quality dimension. However, all features of new normal banking are in a moderate level as per the customers who use the new normal banking initiatives of licenses commercial banks in Sri Lanka.

Table 1: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	-.052	.203		-.255	.799
	TR	.034	.061	.031	.564	.573
	EC	.088	.066	.081	1.335	.183
	SP	.160	.065	.147	2.447	.015
	SQ	.148	.053	.159	2.802	.005
	RE	-.007	.083	-.005	-.080	.936
	SD	.229	.059	.207	3.860	.000
	GC	.370	.052	.379	7.172	.000

a. Dependent Variable: CS

Source: Survey data, 2022

To determine the relationship between independent variables and dependent variable, Pearson's correlations were calculated and also it was used to determine the nature and strength of the relationship among variables of the study. It can be concluded there were positive strong and significant relationship between new normal banking initiatives (Trust: .519, Ease of Use: .609, Security and Privacy: .550, Service Quality: .713, Reliability: .697, Social Distance concerns: .682 and Green Concerns: .759) and Customer satisfaction. Analyzing the data, R square of this study was 0.668 and this means that 66.8% of the variation in dependent variable is explained by the independent variables or the fitted regression model. Furthermore, to assess the statistical significance of the result it is necessary to look in the ANOVA table. Here "F "value is equal to 67.947 and p value equal to 0.000, which is significant at 0.001 significant levels. Therefore, it can be confirmed that model is significantly valid.

Table 02: Hypothesis testing

Hypothesis	Description	Regression Result	Result	Results
H1	There is a significant impact of trust on customer satisfaction of new normal banking.	Positive insignificant	(0.573> 0.05)	Rejected
H2	There is a significant impact of ease of use on customer satisfaction of new normal banking.	Positive insignificant	(0.183> 0.05)	Rejected
H3	There is a significant impact of security and privacy on customer satisfaction of new normal banking.	Positive significant	(0.015< 0.05)	Accepted
H4	There is a significant impact of service quality on customer satisfaction of new normal banking.	Positive significant	(0.005< 0.05)	Accepted
H5	There is a significant impact of reliability on customer satisfaction of new normal banking.	Negative insignificant	(0.936> 0.05)	Rejected
H6	There is a significant impact of social distance concerns on customer satisfaction of new normal banking.	Positive significant	(0.000< 0.05)	Accepted
H7	There is a significant impact of green concerns on customer satisfaction of new normal banking.	Positive significant	(0.000< 0.05)	Accepted

Based on the regression analysis coefficient results the estimated regression model can be developed as follow.

$CS= (.52) + .147(SP) + .159(SQ) + .207(SD) + .379(GC)$

CS = Customer Satisfaction (Dependent Variable), SP = Security and Privacy (Independent Variable), SQ = Service Quality (Independent Variable), SD = Social Distance Concerns (Independent Variable), GC = Green Concerns (Independent Variable)

Conclusion

The purpose of this study was to examine the new normal banking initiatives of license commercial banks in Sri Lanka and identify how they affect the customer satisfaction. The researcher used seven features of new normal banking initiatives; trust, ease of use, security and privacy, service quality, reliability, social distance concerns and green concerns. Based on them, seven hypotheses were established to achieve research objectives.

The correlation analysis result illustrated that all independent variables had positive strong significant relationship with customer satisfaction. Multiple regression analysis of this study concluded that there was a strong positive relationship between six independent variables of trust, ease of use, security and privacy, service quality, social distance concerns & green concerns, and dependent variable of customer satisfaction but Reliability has a negative relationship between Customer Satisfaction. According to this study, researcher found that there is significant relationship in between security and privacy, service quality, social distance concerns & green concerns and there is an insignificant relationship between trust, ease of use and reliability.

Further, the most significant independent variable which affect to the customer satisfaction is green concern and it describe 37.9% of the customer satisfaction and the least significant independent variable which affect to the customer satisfaction is trust and it describe 3.1% of the independent variable. When carrying out the study, several limitations were found. Such as study was limited to the banking industry, study focused only seven variables were selected as the independent variables. But this study can be expanded more by using several features as the new normal banking initiatives. Finally, researcher recommends that the licenses commercial banks have to develop new normal banking initiatives in order to achieve their customer satisfaction and in achieving their success.

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Factors affecting to the savings behavior among youth generation in Sri Lanka

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Introduction

Savings is one of the assets that can enhance lifetime consumption and raise the financial security of future generations. Saving behavior is the result of views of future needs, a saving decision, and a saving action. It can be defined as the proportion of disposable income in a period that is not consumed, but instead invested (or saved) for future consumption or bequest (Chowa, Masa & Ansong, 2012). Individuals can save money to improve their income in the future as there are many uncertainties (e.g. inflation) about how much money they will have at the end of their working life. Any economy needs to encourage people to save more since it provides the money needed for continued development. Therefore, saving has been a key component of economic development and progress (Krieckhaus, 2002). Young people are a major human resource for development and key agents for social change, economic growth and technological innovation. The earlier kids and teens start saving money, the more likely it is to become a habit. Kids and teens can boost their savings by finding ways to earn more money. According to past studies it has proved that there are some factors affecting to the savings behavior of the youth generation. In this study is based the young generation's savings behavior because understanding young people's financial habits can help the country advance and prosper. The youth are a crucial component in the household sector since they will be the future leaders and may make significant contributions to the development process.

The main objective of this study is to evaluate the concept of saving behavior and identify the variables influencing young people's saving behavior in Sri Lanka. There were four specific objectives as to investigate impact of financial literacy, risk tolerance, demographic factors, and financial socialization on savings behavior among youth generation in Sri Lanka. Accordingly, this study explores this as the problem to investigate empirically with the general research question; what are the factors that influencing savings behavior among youth generation in Sri Lanka.

Financial literacy means the ability to make informed judgments and take effective decisions regarding the use and management of money. And also it can be defined as the ways how people manage their money in terms of insuring, investing, saving and budgeting (Hogarth, 2002). Risk tolerance is the willingness of individual to take risks that can be taken based on the current asset or wealth and current financial situation for the future growth (Gibson, Michayluk & Venter, 2013). Some demographic factors also affecting to the savings behavior of youth generation. Saving increases with income (Chang, 1994; Foster, 1981; Hefferan, 1982; Lee et al., 2000; Yuh & Hanna, 2010), indicating a positive relationship between incomes and saving. According to Yuh and Hanna (2010), respondents under the age of 30 had the highest anticipated chance of saving, with the estimated probability progressively declining with age. Men tend to be risk-averse, while women are risk-neutral, according to a study by Warshawsky-Livne et al. (2014). Men generally have higher earnings and they tend to have a higher level of saving and wealth, contrary to women. According to Jamalet al. (2015), students are said to have a more favorable financial attitude when they are more educated. Financial socialization agents can be defined as the social environment immediately around a person, including family, parents, relatives, close friends, local community organizations, and professional financial bodies, is the source of that person's financial socialization or social influence (Franzoi, 2006). And also this study is based on Life Cycle Hypothesis Theory which explained that majority of the individuals tend to save for a particular age when their income is more than their consumptions. It was developed by Modigliani and Brumberg (1954).

Methodology

The current study was focused on the factors affecting to the savings behavior among youth generation in Sri Lanka. Financial literacy, risk tolerance, demographic factors and financial socialization agents act as the independent variable and savings behavior acts as the dependent variable. The researcher selected youth generation of Sri Lanka as the population and using the convenience sampling method researcher has selected 150 young people who are belonging to 15-35 age category as the study sample. Data were collected through a standardized questionnaire which consists of six sections. The first section analyzes background information of the respondents, the second section consists of testing questions that measure financial literacy level and five-point Likert scale questions were included in the third part to measure the risk tolerance level of the customer. The fourth part included four questions to test the demographic factors and fifth part consisted with ten questions to measure the parental & peer influence. Finally, six part consisted with seven questions to measure the savings behavior of the respondents. SPSS (26.0) version has been used for data analysis. Prior to analysis, the researcher performed the reliability and validity tests to validate the data. The dependent and independent variables performed a further descriptive analysis. After that, multiple regression analysis was used to assess the significance of the variables developed by the researcher and correlation analysis was employed to investigate the relationship between variables.

By reviewing the literature, the researcher developed a model to conceptualize the framework of the study as follows:

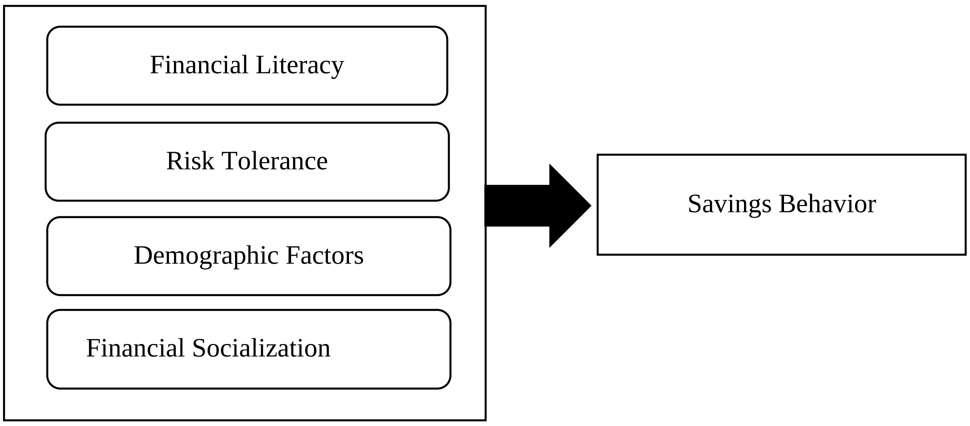

Figure 1: Conceptual Framework

Hypothesis of the Study

H1: There is a significant impact of financial literacy on savings behavior among youth generation in Sri Lanka.

H2: There is a significant impact of risk tolerance on savings behavior among youth generation in Sri Lanka.

H3: There is a significant impact of demographic factors on savings behavior among youth generation in Sri Lanka.

H4: There is a significant impact of financial socialization agents on savings behavior among youth generation in Sri Lanka.

Findings

Descriptive statistics are brief informational coefficients that summarize a given data set, which can be either a representation of the entire population or a sample of a population.

Table 1: Descriptive Statistics

Variable	Statistic
Savings Behavior	3.9133
Financial Literacy	4.2280
Risk Tolerance	3.7117
Demographic Factors	3.8550
Financial Socialization Agents	3.9067

Source: Author's Estimation

According to descriptive statistics all the variables are near to agreeable scale. According to the reliability & validity test are used to evaluate the quality of research. According to this study Cronbach's alpha values are more than 0.7 value and KMO values are more than 0.5 value which stated the good reliability and validity. According to the Model summary, it has indicated that 57.4% of the variation in dependent variable is explained by the independent variables or the fitted regression model.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.757	0.574	0.562	0.35106

Source: Author's Estimation

Table 3: Coefficient Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.058	.257		4.121	.000
	F_L	.143	.078	.139	1.841	.068
	R_T	.066	.047	.084	1.397	.164
	D_F	-.009	.085	-.012	-.109	.913
	F_S_A	.522	.090	.635	5.811	.000

a. Dependent Variable: S_B

Source: Author's Estimation

By considering above analyze that can be derived the following regression equation;

SB = 1.058 + .143 (FL) + .066 (RT) + (.009) (DF) + .522 (FSA)

SB = Savings Behavior, FL = Financial Literacy, RT = Risk Tolerance, DF = Demographic Factors FSA= Financial Socialization Agents

Table 4: Hypothesis Testing Analysis

Hypothesis	Description	Results
H1	There is a significant impact of financial literacy on savings behavior.	Rejected
H2	There is a significant impact of risk tolerance on savings behavior.	Rejected
H3	There is a significant impact of demographic factors on savings behavior.	Rejected
H4	There is a significant impact of financial socialization agents on savings behavior.	Accepted

Source: Author's Estimation

Conclusion

This study focused on the factors affecting to the savings behavior among youth generation in Sri Lanka. As per the findings, it was found that there is a positive significant relationship in between financial socialization agents and savings behavior. However, the study found that there is a positive insignificant relationship between financial literacy, risk tolerance and savings behavior among youth generation. According to this study, it has found that there is a negative insignificant relationship between demographic factors and savings behavior. This concludes that financial socialization agents is a valid determinant to identify savings behavior among youth generation in Sri Lanka. The results were similar to the prior studies done in other countries. Webley and Nyhus (2006) and Younis and Haynie (1992) discovered that there is positive significant relationship between FSA and SB. This demonstrates that parents have a bigger influence on their children's saving behavior. Another agent for financial socialization that positively and significantly affects the behavior of saving is the peer group (Jamal et al., 2016; Kamarudin & Hashim, 2018).

Also, the study conducted by (Karunaanithy et al., 2017) who has invented that there may be positive insignificant relationships between financial literacy and savings behavior. Number of previous researchers tested that there is a positive relationship in between risk tolerance and savings behavior. (Dangol & Maharjan, 2018). And also (Gerhard et al., 2018) found that demographic characteristics do not always influence savings behavior similarly across different groups of individuals.

The findings of the study can be applied by the policy makers can be taken proper actions to encourage young generation in order to make saving behavior patterns. Since this study tested that there is a high impact of parental and peer influence on savings behavior, parent should be responsible to make awareness and teach the important of saving behavior for their children. And also future researchers could benefit from the researcher's suggestions for further development and improvement on the chosen elements in order to learn more about the relationships between saving and youth. Also, it is suggested to utilize another data collection method or combine two methods such as a combination of interview method and questionnaire distribution method together in order to make the data more reliable and accurate. Furthermore, researcher suggests to use sample size more than 150 in order to accurately describe the population.

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Business Strategies and Innovations in Crisis

The study of perceived barriers to green supply chain management implementation in the apparel industry in Sri Lanka

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Introduction

Green Supply chain management is the environmentally friendly manufacturing system of the modern business world. When the business organization started adopting the green supply chain concept, the business industry faced barriers to green supply chain management (GSCM). This study identified the barriers to green supply chain management in the apparel industry of Sri Lanka. The Apparel industry is one of the main income hubs of the economy in Sri Lanka. Therefore, apparel industrialization activities are usually required supply chain activities. Then these activities are major reasons of arising natural disasters, Climate Problems, the disruption of the ecosystem, and human life with different diseases such as heart disease, lung cancer, stroke, dracunculiasis, cholera, and hepatitis (Diabat et al., 2014; Lee, 2008). Thereafter, supply chain management is integrated with environmental management principles of green supply chain management. In the 21st century, many industries are adopting the green concept to protect the environment and the organization's reputation (Zhang et al., 2009). However, Organizations have not succeeded in the green concept because of barriers to green supply chain implementation. There are several barriers in the apparel industry, such as the Lack of Technology (LTB), Lack of Knowledge(LKB), Lack of financial factors(LFB), Supplier's flexibility to change towards GSCM (LSF), and the Lack of government initiatives system for GSCM practitioners(LGP) (Govindan et al., 2014). The main aim of the research is to quantify the adverse impact of the barriers to green supply chain management implementation and define the organizational responses of textile and fashion companies towards perceived barriers through a selected factor in the apparel sector industry. In addition, apparel manufacturers identify the barriers to GSCM implementation, and they analyze this problem to eradicate these barriers in this sector because they try to achieve the most environmentally friendly production and long-term sustainability (Rui, 2017). Furthermore, making responsible environmental practices part of supply chain management is the moral thing to do good business. The modern business is introduced with shorter product life cycles, sophisticated customers, and rapid new product introductions. Potential customers are increasingly knowledgeable and well-informed. In this situation, the Business world has been increasing emphasis on environment-friendly corporate activities, and many progressive companies are embracing green supply chain management (Priyashani and Gunarathne, 2021). This paper consists of four parts. Firstly, it reviews the aim of study and scope with previous literature on the barrier to green supply chain management implementation. The research methodology is presented with sampling, data collection, and analysis methods. Next, the resulting discussions and conclusions achieved the theoretical and managerial implications and directions for further research.

Methodology

After conducting a comprehensive review of the literature regarding the selected subject area, the researcher could find several barriers that can affect green supply chain management implementation. This study is based on the positivism philosophy, which believes that there is no involvement of the researcher in reality, and the findings can be generalized because it is detached from the research. Also, This study is conducted using the quantitative method. The researcher has identified five areas of barriers and those are selected five influencing factors are shown below to be considered as independent variables, and the green supply chain implementation is considered as the dependent variable.

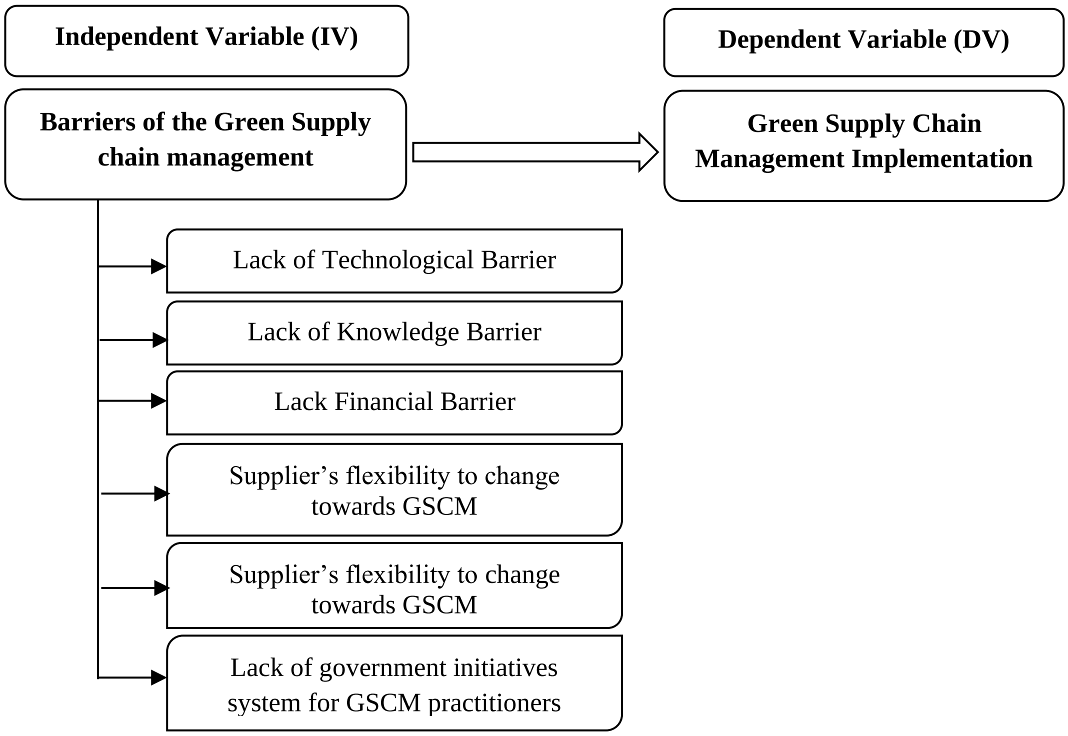

Figure 4: Conceptual Framework

This research has been conducted to identify the main barriers to implementing green supply chain management in the appeal industry by getting responses from appeal industry employment. Therefore, the population of this study was the total number of staff and executive-level employees who are working in an Apparel company in the Western Province of Sri Lanka (amount: 3000). Among them, this study used the convenience sampling method to select the sample. Therefore, based on It, the sample of this study consisted of 150 staff and executive-level employees working in three plants of the Apparel Company located in Meerigama, Welisara, and Avissawella. Under the data collection method, this study has created a google questionnaire to gather data from the selected sample. Because it is easy to distribute among the sample and gather data from a google questionnaire. Therefore, this study has used 152 respondents as its actual sample. This research presented the empirical results by SPSS analysis to test Demographic factors and the hypotheses of the study. Then, research variables have been measured using an accurate and reliable scale. This reliability test will use to ensure the data is reliable and to achieve the objective of the study and correlation analysis will be used to measure the association between independent and dependent variables. The descriptive statistic will be used to analyze results and analyze respondents' demographic factor characteristics. In addition, regression analysis will be used to measure the impact of independent variables on dependent variables. as well-analyzed data have been presented using tables, charts, and diagrams.

Findings

This study aimed to investigate whether there is any impact of green supply chain barriers to implementing the green supply chain process in the apparel sector. Firstly, describe the demographic analysis of the selected sample. According to the age analysis, the majority (33.55%) of respondents are between 40-50 years old, 32.24% of respondents are 20-30 years, 27.63% of respondents are between 30-40 years, and 6.58% of respondents are above 50 years. According to the gender mix analysis, the majority of the sample indicated Male. The number of female respondents indicated 58.55% of the sample. According to the occupation mix detail, respondents of majority (29.61%) of respondents are Staff Level in apparel companies. 24.34% of respondents were senior executives, and 19.74% of the respondents are represented at the junior executive level. The assistant manager and manager respondents represented respectively 18.42% and 7.89%. Accordingly, the Meerigama factory the Most popular respondent representing 38.16% and 31.58% of the sample size represented the 48 respondents of the Welisara plant. Avissawella plant represented the 46 respondents, which was a 30.26% percentage of the sample size. Moreover, all independent variables of LFB, LTB, LKB, LSF, LGP and dependent variables are normally distributed and independent variables are not multicollinearity which is not highly correlated with each other. And then, according to the reliability test done on the questionnaire, Cronbach's alpha values for the questionnaire ranged from 0.746 to 0.912. As those values were higher than 0.7 in Cronbach's alpha value statistically, the entire data set is correct and reliable. It assist to achieve the research objectives. Given the research hypothesis, the results showed that green supply chain barriers have a significant impact on green supply chain implementation ($p<0.05$). The Pearson correlation value is reported as repectively 0.594, 0.797, 0.685, 0.766,0.675 therefore, it can be concluded that the strong positive relationship between independent variables and the dependent variable of Green Supply Chain Management Implementation.

Table 5: Multiple Regression Model

Model	Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	95% Confidence Interval for B Lower Bound	95% Confidence Interval for B Upper Bound
(Constant)	-0.279	0.255		-1.094	0.276	-0.783	0.225
LTB	-0.172	0.082	-0.162	-2.114	0.036	-0.334	-0.011
LKB	0.633	0.104	0.465	6.063	0.000	0.426	0.839
LFB	0.186	0.084	0.175	2.214	0.028	0.020	0.353
LSF	0.279	0.096	0.262	2.912	0.004	0.090	0.469
LGP	0.163	0.062	0.173	2.628	0.010	0.041	0.286

According to the table, independent variables of LFB, LKB, LKB, LSF, LGP are statistically significant which are respectively 0.036, 0.000, 0.028, 0.090, 0.041 ($P<0.005$). And also, Regression analysis has been used to achieve this objective. According to the regression test in the previous chapter, R is the correlation coefficient that found a strong positive linear relationship which is 0.844 of R square value is 0.713. This illustrates the impact of the independent variables on the dependent variable can be stated based on a 71% accuracy level.

Conclusion

The research aimed to identify several barriers related to the implementation of green supply chain management in the apparel industry in Sri Lanka. This study is based on the Western province apparel industries in Sri Lanka and data collected from people was limited only to the Fast Fashion Cluster of Apparel companies from the selected branches. The findings of this study suggest that there is also a relationship between green supply chain barriers and the implementation of GSCM, but they are statistically significant or correlated. The study revealed that the Sri Lankan apparel industries still struggle to prioritize environmental performance. Similarly, most companies try to assist the financial sector with new eco-friendly implementations. Apparel industries have low awareness of sharing environmental Knowledge and updating environmental technologies. However, they are interested in improving environmental performance. The research objectives, questions, and hypotheses have been addressed, and this study also contributes to the gap in the problem statement. The results of this study can be used as a guideline by various parties, such as the apparel sector, policymakers, and researchers, to formulate their communication and business strategies related to implementing GSCM.

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E-commerce & Business Communication

Sri Lankan perceptions on cryptocurrency and blockchain technology

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Introductıon

Cryptocurrencies have become tremendously popular over the last decade, with the introduction of Bitcoin in 2009. They are digital money or tokens that only exist online through a network of distributed, decentralized ledgers known as Blockchain technology (Hayes, 2017). Public perceptions regarding cryptocurrencies have a high impact on their values, and a generally favourable sentiment of the public towards cryptocurrencies can be attributed to the heavy innovation that takes place across cryptocurrencies – which rivals the already corrupt banking industry (Mnif, Lacombe, & Jarboui, 2021). The transparency of the cryptocurrency and blockchain industries can also play a part in the positive perceptions of the public towards cryptocurrencies and blockchain technology – cryptocurrency balances and transactions are completely visible across the peer network, however, personal information of the owner is not visible (Plassaras, 2013). Blockchain technology provides the backbone for cryptocurrencies and related ecosystems to run on. According to (Albayati, Kim, and Rho 2020) a Blockchain is a data structure identifies and tracks transactions digitally as well as sharing such transactional information within the distributed network. Studies conducted by (Alshamsi and Andras 2019) state that security is a major constraint in utilization of a technology by users, and that the confidence of the general public in a technology decreases when it is not backed by a renowned organization or a central authority – which is the case with cryptocurrencies and blockchain technology. The objectives of this study were to identify the factors that affect the perception of Colombo district residents on Cryptocurrency and Blockchain Technology, investigate the relationships between those independent variables and perceptions of Colombo district residents on Cryptocurrency and Blockchain Technology, and to investigate the effect of the independent factors on the perceptions of Colombo district residents on Cryptocurrency and Blockchain Technology. The research was primarily focused on respondents aged 18-50 with a few limiting factors, such as them being professionals living within the geographical boundaries of the Colombo district. Priority was given to respondents with previous financial market experience and previous knowledge of cryptocurrencies or blockchain technology. Owing to the above-mentioned objectives and considering the research scope, the researcher arrived on the research problem as **"What is the perception of Colombo district residents towards cryptocurrency and blockchain technology?"**

Methodology

Through the course of the study, the independent variables were identified as the respondents' Financial Literacy (FL), Financial Market Experience (FME) and Computer Self Efficacy (CSE) which were all measured through Likert-scale questions. These independent variables impacted the dependent variables, which were the Perception on Cryptocurrency (C) and Perception on Blockchain Technology (BC).

According to Huston (2010), financial literacy – which is also known as financial knowledge, is an input used to measure human behaviour related to finance. Meanwhile, Ameliawati & Setiyani (2018) argue that financial experience gives people the ability to act wisely and prudently in their financial decisions. Compeau & Higgins (1995) defined Computer Self-Efficacy as the "judgment of one's capability to use a computer." The researcher has considered these three factors to be essential in handling blockchain and cryptocurrency-related applications and transactions – and thus has selected them as the independent variables.

Figure 01 below shows the conceptual framework devised by the researcher based on the existing literature with regard to the research area.

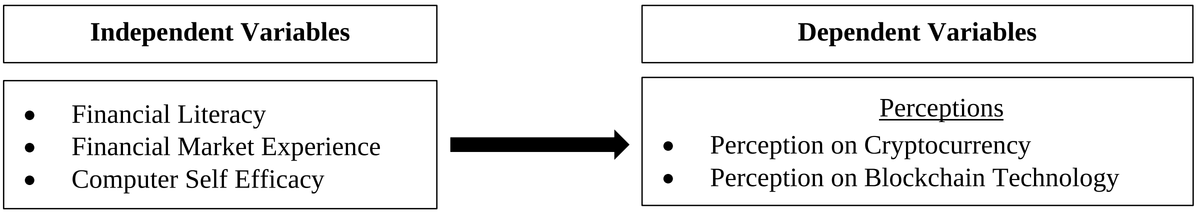

Figure 1: Conceptual Framework

The following econometric models provide a functional form of the variable relationships:

Model 1 – Perception of on Cryptocurrency

$$C = \beta_0 + \beta_1 FL + \beta_2 FME + \beta_3 CSE$$

Model 2 – Perception of on Blockchain Technology

$$BC = \beta_0 + \beta_1 FL + \beta_2 FME + \beta_3 CSE$$

Where,
C = Perception on Cryptocurrency, BC = Perception on Blockchain Technology, FL = Financial Literacy, FME = Financial Market Experience, CSE = Computer Self Efficacy, β_0 *= Constant,* $\beta_1, \beta_2, \beta_3$*= Coefficients of independent variables.*

The researcher utilized primary data collected from 100 respondents and utilized the SPSS statistical software to perform an analysis of the gathered data. Descriptive statistic techniques were utilized to describe summary statistics of the data set, while Cronbach's Alpha metric was used to analyze the reliability of the collected data. Pearson Correlation Analysis was used to identify the relationship between the respective and independent variables, and thereby testing the hypotheses. Furthermore, the multiple regression techniques was used to identify the impact each independent variable had on the respective dependent variables – perception on the future of Cryptocurrency and Blockchain Technology. The survey mostly used Likert-scale questions to measure responses, the scale was of five points, with 1 being Strongly Agree and 5 being Strongly Disagree.

Findings

Table 1 given below, showcases the descriptive statistics of the variables considered in identifying the perceptions towards Cryptocurrency and Blockchain Technology.

Table 6: Summary Statistics

	Independent Variables			Dependent Variables	
	FL	**FME**	**CSE**	**C**	**BC**
Valid (N)	100	100	100	100	100
Missing	0	0	0	0	0
Mean	2.0880	2.9680	1.4100	1.9544	2.0443
Median	2.2000	3.0000	1.2000	2.0000	2.0000
Mode	2.20	4.00	1.00	2.22	3.00
Std. Deviation	.53282	1.07298	.55949	.56194	.72009
Variance	.284	1.151	.313	.316	.519
Skewness	-.326	.002	1.264	.267	.201
Std. Error of Skewness	.241	.241	.241	.241	.241
Kurtosis	-.177	-.546	.505	.492	-.823
Std. Error of Kurtosis	.478	.478	.478	.478	.478
Range	2.40	4.00	2.00	3.00	3.00
Minimum	1.00	1.00	1.00	1.00	1.00
Maximum	3.40	5.00	3.00	4.00	4.00

The sample was selected by considering individuals with at least some level of knowledge on cryptocurrencies and blockchain who resided in the Colombo district. Therfore, respondents were selected based on confirmation of their knowledge on cryptocurrency and blockchain technology.

Considering the descriptive statistics listed above, it can be stated that the respondents on average showed a high level of CSE, while FL was also at a high level among respondents. FME however, displayed a more neutral result on average – meaning most respondents were neither strong nor weak in FME. The perception of respondents towards cryptocurrency and blockchain technology both recorded positive responses on average.

Table 2 below denotes the findings from the Pearson Correlation calculations – depicting the relataionship between the indpendent and dependent variables.

Table 7: Correlation Matrix

	FL	FME	CSE	C	BC
FL	1	-	-	-	-
FME	.507**	1	-	-	-
CSE	.160	.268**	1	-	-
C	.385**	.379**	.541**	1	-
BC	.401**	.485**	.519**	.736**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Considering the above results, it's clear that CSE denoted a moderate positive correlation with peceptions of cryptocurrency and blockchain technology. FME and FL also proved to be positively correlated with the dependent variables – perception on Cryptocurrency and perception on Blockchain Technology. However, the FL-C, FL-BC, FME-C and FME-BC relationships can be considered weak in nature. The positive relationships FL-C anf FME-C are backed by findings of (Fujiki 2020, 2021), while the CSE-BC relationship was confirmed by the findings of (Nuryyev et al. 2020).

The following Table 3 provides the summary of the multiple regression models executed based on the dependent variables. These model ffs were tested for normality, heteroskedasticity and multicolinearity and the researcher discovered there were no statistically signifcant errors.

Table 8: Summary of Regression Models

Dependent Variables		C				BC		
	(Constant)	FL	FME	CSE	(Constant)	FL	FME	CSE
Unstandardized Coefficients								
B	0.553	0.257	0.068	0.469	0.193	0.265	0.184	0.533
Std. Error	0.201	0.097	0.049	0.083	0.251	0.121	0.062	0.103
Standardized Coefficients								
Beta		0.244	0.13	0.467		0.196	0.274	0.414
t	2.755	2.653	1.378	5.674	0.771	2.186	2.985	5.158
Sig.	0.007	0.009	0.171	0	0.443	0.031	0.004	0
Correlations								
Zero-order		0.385	0.379	0.541		0.401	0.485	0.519
Partial		0.261	0.139	0.501		0.218	0.291	0.466
Part		0.21	0.109	0.45		0.169	0.231	0.399
Collinearity Statistics								
Tolerance		0.743	0.707	0.927		0.743	0.707	0.927
VIF		1.347	1.414	1.079		1.347	1.414	1.079

The researcher identified that all independent variables were statistically significant across both regression models, except in the case of FME against the perception of Colombo district residents on the future of cryptocurrency.

Accordingly, the following regression equations were constructed:

Model 1 – Perception on Cryptocurrency

$$Y = 0.553 + 0.257X_1 + 0.068X_2 + 0.469X_3$$

Model 2 – Perception on Blockchain Technology

$$Y = 0.193 + 0.265X_1 + 0.184X_2 + 0.533X_3$$

Conclusıon

This study was conducted to identify perceptions on the future of Cryptocurrency and Blockchain Technology of residents within the **Colombo district**. Based on the findings reported above, the researcher arrived at the conclusion that all independent variables (FL, FME, CSE) had positive relationships with perceptions on Cryptocurrency and Blockchain Technology. CSE was observed to have the strongest relationship with the two independent variables, confirming that those well-versed in computer use and technology had a more positive outlook on the future of Cryptocurrency and Blockchain Technology. A limitation of the study was the lack of a substantial sample size as the study was limited to professionals residing within the geographical boundaries of the Colombo district. The researcher recommends, based on the findings that future studies on these topics can be based around those who exhibit high computer self-efficacy. Furthermore, the researcher also recommends that financial education must be provided on a larger scale to develop prudent financial decision making capabilities. Therefore, the researcher hopes that this study will prove to be useful to institutions and organizations focused on financial education, with a special focus towards Cryptocurrency and Blockchain Technology.

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Does the assurance of data security enhance the customer trust in using mobile financial services?

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Introduction

Since the inception of mobile financial services in year 2001, this facility kept growing with over 60 million of active accounts globally, popularized in emerging markets throughout the last decade (Sultana, 2014). However, the literature says that customers are reluctant in using FinTech applications due to the risk vulnerability associated with such applications (Stewart & Jürjens, 2018; Cheng, Chan, & Chau, 2020; Nofer, Hinz, Muntermann, & Roßnagel, 2014). However, the abrupt popularity of mobile financial services during the Covid 19 outbreak, exceeding the aforesaid constrained behavior of customers, motivated us to study the relationship between data security and customer trust in using mobile financial services in Sri Lanka.

Mobile financial services can be categorized into three sections, m-money (mobile money), m-insurance (mobile insurance), and mobile credit and savings (Sultana, 2014). These services can be either non-bank-led mobile wallets or bank-led mobile banking. The current study focuses on bank-led mobile banking services.

The increasing trend of data breaches within the last decade continuously emphasized a craving need for a proper background in combating cybercrimes. Throughout, phishing is a source of cybercrime that has been widely used for data breaches. As a response, recently most organizations develop countermeasures to secure data. The companies that hold huge customer databases have drawn their attention to investing millions of dollars in developing countermeasures for data protection as a mitigation of the risk. However, these decisions are associated with direct and indirect costs and benefits (Anderson, et al., 2019).

The types of data breaches are different thus the impact of a breach remains the same. Less concern in data security could incur breach-related costs such as customer lawsuits and post-response costs such as remediation, investigation, and inbound communications (Khan, Kim, Mathiassen, & Moore, 2021; Sinanaj & Zafar, 2016). Further, such incidents could cause non-financial losses such as physical danger, psychological distress (Cheng, Chan, & Chau, 2020; Nofer, Hinz, Muntermann, & Roßnagel, 2014), and reputational damage.

The psychological traumas among affected customers (Cheng, Chan, & Chau, 2020; Nofer, Hinz, Muntermann, & Roßnagel, 2014), leads to suspicion about data security; discourage them to trust smart banking systems and mobile banking transactions (Stewart & Jürjens, 2018). Thus, it was found that the threat of data security is a major barrier to the usage of mobile financial services (Dzidzah, Owusu, & Asante, 2020). Yet, banks attempt in developing confidence and belief about the mobile financial services in customers' minds (customer trust) by confirming data security, while protecting digital data from misuse, unauthorized access, fraud, and stealing.

In the Sri Lankan context, users discourage to keep trust in mobile financial services due to their fear about the security of their money and sensitive information. Though customers maintained such constrained behavior so far, it was noted that the usage of mobile financial services has bounced up. Thus, the study focused to answer the question "does the assurance of data security enhance customer trust in using mobile financial services?"

The study used Technology Acceptance Model (TAM) in determining the determinants of customer trust. Having perceived usefulness, perceived ease of use, and perceived enjoyment could result in developing an intention to use. Further, the system quality can be added up as an independent variable to TAM under cognitive theory. Thus, the perceived usefulness, perceived ease of use, perceived enjoyment, and system quality have led to creating trust among customers (Chesney, 2006).

User training has been an effective way of protecting users from potential threats (Chanti & Chithralekha, 2020; Chanti & Chithralekha, 2020). Thus, educating users can be done by letting them practice identifying fake emails (Alkhalil, Hewage, Nawaf, & Khan, 2021). Identity and access management helps to avoid the access of unauthorized users to the accounts, data, and transactions through authentication, authorization, digital signature, and strong & strict passwords (Akhter & Haque, 2014; Kumar & Goyal, 2019). Further, encryption and key management secure data by protecting the confidentiality & integrity of data by converting data into encoded information using strong encryption schemes, storage, and access control, and confidentiality & recoverability (Akhter & Haque, 2014; Kumar & Goyal, 2019). Anti-Phishing Content-Based Technical Solutions gives technical solutions for detecting and blocking phishing attacks through spam filters, anti-spam software tools, and warning tools (Alkhalil, Hewage, Nawaf, & Khan, 2021). Thus, securing data storage avoids attacks that may come into the data through data integrity and availability, access controllability, location, backup, & recovery transparency, and data sanitization (Kumar & Goyal, 2019).

Methodology

The study used the positivism research philosophy and used the deductive research approach. Followed by the survey strategy Likert scale questionnaire was used for the data collection. There were 3-4 questions in the questionnaire for each variable to measure the latent variables. The questionnaires were distributed among the individuals in the Gampaha district on a convenient basis and collected 440 valid responses. The study used 5 variables to measure data security [DS]: human education [HE], identity and access management [IAM], encryption and key management [EKM], anti-phishing content-based technical solutions [APTS], and securing data storage [SDS]. The collected data was analyzed using the OLS regression model and derived the data security variable based on the significance of those 5 variables. Similarly, we defined customer trust [CT] using perceived enjoyment [PE], perceived usefulness [PU], perceived ease of use [PEU], and system quality [SQ]. The variable, customer trust was derived using the most significant variables among them. Finally, the study analyzed the relationship between data security and customer trust to affirm whether the assurance of data security enhances customer trust in using mobile financial services.

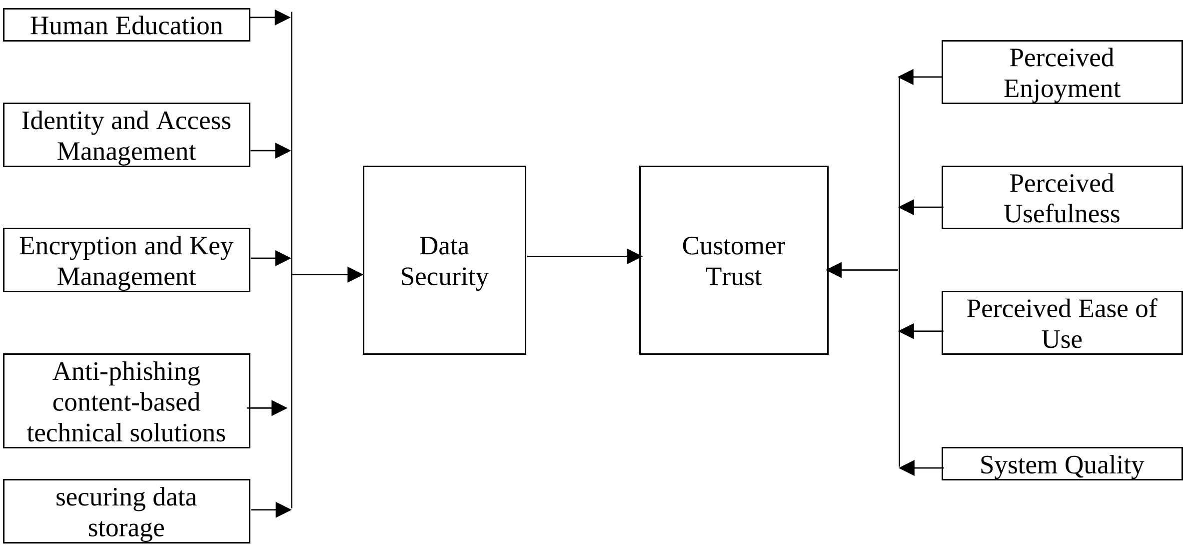

Figure 5: Conceptual Framework

Findings

The respondents to the questionnaire are between the age of 20-50 years and the majority is between 20-30 years. As well, the male and female participation in the study was a 2:3 ratio respectively. The Cronbach's Alpha of all the variables is greater than 0.79 which reveals a good internal consistency among the questions used to define the latent variables. The KMO statistic confirmed the adequacy of the selected sample [0.963].

Accordingly, the first regression model confirmed that human education, identity and access management, anti-phishing content-based technical solutions, and securing data storage positively and significantly impacting to determine data security. Through the second regression model, it was confirmed that perceived enjoyment, perceived ease of use, and system quality are the key determinants of customer trust. The final regression model confirmed that the assurance of data security can significantly entrust the customers to use mobile financial services.

Table 9: OLS Regression Models

Regression Model 01 Dependent Variable: Data Security			**Regression Model 02 Dependent Variable: CT**			**Regression Model 03 Dependent Variable: CT**		
Variable	**Coefficient**	**Prob.**	**Variable**	**Coefficient**	**Prob.**	**Variable**	**Coefficient**	**Prob.**
C	0.3996	0.0008	C	0.4337	0.0000	C	-0.1254	0.4664
HE	0.0700	0.0414	PE	0.2374	0.0000	DS	0.8076	0.0000
IAM	0.1361	0.0101	PU	0.0606	0.1407			
EKM	0.0370	0.3981	PEU	0.2836	0.0000			
APTS	0.2747	0.0000	SQ	0.2948	0.0000			
SDS	0.3691	0.0000						
R-squared		0.7142		0.7400			0.4663	
Adjusted R-squared		0.7110		0.7376			0.4651	

Conclusion

This study is an empirical analysis of the key factors of customer trust and data security. The recent changes in customer behavior in adopting mobile financial services questioned the content of the literature that highlights the sluggish behavior among customers to accept FinTech applications (Stewart & Jürjens, 2018; Cheng, Chan, & Chau, 2020; Nofer, Hinz, Muntermann, & Roßnagel, 2014). Thereby, the current study aimed to answer the question "does the assurance of data security enhance customer trust in using mobile financial services?"

The findings of the study revealed that customer trust is relying on perceived enjoyment, perceived ease of use, and system quality. Thus, the findings confirmed that the enhancement of these variables could cause to increase in customer trust. Further, the key deterministic factors of data security are human education, identity and access management, anti-phishing content-based technical solutions, and secure data storage. Thus, the advancement of these determinants could strengthen data security. Finally, while answering the research question, the study found that the advancement of data security could cause to enhance customer trust. However, if the financial service providers invest in human education, identity, and access management, anti-phishing content-based technical solutions, and securing data storage, then it is beneficial for them to promote their fintech applications while satisfying the customer through perceived enjoyment, perceived ease of use, and system quality. This will drive toward more trust-based adoption among customers to use mobile financial services.

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Critical success factors for e-commerce entrepreneurship: an empirical study based on Sri Lankan woman fashion industry

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Introduction

Entrepreneurs are considered the backbone of any nationality since they hold a significant portion of national economic development. Al-Aali and Teece (2014) define entrepreneurs as people who are performing innovative activities in a global market. Same as entrepreneurs, e-commerce plays a vital role in integrating the business stakeholders on national and international platforms. By adopting e-commerce practices, businesses gain different competitive advantages. The dynamic and wide range of features differentiates the business in terms of marketing, advertising, and operation work Khan et Al., 2016). Many researchers, including Imran Khan (2015) and Alraja (2015), stated that E-commerce provides potential benefits for the entrepreneurs, such as cost-effectiveness, Time management, flexibility, and many other factors that benefit these businesses. Entrepreneurs can earn many benefits by upgrading their business functions to e-commerce and conducting market-related activities via online platforms. By conducting this study, the author has contrasted the ways critical success factors impact modern e-commerce entrepreneurs based on the Fashion industry in Sri Lanka.

According to Global Entrepreneurship Index (GEI) conducted by Global Entrepreneurship Development Institute, Sri Lanka ranked in 90th place out of 139 countries in 2019 (Acs, et al., 2019). Most entrepreneurs who perform on online business platforms and digital platforms help entrepreneurs execute their market activities with many facilities. To answer the prevailing economic crisis and Sri Lanka is a developing country, empowering entrepreneurship is the primary solution to leverage economic stability. Therefore, by conducting this study, the author has taken this approach to identify the critical success factors that affect contemporary e-commerce entrepreneurship.

Research Objectives

- To understand entrepreneurship and its importance towards current economic practices.
- To understand the participation of entrepreneurship in contemporary e-commerce activities.
- To explore fashion-related entrepreneurship, particularly in e-commerce.
- To contrast the ways critical success factors impact modern e-commerce entrepreneurs based on the Fashion industry in Sri Lanka.
- To provide recommendations for e-commerce entrepreneurs in the fashion industry to measure and expertise the e-commerce practices.

Scope of the Study

When referring to Sri Lankan economic recession and economic instability, the author captures that entrepreneurs are the main contributors who can provide solutions for these issues. In 2019 Daily ft. lk reported that Sri Lankan has a deficient presence of entrepreneurs in the market, numbering less than 1.5% of the population (Dailymirror.lk, 2019). New businesses invest heavily in search of alternatives and better prospects than established businesses. On the other hand, the Sri Lankan e-commerce market is a highly emerging and developing industry. Therefore, entrepreneurship and innovations are working as integrated aspects. Considering the potential gaps above, the author has considered identifying the critical success factors of entrepreneurship.

Literature Search

Under the literature search, the author has comprehensively discussed entrepreneurship, the importance of entrepreneurship, e-commerce, global entrepreneurship participation in the fashion industry, Sri

Lankan e-commerce entrepreneurship in the fashion industry, and critical success factors of e-commerce entrepreneurship. “Entrepreneurship” is a broad concept with different characteristics and traits. E-commerce is an interconnected range of networks such as the Internet, multiple devices, buyers, suppliers, customers, and other stakeholders to conduct transactions to exchange goods and services between sellers and buyers in a business-to-business (B2B) as well as business-to-consumer (B2C) (Barlian, Supardi, Suprapto, and Pradipto, 2020). Davidsson (2007) has described “Fashion entrepreneurship” as different from the process of exploring potential opportunities related to existing firms or that are created through fashion-related innovation in order to create a business value. The leading exporters of the apparel industry are the EU, USA, Canada, United Arab Emirates, Australia, and Japan. Statista (2021) reports that the Sri Lankan E-commerce revenue is predicted to reach USD 2,682 million by 2022, and in 2025, the expected increment of the revenue reports is 9.2 million. This report predicted an annual growth rate between 2022 to 2025 of 21.57%, and the projected market volume is calculated as USD 4,819 million by 2025. However, the capacity of entrepreneurs, external environmental factors, and facilities for fashion the e-services factors was tested as the critical success factors under e-commerce entrepreneurship.

Methodology

The author has applied the descriptive statistics method to test the relationship of the factors identified by the above literature search. Since this study was conducted at the academic level, the author has applied Saunder’s research onion model for the methodical process. Accordingly, positivism philosophy has applied to the study, and the author has followed the deductive approach. The author has taken quantitative data type and applied mono-method as the research choice. A cross-sectional study was conducted using a survey strategy, and the author used a self-designed close-ended questionnaire to gather primary data from the sample. Under the study, the author has taken the fashion industry in Sri Lanka and the entrepreneurial firms active on e-commerce platforms. The population is the females who buy clothes online. As the research sample, the author has taken online fashion customers, and since the market is considerably high, the author has taken 150 female participants voluntarily. The probability sampling technique was applied, and the simple random sampling method was used to pick the sample participants. The Data analysis was conducted by using SPSS version 26 for Windows. The author has conducted correlation and regression analysis to testify to the relationship, which is illustrated under the research framework (Refer to Figure 01). Depending on the analysis and findings, the author has provided recommendations for e-commerce entrepreneurs to measure and expertise the e-commerce practices.

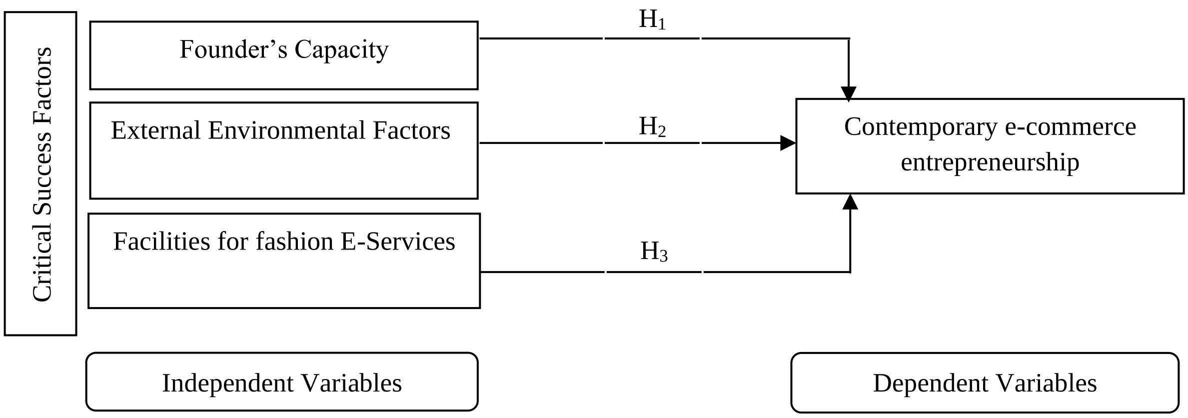

Figure 01: Conceptual Framework of the Research

Findings

Respondent Rate

The self-administrated questionnaire under the survey strategy has been distributed among the research sample. The Sample size was 150. Random Sampling techniques were used to gather data from the respondents, and the response rate was recorded as 100 percent.

Data Analysis

In the questionnaire developed by the author, the first section is used to capture the demographic variables of the respondents, and the background information about the entrepreneurs and their e-commerce practices has been collected. Under part 'C,' all 17 statements of variables (Contemporary e-commerce (Dependent variable) and Founder's Capacity, External Environmental Factors, and Facilities for fashion E-Services (Independent variables)), the reliability, and validity are measured. For reliability, Cronbach's alpha values are taken. Social science research uses validity and reliability to measure the measurement items' goodness. According to that, validity and reliability test assure the quality of the measurement instruments.

Reliability Analysis

Reliability measures the accuracy and repeatability of data, and social science researchers use Cronbach's alpha to measure reliability. Sekaran and Bougie (2016) mentioned that Cronbach's alpha value should be greater than 0.7. According to that, Cronbach's alpha measures the internal consistency of the reliability. The study reliability statistics are depicted in table 4.8.

Table 01: Cronbach alpha coefficient for the variables

Variable	No Items	Cronbach's Alpha
Contemporary e-commerce	5	.840
Founder's Capacity	4	.875
External Environmental Factors	4	.786
Facilities for fashion E-Services	4	.759

According to table 4.8, the Cronbach alpha values are above 0.7; therefore, they have internal consistency. The Likert-scaled questions follow a uni-direction. Without deleting any item, the variables can be operationalized. Thereby the researcher constructed the respective variables without deleting any item.

Validity Analysis

In this study, the researcher has used factor analysis to test the validity. The result of the validity test is depicted in table 4.9. The validity of the data set is as follows.

Table 02: Validity Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.686
Sig	0.00

According to the rule, the Kiser -Mayer-Olkin measure of sampling adequacy and cumulative value should be greater than 0.5, and also significant value should be less than 0.05. As depicted in table 4.9, the two requirements are fulfilled. Therefore the data set is validating for further analysis.

Correlation Analysis

Table 03: Correlation Analysis

		Contemporary e-commerce	Founder's Capacity	External Environmental Factors	Facilities for fashion E-Services
Contemporary e-commerce	Pearson Correlation	1	.757**	.788**	.672**
	Sig. (2-tailed)		.000	.000	.000
Founder's Capacity	Pearson Correlation	.757**	1	.590**	.524**
	Sig. (2-tailed)	.000		.000	.000
External Environmental Factors	Pearson Correlation	.788**	.590**	1	.527**
	Sig. (2-tailed)	.000	.000		.000
Facilities for fashion E-Services	Pearson Correlation	.672**	.524**	.527**	1
	Sig. (2-tailed)	.000	.000	.000	

The correlation Analysis helps to quantify the association between two continuous variables, and the researcher has used correlation Analysis to identify any relationship existing between Contemporary e-commerce and the three factors, Founder's Capacity, External Environmental Factors, and Facilities for fashion E-Services.

Conclusion

The comprehensive SPSS analysis reflected a strong positive linear relationship between Contemporary e-commerce and the Founder's Capacity and External Environmental Factors. Further, the findings contrasted that the facilities for fashion E-Services have a positive linear relationship with Contemporary e-commerce. By considering all these elements, encouraging entrepreneurs to use e-commerce platforms in the twenty-first-century benefits nations in several aspects.

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The impact of internet banking service quality on customer retention in commercial banks of Sri Lanka (with special reference to Kalutara district)

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Introduction

In 21st century, the banking industry and its environment are highly complex and competitive. Therefore, information technology and communication technology play a major role in the operations of banks. Internet banking is critical in the transformation drive of banks in areas such as service delivery. According to Firdous (2017), Internet banking is an electronic payment system that enables customers of a financial institution to conduct financial transactions on a website operated by the institution, such as a retail bank, virtual bank, credit union or building society.

There are many studies conducting to measure the impact on service quality dimensions on customer satisfaction in a conventional banking environment but relatively limited researches were conducted to measure service quality dimensions of Internet Banking Services and its impact of customer satisfaction (Perera & Priyanath, 2018). This research study mainly focus the age group above 18 and below 35 customers of commercial banks in Kalutara district.

Commercial banks in Sri Lanka are the well-established banks over the last few years than the other banks in Sri Lanka. So, the argument has been that most of the products and services offered by the internet banking technology do not fulfill customer's need and quality. In addition to that, such services are skewed to only some selected affluent customers to the neglect of majority of their customers who do not have access to internet facilities, computers, smartphones and even electricity. These competitions have made most of commercial banks in Sri Lanka adopt new technologies such as internet banking to make the banking process faster and easier while satisfying the needs of the customers. Therefore, internet banking does not really satisfy the Sri Lankan commercial banks' customer in any way. According to the above, income and educational level of customers plays an important role in the adoption of internet banking facilities. In spite of the increasing adoption of internet banking and its relevance towards customer satisfaction in the commercial banks in Sri Lanka, research has been conducted in understanding factors of internet banking service quality that lead to customer retention.

More specifically, this study has five main objectives. Such as to examine the impact of reliability on customer retention in commercial banks of Sri Lanka, to examine the impact of Responsiveness on customer retention in commercial banks of Sri Lanka, to examine the impact of Privacy and Security on customer retention in commercial banks of Sri Lanka, to examine the impact of Efficiency on customer retention in commercial banks of Sri Lanka and to examine the impact of Website Design on customer retention in commercial banks of Sri Lanka.

According to Chi, Grant & Edgar (2007), Internet banking is about using the internet to deliver banking services to customers. Internet banking has become a common channel for providing banking services to customers due to its benefits to consumers and banks alike. One of these benefits is convenience, as banking transactions and other related activities can be performed in the comfort of customers, homes or offices.

Methodology

Developing a conceptual framework helps to postulate and hypothesize and test certain relationships and thus to develop our understanding of the dynamics of the situation (Sekaran & Bougie, 2010). According to the below research framework, there are five independent variables and one dependent variable in original research article.

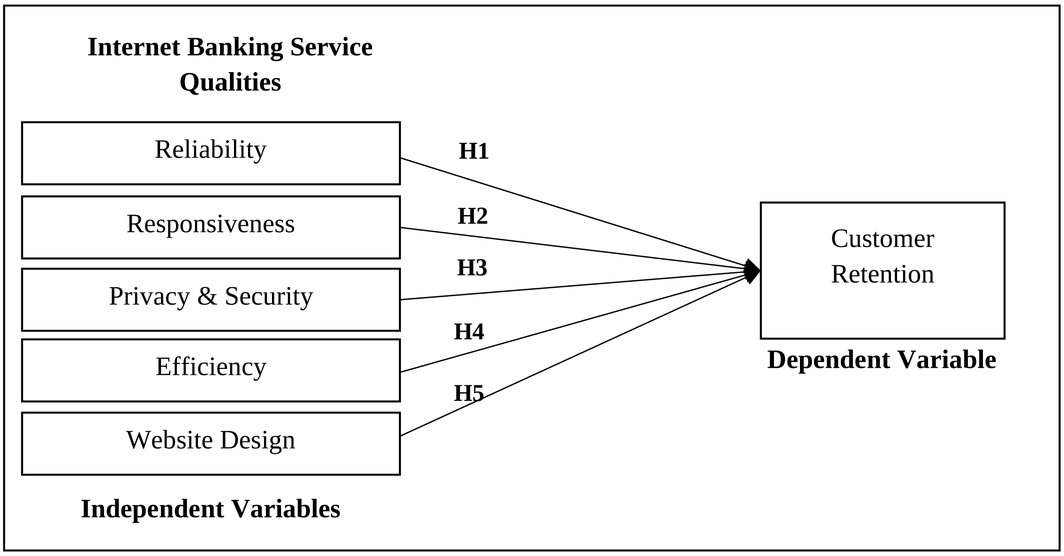

Figure 1: Conceptual Framework

The target population for this study considered all female and male users, above 18 and below 35 years old, who are engaged in internet banking services in commercial banks of Sri Lanka, Kalutara district. The unit of analysis was the internet banking user. The researcher has employed a convenience sample of 384 respondents from the members of population who are conveniently able to provide information. As well as the collection of data was done through a structured questionnaire adopted from Alawneh et al. (2013), Toor et al. (2016), Sikdar et al. (2015), Haq & Awan (2010) with five-point Likert scale ranging from strongly disagree to strongly agree. The questionnaire consisted with 28 questions under six variables. Both dimensions fulfilled the internal consistency (Cronbach Alpha value: 0.6). As well as, all the Keiser-Meyar-Olkin (KMO) test values were above 0.5 and KMO test was used to verify the sampling adequacy for the analysis. And also, the Correlation and regression analysis used to investigate the impact of internet banking service quality on customer retention and to identify the association between those two variables.

Findings

This study investigated the impact of internet banking service quality on customer retention in commercial banks in Sri Lanka. In the demographic profile of the study, the sample was slightly dominated by female respondents (58%) and the majority of the respondents fell in the 21 – 25 age categories. 27% of the respondents reported an education level on undergraduates and 30% of the respondents reported a monthly income between 20,000 – 50,000 LKR. As well, the length of internet banking usage of the respondents most of were belonged to between 1 – 3 years as a percentage 40% and the frequency of internet banking transaction, the majority of respondents were belonged to three or four times per month as a percentage 30%.

Parametric assumptions allowed the researcher to run the regression analysis. The correlation analyses were used to identify the relationship between independent variables and dependent variable. In this study, all p-values regarding to all variables are less than significant level (Sig. level is 0.05). Accordingly, correlations between internet banking service quality and customer retention can be recognized as statistically significant. In the research model, independent variables explain 59% of

validity of customer retention and only 41% of the variance of dependent variable is explained by other influencing factors which are not covered by the current study.
Similar to findings of current research the study has involved five types of determinants of internet banking service qualities on customer retention; Reliability, Responsiveness, Privacy and security, Efficiency and Website Design.

The developed hypotheses were tested based on the outcomes of regression analysis. Results can be indicated in Table 1.

Table 1: Coefficient Table

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.185	.210		.881	.379
	Reliability	.261	.054	**.238**	4.795	.000
	Responsiveness	-.023	.041	-.027	-.566	.571
	Privacy and security	.361	.055	**.389**	6.607	.000
	Efficiency	.073	.064	.064	1.147	.252
	Website Design	.303	.059	**.230**	5.088	.000

The study tested five major hypotheses. The first hypothesis shows that the reliability of internet banking service quality positively impacts on customer retention in commercial banks of Sri Lanka based on 95% confidence level. But the second and fourth hypothesis shows that there is no impact of responsiveness and efficiency of internet banking service qualities on customer retention in commercial banks of Sri Lanka based on 95% confidence level. The third and final hypothesis shows that Privacy and security and website design positively impact on customer retention in commercial banks of Sri Lanka based on 95% confidence level.

Conclusion

This study offers several implications for internet banking services in banking industry. The result of this study provides useful information for policy makers in banking industry and regulatory parties of the government in selecting targets and formulating appropriate strategies. The present study was conducted to examine the impact of internet banking service quality on customer retention in commercial banks of Sri Lanka. According to the research findings, it concludes that reliability, Privacy and security and website design impact on customer retention in commercial banks. And also, the results of this study will helpful for whole banking sector not only for commercial banks in Sri Lanka in order to identify which aspect to internet banking service qualities effect on customers.

Although this study has been focused on only five dimensions there is the need other dimensions of service qualities associated with internet banking and assess its impact of customer retention. This will enable strength the generalization of the findings to the Sri Lankan economy. This study was limited to customer retention and internet banking service quality, but there is need for further researchers to examine the effect of customer satisfaction or dissatisfaction on the switching cost of banks offering internet banking or the switching intent of customer of their banks. Also, this study was focused on the Kalutara district commercial banks therefore next researchers will considering from different geographic such as all provincials and all sectors inclusive. Finally, further studies should research into the relationship between the heterogeneity of the various customers of internet banking and issues of electronic payment.

The main limitation encountered in the study was selected customers of few commercial banks. Instead of using customer of all the banks sampled only selected few were used for this study, this can affect the results of the study. Furthermore, another limitation faced by the researcher was the time and resource constraint. These two constraints affect the way in which the research was conducted. The time constraints affected the choosing of the sample size as well as the quality and quantity of the research work.

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Economics

Tax revenue and economic growth nexus: empirical analysis from Sri Lanka

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Introduction

Government revenue plays a major role in the process of economic growth and development in a particular country. It is fundamental to make possible to finance investment in human capital, infrastructure, and provide goods and services to citizens and businesses, and to fulfill their redistributive role. So, every country tries to increase its government revenue. Goods and Services Tax (GST), Income tax, corporation tax, non-tax revenues, union excise duties are major sources of revenue for government. Among them, taxation is a major source of revenue to many governments, an instrument for regulating economic and social policies, and a tool for enhancing economic growth. Engen and Skinner (1996) recognize different channels through which taxes might cause output growth. However, taxes imposed on reproducible factors such as physical and human capital, are reduce the rate of economic growth (Kesavarajah, Staff studies, Central Bank).

In 2021, government revenue in Sri Lanka amounted to 8.6 per cent of the nation's gross domestic product. According to the 2018 Central bank report of Sri Lanka we can understand that taxes are the most major source for the government revenue, contributing 89% of the revenue. Sri Lanka embarked on tax reform to revamp its tax systems and to increase its revenue in the face of growing government expenditure and declining tax revenues. However, it could also be found that tax revenue as a percentage of GDP has continuously declined. Successive governments of Sri Lanka have provided a number of concessions in the form of tax exemptions and tax holidays to attract more private investment into the economy. During the post economic liberalisation period, the tax revenue was nearly about 82.4 percent of total revenue while the rest is non-tax revenue. Since 1990s, however, this trend has changed significantly. In particular, non-tax revenue as a percentage of total revenue increased from 6.6 percent in 1980 to 9.9 percent in 1990. Similarly, by 2013, while tax revenue was approximately 88.4 percent of total revenue the rest is non-tax revenue (Kesavarajah, Staff studies, Central Bank). Because of the low government revenue, capital investment is low in Sri Lanka. It is negatively effect on varies government investment sectors such as economic development, social, education, health production. Further, it leads to a budget deficit in government. These may be causes for low level economic growth.

The theoretical literature suggests that taxes have a negative effect on economic growth (Athukorala and Karunarathna, 2004). Thus, high tax rates diminish economic growth. The reason for this is that higher rates may be more distortionary and hence impact growth negatively while lower rates may generate revenues that are spent in productive ways (Neruja, 2018). However, the empirical literatures found mixed findings. Babatunde et al.(2017); Ojong et al. (2016); and Bukie and Adejumo (2013) found a positive relationship between tax revenue and economic growth. Besides that, there is some research that found a negative relationship such as Maccarthy et al.(2022). The study by Gurdal et al. (2019) found no significant impact of tax revenue on the economic growth of G7 countries. In the Sri Lankan context there is no empirical study regarding the dynamic relationship between tax revenue and economic growth. Therefore, this study is intended to fill the research gap.

Objective

The main objective of this study is to empirically examine the effect of tax revenue on economic growth in Sri Lanka, and to make some policy suggestion for improving the tax revenue of the government.

Methodology

This research intends to empirical examine the effect of tax revenue on economic growth in the country, using the data from 1990 to 2020. The Gross Domestic Product (GDP) was used as the dependent variables, and Direct Tax Revenue (DT), Indirect Tax Revenue (IT), Debt (DEBT) and Net Inflow of Foreign Direct Investment (FDINI) were used as the independent variables. Gross Domestic Product (GDP) used as a proxy for economic growth. The data of all variables were collected from Annual Reports of the Central Bank of Sri Lanka (CBSL). Endogenous growth model developed by Barro (1990), Mendosa, Milesi-Ferreti and Asea (1997) predict that fiscal policy can affect the level of product and long run economic growth.

The functional form of the theoretical model of this study is drawn as:

$$GDP = (DT, IT, DEBT,\ FDINI) \quad (1)$$

The above functional form is specified in the following econometric model:

$$GDP_t = \pi_0 + \pi_1\, DT_t + \pi_2\, IT_t + \pi_3\, DEBT_t + \pi_4\, FDINI_t + \varepsilon_t \quad (2)$$

Where, $\pi_i(i = 0, \dots\dots, 4)$ are the slop coefficients and ε_t is the white noise error term.

In order to make the model and variables free from problems associated with time series data used Augmented Dickey – Fuller (ADF) unit root test approaches to test stationarity of the variables. Then the optimum lag which will be enclosed within the model is selected from the AIC criterion. Auto Regressive Distributed Lag (ARDL) co-integration method developed by Pesaran et al. (2001) was utilized to empirically examines the equation (2). The ARDL co-integrating bound testing procedure is shown by the Equation (3).

$$\Delta GDP_t \ = \beta_0 + \beta_1 GDP_{t-1} + \beta_2 DT_{t-1} + \beta_3 IT_{t-1} + \beta_4 DEBT_{t-1} + \beta_5 FDINI_{t-1} + \sum_{1=1}^{q1} \gamma_{1i}\, \Delta GDP_{t-i} + \sum_{1=0}^{q2} \gamma_{2i}\, \Delta DT_{t-i} + \sum_{1=0}^{q3} \gamma_{3i}\, \Delta IT_{t-i} + \sum_{1=0}^{q4} \gamma_{4i}\, \Delta DEBT_{t-i} + \sum_{1=0}^{q5} \gamma_{5i}\, \Delta FDINI_{t-i} + e_t \quad (3)$$

Where Δ: 1st difference operator, β_0: drift component, e_t: unobserved random error term, $\beta_2 \rightarrow \beta_5$: long-run slope coefficients, the remaining expressions with the summation sign $(\gamma_{1i} \rightarrow \gamma_{5i})$ denotes the short-run dynamics of the model. Bound testing procedure is used to investigate the existence of long-run relationships among the variables.

In the next step of the estimation procedure obtain the short run dynamics of parameters and long run adjustment of the model by estimating the error correction version of ARDL model pertaining to the variables in equation (4) is as follows:

$$\Delta GDP_t = \alpha_0 + \sum_{1=1}^{q1} \alpha_{1i}\, \Delta GDP_{t-i} + \sum_{1=0}^{q2} \alpha_{2i}\, \Delta DT_{t-i} + \sum_{1=0}^{q3} \alpha_{3i}\, \Delta IT_{t-i} + \sum_{1=0}^{q4} \alpha_{4i}\, DEBT_{t-i} + \sum_{1=0}^{q5} \alpha_{5i}\, \Delta FDINI_{t-i} + \gamma ECT_{t-1} + \mu_t \quad (4)$$

Where, α is the speed of adjustment coefficient, and μ_t is a pure random error term. Meanwhile as this methodology considers both short-run and long-run relationships it facilitates policy making to attain expected changes of the economy through these variables.

We can define the granger causality test model between the GDP and the Direct Tax Revenue as follows:

$$\Delta GDP_t = C_1 + \sum_{i=1}^{P} \beta_i\, \Delta GDP_{t-i} + \sum_{i=1}^{p} \alpha_i\, \Delta DT_{t-i} + U_{1t} \quad (5)$$

Findings

In the first steps of the estimation procedure, have to confirm the order of integration of all the variables. Accordingly, the results of the unit root test, except for IT, FDINI the other three variables (GDP, DT, and DEBT) are stationary at the first difference. But only IT, FDINI variables are stationery at the levels form [I(0)] which suggests we use ARDL Bound testing method to estimate the coefficients. Using the unrestricted VAR model and AIC criteria, this study has chosen 4 lags as optimum lag for the model. The results of AIC advocate the use ARDL (2, 4, 3, 3, 4) model to evaluate the parameters.

The selected ARDL model passed all the diagnostic tests. Graphs of CUSUM and CUSUM of squares confirm that the model is stable since the residual plot lies between the lower and upper critical bounds at the 5% level of significance. Next, need to confirm the cointegrating association between the variables of the selected model. ARDL Bounds test (Wald Test) method was adopted and the results indicated the existence of cointegrating relationship between GDP and explanatory variables in the model since the calculated test statistics (9.4379) is exceed critical value (3.49) of the upper bound [I(1)] at 5% significance level. Accordingly, it could be concluded that there is a strong evidence to support the existence of a long run association between GDP and explanatory variables such as DT, IT, DEBT and FDINI. Hence, the estimated model confirms that there is a long run relationship between the variables under this study. The estimated results of long-run link of the model are show in the Table 1.

Table 1. The Results of Long-run Relationship

Variable	Coefficient	Probability Value
Constant	1.409069	0.8468
DT	8.61E-05	0.1403
IT	-1.88E-05	0.1230
DEBT	0.018452	0.7502
FDINI	1.532285	0.4668

Out of these factors, indirect tax revenue has a negative relationship with economic growth, while direct tax revenue, debt, and net inflow of foreign direct investment have a positive link with economic growth. Even though all the explanatory variables have a relationship economic growth, any variable hasn't statistically significant impact on GDP in the long run above the period in Sri Lanka.

Finally, we estimated the error correction version of the ARDL model to identify the short-run relationship between the variables and the long-run adjustment of the model.

Table 2. Results of Error Correction Representation of ARDL Model

Dependent Variables : ΔGDP				
Variables	**Lag order**			
	0	**1**	**2**	**3**
ΔGDP	-	0.284251 (0.0181)**	-	-
ΔDT	-4.70E-06 (0.5190)	-9.44E-05 (0.0008)***	-0.00017 (0.0003)***	-3.42E-05 (0.1029)
ΔIT	1.64E-05 (0.0078)***	1.07E-05 (0.2042)	2.81E-05 (0.0040)***	
ΔDEBT	-0.138946 (0.0065)***	-0.218015 (0.0025)***	-0.151489 (0.0172)**	-
ΔFDINI	1.342735 (0.0079)***	0.119571 (0.7564)	0.265256 (0.4635)	1.784238 (0.0012)***
ECT (-1)	-1.478171 (0.0001)***	-	-	-
R^2	0.971675	-	-	-
F-Stat	9.437881	-	-	-

Note: Probability values are given in the parenthesis. ***, and ** imply the rejection of the null hypothesis at 1% and 5% level of significance respectively. All other variables are not significant at least at 10 % significance level.

The short run form of ARDL results reveals that the impact of coefficients of direct tax revenue, indirect tax revenue, debt, and FDINI are statically significant. With regard to short run relationship, last period GDP, current period and two periods before the indirect tax revenue, and current and three periods before the FDINI are have a positive and significant impact on GDP in short-run. Past periods (-1,-2) of direct tax revenue, and current and past periods (-1, -2) of debt are have a negative and significant impact on GDP in short-run. Meanwhile, Coefficient of error correction term (ECT_{t-1}) carries an expected negative sign. The absolute value of the coefficient of the error-correction term (1.478171) indicates that about 147.81% of the disequilibrium in the GDP is offset by short-run adjustment in each year one period after the exogenous shocks. Thus, it is important to reduce the existing disequilibrium over time to maintain long-run equilibrium.

For the purpose of our study, we have identified the causality relationship between the GDP and independent variables using granger causality test.

Table 3. The results of the causality test

Dependent variable: GDP		
	ARDL (2, 4, 3, 3, 4) Model	
Variables	**Lags**	**P- value (wald test)**
IT → GDP	4	0.0699*
IT → DT	4	0.0985*
DT → IT	4	0.0008***

Note: Probability values are given in the above table. ***, and * imply the rejection of the null hypothesis at 1%, and 10%, levels of significance respectively.

The indirect tax revenue has a significant causality relationship with the economic growth. Similarly, there is a bidirectional causality relationship between the direct tax revenue and indirect tax revenue significantly. In the Sri Lankan context tax revenue which largely consists of indirect taxes are major source of financing the fiscal deficit and the means of meeting other public expenditure needs. That's why indirect tax revenue has a significant causality relationship with the economic growth.

Conclusions

The findings show that the direct tax revenue, debt, and net inflow of foreign direct investment have positive relationship; indirect tax revenue has negative relationship with economic growth. Any variable hasn't statistically significant impact on economic growth in the long run above the period in Sri Lanka. With regard to short run relationship, last period GDP, indirect tax revenue, and FDINI are having a positive and significant impact on GDP. Direct tax revenue and debt are having a negative and significant impact on GDP in short-run. The direct tax revenue has a significant causality relationship with the economic growth. The results of the above analyses reveal that the tax revenue has a significant influence on the economic growth of Sri Lanka, especially in the short run which needs policy-making considerations regarding tax changes and development approaches to accelerate the economic growth of Sri Lanka.

Based on the results obtained, the following policy recommendations are made. The positive relationship between indirect tax revenue and economic growth in the short run calls for efficient tax policy to be formulated and implemented so as it to continue to generate the needed revenue for the government. Also revenue collecting authorities of the government should be made more effective in their operations of collecting revenue.

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The impact of macroeconomic factors on food price inflation: evidence from Sri Lanka

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Introduction

The important goal of the monetary policy in an economy is the price stability. High food price inflation is one of the factors that affect macroeconomic stability as well as small farmers and poor consumers. They spend their large portion of income for the consumption of goods and services and also for day to day activities. Further agricultural food price changes negatively impact poor income group. Especially the people who live under poverty line spend large portion of their income on food and fuel. Food inflation is reducing the income levels of the households, worsening income disparities. Poverty and dominance of food in the consumption basket is more noticeable as the poor have to spend a relatively higher share of their disposable income on food. Food price dynamics have a noticeable influence in the economic stability and wellbeing as high poverty and malnutrition directly affects the welfare of households. Therefore, the food price inflation becomes a significant research concept among policy makers and researchers.

Sri Lanka and some other countries calculate food inflation as a part of overall inflation. The contribution to the overall inflation by food in Sri Lanka stands out at a rate of 7% in December 2021. The current surge in global food prices can be attributed to several reasons such as the recent cost for the vaccine administration which has a consequence of rising inflation. Though COVID contributed to plummeting prices through supply chain disruptions, Sri Lanka experienced the food price hike even before the pandemic situation. High and persistent food inflation has emerged as a major concern of the Sri Lankan economy. Sri Lanka has recorded the highest increase in the food inflation index at a rate of 21.1% in December 2021 which stood at 16.9% in November 2021. It was 25% in January 2022 and increased to 58% in May 2022 causing alarm among the consumers in the country (Central Bank of Sri Lanka, 2022). Given these background, this study focus on investigate the impact of macroeconomic factors on food price inflation in Sri Lanka.

Number of previous studies are discussing about the impact of macroeconomic factors on food inflation in across the world. Samal et al. (2022) investigate the impact of macroeconomic factors on food inflation in India. The study confirmed the long run relationship between variables. Macroeconomic factors such as per capita income, money supply, global food price and agricultural wages positively and significantly impact on food inflation in the short run and long run. The short run estimates reveal that real effective exchange rate positively impact food price inflation and the impact is insignificant in the short run. Granger causality test reveal bidirectional causality among per capita income, exchange rate, per capita net availability of food gain and food price inflation. Raphael and Mpofu (2017) analyze the association between macroeconomic variables and food price inflation and overall inflation in Zimbabwe. The study identified that there is a very strong association between non - food inflation and these macroeconomic variables as well as between overall inflation and the independent variables. Apergis and Rezitis (2011) examine the food price volatility and how it is affected by short run deviation between food price and macroeconomic factors. The results show that there exist a positive relationship between the deviations and food price volatility. Further, study shows that there is a co integrating relationship between food price and macroeconomic variables such as real money balances, real per capita income, real exchange rate and real deficit to income ratio. The results from GARCH model showed a significant and positive effect is imposed by those deviations on the volatility of relative food prices.

However, there is a scarce for recent studies discussing about the impact of macroeconomic factors on food price inflation in Sri Lanka. Therefore, this study tries to produce new knowledge in the Sri Lankan research area by investigate the impact of macroeconomic factors.

Methodology

The study used monthly data on Food price inflation (FPI), Exchange rate (ER), money supply (MS), world food price index (WFP), agricultural wage rate (AWR) and Gross Domestic Product (GDP) during January 1996 to December 2021. The quarterly data for GDP used as monthly average for each quarter. The data for the world food price index is extracted from FAO and data for other variables collected from Central Bank annual reports. ADF and PP unit root tests are employed to test the stationary property of the series. Akaike Information Criterion and Schwarz Information Criterion and Sequential modified LR test are used to test the optimum lag length of the series. After careful study of literature the researcher develops the following conceptual frame work.

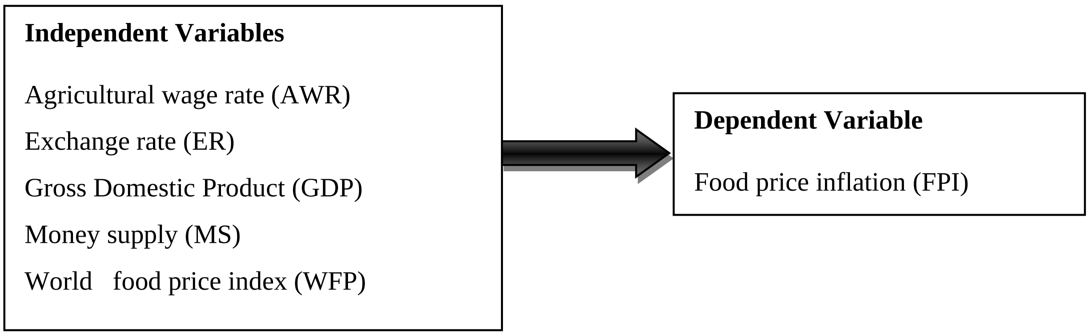

Figure 1: Conceptual frame work

Based on the conceptualization, the following hypotheses can be developed.

H_1: There is a significant impact of AWR on food price inflation

H_2: There is a significant impact of ER on food price inflation

H_3: There is a significant impact of GDP on food price inflation

H_4: There is a significant impact of MS on food price inflation

H_5: There is a significant impact of WFP on food price inflation

Further, the study used Johansen co - integration test to identify the number of co - integrating equations and long run relationship between variables. The empirical model is described as below:

$$\mathrm{LFPI_t} = \alpha_0 + \alpha_1 \mathrm{LAWR_t} + \alpha_2 \mathrm{LER_t} + \alpha_3 \mathrm{LGDP_t} + \alpha_4 \mathrm{LMS_t} + \alpha_5 \mathrm{LWFP_t} + \mathrm{U_t} \ldots\ldots\ldots\ldots (1)$$

Where, LFPI: food price inflation as a dependent variable in natural log, LAWR: agricultural wage rate in natural log, LER: exchange rate in natural log, LGDP: Gross Domestic Product in natural log, LMS: Money supply in natural log, LWFP: world food price index in natural log. U indicates the white noise error term and t refers the time period. The study utilized Error Correction model in order to identify the short run relationship between variables and long run adjustment of the model which is given below:

$$\Delta lnY_t = \delta_0 + \prod Y_{t-1} + \sum_{i=1}^{p-1} \varphi_i^* \, \Delta lnY_{t-i} + \varepsilon_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (2)$$

Where, $\prod Y_{t-1}$: error correction term, $\prod = \alpha\beta', \alpha$ is the 7×1 vector of speed of adjustment coefficient. β': (1×7) vector of co integrating coefficients and $Y_t = [LFPI_t, LAWR_t, LER_t, LGDP_t, LMS_t, LWFP_t]'$ is a vector of endogenous variables, Y_{t-i} is the lagged value of the variables and ε_t is the white noise error term. Finally, Granger causality test is used to test the causality relationship between variables.

Findings

ADF and PP unit root tests confirm that all variables are integrated in order I(1). Akaike Information Criterion, Schwarz Information Criterion and Sequential modified LR are suggested to use lag 2 as optimum lag length.

Table 1: Unit root test results

	ADF Unit root tests		**PP Unit root tests**	
Variables	Level	1st difference	Level	1st difference
LAWR	0.9649	0.0000*	0.9716	0.0000*
LER	0.6635	0.0000*	0.6900	0.0000*
LFPI	0.8477	0.0000*	0.7987	0.0000*
LGDP	0.6245	0.0198*	0.7481	0.0000*
LMS	0.9997	0.0000*	0.9994	0.0000*
LWFP	0.7746	0.0000*	0.7916	0.0000*

*Note: probability values are given in parenthesis. *, **, *** show significant at 1%, 5%, 10% level respectively.*

Johansen Co - integration technique which is Trace statistics identified one co integrating equation in the system of equation at 5% level of significance. The given model shows the long run relationship between variable.

$$LFPI = -6.165 + 0.016LAWR + 0.542LER + 0.474LGDP - 0.077LMS + 0.315LWFP \dots\dots\dots (3)$$
$$[0.271] \quad [5.14] \quad [6.98] \quad [-1.17] \quad [5.10]$$

Note: t statistics are given in the brackets.

According to the results ER, GDP and WFP have positive and significant effect on FPI in the long run at 5% significance level. AWR and MS do not have significant effect on FPI in the long run. ER largely affects FPI in the long run among these variables similar to the study Apergis and Rezitis (2011). When ER increases by one percent FPI increases by 0.542 percent while other variable remaining constant. WFP is the next variable that largely and positively affects the FPI in the long run. While WFP increases by one percent FPI increases by 0.315 percent, holding other variable fixed.

Table 2: ECM result of the long run adjustment

Error Correction	**D(LFPI)**	**D(LAWR)**	**D(LEXR)**	**D(LGDP)**	**D(LMOS)**	**D(LWFP)**
CointEq1	-0.0889	0.0033	-0.0037	0.0466	0.0168	0.0223
	[-5.4878]	[0.06369]	[-0.3629]	[1.2373]	[1.8425]	[1.1355]

Note: t statistics are given in the brackets.

The table 2 shows the result of short run Error Correction model. The coefficient of speed of adjustment of the Error Correction model confirmed that there is a short run relationship between variables. Error correction term is negative and highly significant and indicates that there is long run adjustment towards study state equilibrium and it corrected by 8.89% in every year.

Table 3: The results of short run relationship between variables

Variables	**D(LFPI)**	**D(LAWR)**	**D(LEXR)**	**D(LGDP)**	**D(LMOS)**	**D(LWFP)**
D(LFPI(-1))	0.4382	0.04714	-0.0122	0.4691	-0.0475	-0.0189
	[8.5117]	[0.2846]	[-0.3729]	[3.9242]	[-1.643]	[-0.3020]
D(LFPI(-2))	-0.3708	0.1522	-0.0221	0.1563	0.0301	-0.0166
	[-6.9119]	[0.8819]	[-0.6499]	[1.2546]	[0.9986]	[-0.2548]
D(LMS(-2))	0.2375	-0.0599	-0.0832	-0.6274	0.0146	0.1071
	[2.4111]	[-0.1889]	[-1.3308]	[-2.7432]	[0.2647]	[0.8954]

Note: t statistics are given in the brackets.

Table 3 shows the results of short run relationship between the variables. There is a positive relationship between lagged and two months lagged value of FPI in the short run. Further, the study identified that two months lagged value of MS positively and significantly affects FPI in the short run at 5% significance level.

Table 4: The results of Granger causality test

Null Hypothesis:	Obs	F-Statistic	Prob
DL_FPI does not Granger Cause DL_AWR	302	4.8421	0.0009*
DL_GDP does not Granger Cause DL_FPI	302	11.7681	0.0000*
DL_WFP does not Granger Cause DL_FPI	302	2.17411	0.0719***

*Note: probability values are given in parenthesis. *, **, *** show significant at 1%, 5%, 10% level respectively.*

According to the results of table 4, the Granger causality test confirms unidirectional causality relationship between FPI to AWR, GDP to FPI and WFP to FPI.

Conclusion

The study investigates the impact of macroeconomic factors on food price inflation in Sri Lanka. Applying Johansen co integration technique to annual data for the period January 1996 to December 2021, the study identified that there exists a co - integrating relationship between the variables. The finding further adds the impacts of variables such as, ER, GDP and WFP on FPI in the long run and the impacts are positive and significant. Therefore, the government should consider these variables while implementing policies to control food price inflation in the long run. Further, Error correction model identified that lagged values of FPI and MS significantly affects FPI in the short run. Moreover, Granger causality test identified unidirectional causality relationship between FPI to AWR, GDP to FPI and WFP to FPI. In all, the government should consider GDP, WFP, MS and ER when implementing monetary and macroeconomic policies in order to adjust food price inflation.

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The impact of inflation on economic growth in Sri Lanka

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Introduction

In general economic growth is an important factor which help country to become prosper than the other nations in the world. Thus the main attempt of this study was to identify the impact of inflation on economic growth in Sri Lanka. Sri Lanka faced high inflation situation and it played major role in economy. There were various factor behind the high inflation situation such, increased money supply, depreciation of rupee, higher public wages, deficit of foreign currency and etc... According to the article of ACAPS Anticipatory analysis has reported Sri Lankan monthly inflation rate rose from 3% in January 2021 to 39.1% in May 2022. Then it is clear that Sri Lanka is suffering high inflation with facing economic crisis. So inflation and economic growth can be recognized as the key indicators which are showing economic crisis.

Other than main findings this study investigated the impact of another three economic variables on economic growth in Sri Lanka. Accordingly, investment, interest rate, and foreign asset in banking system were used as moderate variables for this study.

Currently Sri Lanka is suffering high inflation and also with the deficit of foreign reserves. Central bank data for the 1st quarter of 2022 shows the economic growth as negative (-1.6). Then currently country is facing economic crisis. Article of Wikipedia has shown crisis is said to begun due to multiple compounding factors like money creation, a nationwide policy to shift to organic or biological farming, Ester bombing (2019), and also COVID 19 pandemic situation.

When consider the inflation and economic growth figure 01 shows the behavior of inflation for first six months in Sri Lanka according to the central bank report and it shows that headline inflation has increased to 54.6% in June, from 39.1% in May 2022. So simply it's clear that there is a significant percentage change in price of goods.

Figure 6: last six month inflation in Sri Lanka

Then under this study as main finding researcher try to find out "what is the impact of inflation on economic growth in Sri Lanka?"

Other than main finding researcher has found,

- What is the impact of investment on Economic growth in Sri Lanka?
- What is the impact of interest rate on Economic Growth in Sri Lanka?
- What is the impact of foreign asset in banking system on Economic growth in Sri Lanka?
- What kind of trend can be seeing inflation, interest rate, investments, foreign assets in banking system and economic growth in Sri Lanka?
- What are the factors affecting in high inflation in Sri Lanka?

Objectives of the study

The main objective of this study is

"To examine the impact of inflation on Economic Growth in Sri Lanka"

Specific objectives

- To examine the impact of investment on economic growth in Sri Lanka.
- To examine the impact of interest rate on economic growth in Sri Lanka.
- To examine the impact of foreign assets in banking system on economic growth in Sri Lanka.
- To examine the trend of inflation, interest rate, investment, foreign assets in banking system and economic growth in Sri Lanka.
- Examine the factors affecting in high inflation in Sri Lanka

Review of the literature

There were many research related to this study such, the study of "Role of macro-economic factor in growth" by S. Fisher (1993) has found that inflation effect economic growth and inflation negatively affect growth by reducing investment. And also another study by Madurapperuma (2016) had found the impact of inflation on economic growth in Sri Lanka. For this study has used 20 years data and also error correlation model. Then under this study researcher had found that inflation has detrimental to sustainable economic growth in country. Even though many researches have done researches regarding impact of inflation on economic growth, this study was different from the previous studies. Though this study going to find out what are the factors which have been effect on high inflation with this economic crisis, other than impact of inflation on economic growth in Sri Lanka. And also researcher has used moderate variables to find out the impact on economic growth.

When consider the theories related to the inflation can identify mainly three types of inflation. That are the ways which inflation can be occur. Such,

- The demand pull inflation
- Cost push inflation
- Structural inflation

Currently we can see structural inflation with increasing money printing and also shortage of supply of essential goods. Economists have been studying about inflation and economic growth starting from appearance of classical economic theories to modern economic theories.

According to the classical growth theory have mentioned savings as the most important factor effecting economic growth but can't find direct explanation of impact on economic growth.

According to the Keynesian theory have pointed that aggregate demand fall will restoring economic growth will resulting weakness in production and job would precipitate a decline in prices and wages. So with lower level inflation capital investment and stimulating employment and restoring economic growth.

But currently we can see lack of supply not demand pull with this situation policy which are taken not match with the current situation. Such money printing also effect to the badly on economy with this crisis.

Methodology

Through this current study researcher has mainly found the impact of inflation on economic growth in Sri Lanka and other findings were the impact on economic growth of other moderate variables such investments, interest rate and also foreign assets in banking system. For this current study data was mainly collected from secondary sources through report of Central Bank and also website of the Central Bank for the past 12 years from 2010 to 2021. Population of the study is Sri Lanka. Researcher has used null hypothesis testing for the analysis objectives and have used descriptive analysis, correlation analysis and trend analysis as statistical analysis and researcher used views analysis for that.

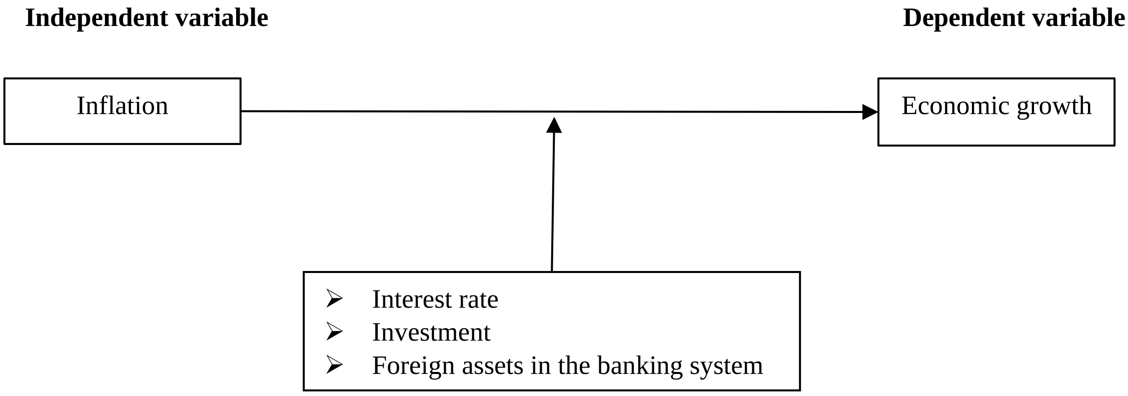

Figure 01 - Conceptual framework

When consider the data analysis methods,

Descriptive analysis to describe the basic features of the study it provide the simple summary about the measures and also used to present quantitative description in a manageable form.

Correlation analysis has used to test the relationship between quantitative variables. That mean it measures how things are related.

Using trend analysis measure the future of the relationship is set on the basis of the in past. It lead to trustworly and reliable conclusions rather than assumptions.

Findings

Table 01 shows the study findings of correlation analysis regarding selected variable for past 12 years. According to the past 12 years correlation data analysis shows there is positive relationship between inflation and economic growth but present and future data analysis shows negative relationship between inflation and economic growth. It shows -0.369570 for last five quarter data analysis. It is clear that with this economic crisis inflation has been badly effect on economic growth.

Table 10: correlation analysis of past 12 years

	Y__ GDP_	**X1_ _INFLATION_**	**X2_ _INVESTM ENT_**	**X3__ IN_RATE_**	**X4_ _FOR/ASST.BS.**
Y__ GDP_	1.000000	0.264481	u//* 0.749876	0.711050	0.013492
X1__INFLATION_	0.264481	1.000000	0.165388	-0.147990	0.001502
X2_INVESTMEN T_	0.749876	0.165388	1.000000	0.666093	-0.033904
X3__IN_RATE_	0.711050	-0.147990	0.666093	1.000000	0.291788
X4__FOR ASSTES	0.013492	0.001502	-0.033904	0.291788	1.000000

Other variables of investment and interest rate show significant impact with economic growth but foreign assets in banking system doesn't show significant impact according to the correlation analysis for fast 12 years. When consider the last five quarter both inflation and interest rate shows negative relationship with economic growth.

Descriptive statistic shows the summarization of the data. When consider the minimum and maximum values for the past 12 year's data set,

	Maximum	minimum
Economic growth	9.1	-3.6
Inflation	12.1	2.1

When move to the last five quarter data analysis as maximum value for economic growth and inflation show 12.4 and 16 and also minimum values show -1.5 and 3.46.

According to the trend analysis for last 12 years all variables show there is a positive trend. When consider the future data analysis inflation shows negative trend and economic growth shows positive trend so can assume by 2025 economy will be recover.

And also broad money and reserve money have been effect on create high inflation situation with considering last six month data issued by central bank and using chart researcher have shown it clearly.

Conclusion

To achieve main objective the current study of measure the impact of inflation on economic growth has done main three analysis. According to the past 12 years data researcher has found that there is a positive relationship and also with current and future data has found negative relationship between main two variables. And also have find that there is significant of the other variables. Other than that researcher have done trend analysis for the variables

Through contractionary monetary policy government try to control high inflation situation with reducing money supply. Other than open market operations can use as the tool which Federal Reserves increased or decrease the money supply and adjust increase rate.

There is a future opportunity to study about the economic growth with different independent variables, and also larger sample observations are available the regression analysis also could be done with more empirical results to the current topic.

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The impact of foreign exchange reserves on the living standard of the Sri Lankan citizens

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Introduction

Foreign reserves are assets or claims that a country holds from a foreign soil where these assets fall into a wide variety of instruments ranging from short-term claims in money markets to long-term investments (Karunaratne 2010). Ownership and the responsibility of management of foreign assets are mainly held by the monetary authority or a central bank of the certain country. Foreign exchange reserves are an essential aspect of the economic system of each country where the growth and size of reserves provide signals for global financial market regarding the accountability of the monetary policy of the respective country and creditworthiness (Andriyani et al. 2020). Foreign reserves owned by the Sri Lankan economy was noticeably reduced during last two decades due to mismanagement by the authorities. Foreign reserves of the country have surged to an extraordinary level during the past one and a half years with the Covid-19 pandemic hit hard on Sri Lanka which insipid the improved investor confidence after the end of the 30-year long conflict and stable economic and political conditions of the country. The maintenance of adequate reserves is also crucial to preserve the external value and the stability of the Sri Lankan currency (Karunaratne, 2010).

Problem Statement

The Depletion of foreign reserves pushed the country into a critical situation which dragged the Sri Lankan economy towards an economic crisis. It was a timely matter that drove the researcher to investigate how the lack of foreign reserves have an impact on the living standard of Sri Lankan citizens. Trends in macro-economic factors such as Sri Lankan Rupee depreciation, trade deficit gap expansion and continuous increased debt stock in USD emphasizes that the economic growth of the country is at a risk, where the annual percentage change in country's growth rate has become a negative. This negative economic growth would adversely affect the economic development which will ultimately impact the living standard of the Sri Lankan citizens. Therefore, the research gap that will be addressed by this study is to investigate the impact of foreign reserves on the living standard of Sri Lankan citizens.

Objectives of the Study

This paper identifies the below objectives of the study.

- To examine the significant impact from foreign reserves towards the living standard of Sri Lankan citizens.
- To evaluate the impact of export income on the living standard of Sri Lankan citizens.
- To evaluate the impact of foreign debt on the living standard of Sri Lankan citizens.
- To evaluate the impact of foreign remittances on the living standard of Sri Lankan citizens.
- To identify the moderating effect of government intervention towards the relationship between foreign reserves and living standard of Sri Lankan citizens.

Literature Review

Theoretical literatures on foreign reserves holdings can be broadly grouped into three where it contains mainly three approaches namely, examines the adequacy of foreign reserves while centers on modelling the optimal foreign reserves holdings and examines the determinants of foreign reserves where the adequacy of foreign reserves approach perceives the reserves accumulation as a catalyst for meeting external payments commitment, stabilizing currency volatility during the occurrence of external shocks and avoiding meeting payment of import sudden-stop (Alfaro and Kanczuk 2006).

Table 1: The summary of the Empirical Review

Author/s and Year	**Research Title**	**Research Objectives**	**Research Methodology**	**Findings**
(Kaphle, 2021)	Impact of foreign exchange reserve on economic growth in Nepal	To identify the impact of foreign exchange earnings on the economic growth of Nepal and To explore the causal relationship between variables for policy recommendation on effective utilization of the foreign exchange	To examine the strength of causal relationship between GDP, foreign exchange reserve (FOREX) and GFCF, vector error correction method (VECM) from vector auto-regressive approach is used. Augmented Dickey Fuller (ADF) test was helpful in detecting unit-root in the series and for co-integration, Johansen test of co-integration was used	FOREX is contributing to the growth in GDP as seen in the analysis period, however, test statistics also shows that there is no impact of GDP growth on increasing foreign exchange earnings for the same period. Similarly, test probability also reveals that the growth in GDP is contributing to the promotion of gross capital formation in economy in-between the analysis period.
(Andriyani et al., 2020)	The Determinants of Foreign Exchange Reserves: Evidence from Indonesia	To identify and analyse the factors that affect foreign exchange reserves in Indonesia.	Descriptive qualitative analysis is an analysis technique that describes research variables in graphs or tables and relates them to relevant theories. Where quantitative analysis is an analytical technique that uses a statistical, mathematical, and econometric approach.	Foreign debt, exchange rates, inflation, and exports significantly affect the simultaneous fluctuation of foreign exchange reserves in Indonesia. Partially, foreign debt has a significant and positive effect on foreign exchange reserves. The exchange rate has a significant and negative effect on foreign exchange reserves in Indonesia.
(Oyeniran and Alamu, 2020)	Determination of optimal level of foreign reserves in Nigeria	Estimating the optimal foreign reserve holdings for Nigeria with focus on both the precautionary and mercantilism approaches.	The study adopts the stock buffer approach since this approach can be easily modified to suit various motives of reserve accumulation; Parameters in the equation were estimated through the bounds testing (or Auto-regressive Distributed Lag (ARDL)) co-integration procedure.	The research concludes that the desire to protect and stabilize the value of local currencies is the major motivation for the accumulation of reserves in Nigeria.

Methodology

The study mainly focuses on secondary data collected from reliable sources such as CBSL annual reports, IMF and World bank publications. The related data over two decades will be considered which varies from 2001 to 2021. In the year 1972 where the Sri Lankan economic growth hit a negative percentage of 0.4, after 29 years, 2001 was the year which recorded a lowest growth rate of negative 1.5 percent. Hence, the researcher considers the relevant period for the study as 2001 till the year where the published data is available.

This study only focused on secondary data hence E-views software will be focused as the statistical tool to derive and measure regression outcomes. The main and the specific research objectives will be achieved through a simple regression model and a multiple regression model. The regression models will be used to measure the marginal impact of each independent variable discussed in the study, whereas correlation analysis will be used to identify whether there is any significant patterns, trends and connections between the variables and also to understand the strength of the relationship between the independent variables and the dependent variable. The Gross national income per capita is employed by the researcher to measure the living standard of the Sri Lankan citizens.

Research Questions

- Is there a significant impact from foreign reserves towards the living standard of Sri Lankan citizens?
- What is the impact of export income on the living standard of Sri Lankan citizens?
- What is the impact of foreign debt on the living standard of Sri Lankan citizens?
- What is the impact of foreign remittances on the living standard of Sri Lankan citizens?

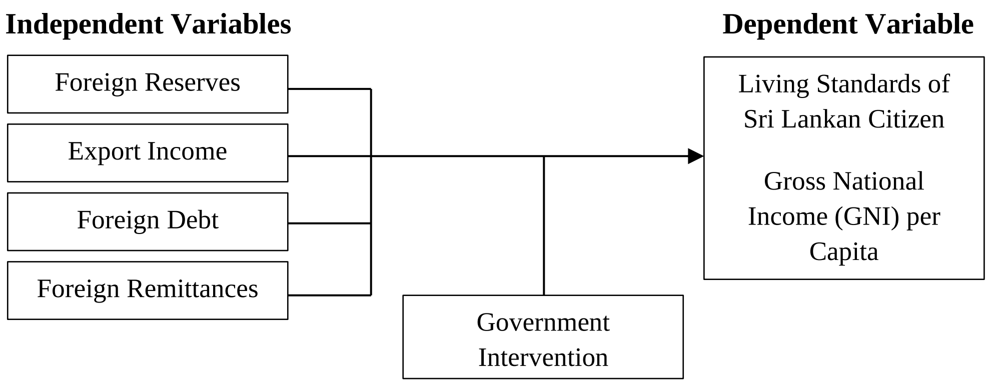

Figure 1: Conceptual Framework

The research hypothesis is hereby stated to give emphasis to the purpose of study and the following hypotheses are derived based on the conceptual framework:

H1 – There is a significant impact from foreign reserves towards the living standard of the Sri Lankan citizens.

H2 – There is an impact of export income on the living standard of the Sri Lankan citizens.

H3 – There is an impact of foreign debt on the living standard of the Sri Lankan citizens.

H4 – There is an impact of foreign remittances on the living standard of the Sri Lankan citizens.

To express the relationships of the conceptual framework, researcher developed regression models as follows:

Multiple Regression Model

$$GNIPC = B0 + B1EXPI + B2FRD + B3FRR + \mathcal{E}$$

Simple Regression Model

$$GNIPC = B0 + B1FR + \mathcal{E}$$

Findings

Multiple Regression Model

Table 2: Multiple regression analysis of factors

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DDEXPI	0.041525	0.012593	3.297412	0.0049
DDFRD	0.033495	0.010465	3.200686	0.006
DDFRR	0.024045	0.060951	0.394504	0.6988
C	2.328148	24.94422	0.093334	0.9269
R-squared	0.640796	Mean dependent var		4.736842
Adjusted R-squared	0.568955	S.D. dependent var		162.425
S.E. of regression	106.6385	Akaike info criterion		12.36143
Sum squared resid	170576.5	Schwarz criterion		12.56026
Log likelihood	-113.4336	Hannan-Quinn criter.		12.39508
F-statistic	8.919667	Durbin-Watson stat		2.576924
Prob(F-statistic)	0.001239			

Source: EViews output for the Regression Model

$GNIPC = 2.328 + 0.042EXPI + 0.034FRD + 0.024FRR$

The adjusted R^2 value states 0.57. Where 57% of the living standard of the Sri Lankan citizens is explained by EXPI, FRD and FRR while 43% of the living standard of the Sri Lankan citizens is explained by the variables other than EXPI, FRD and FRR.

Simple Regression Model

Table 3: Simple regression analysis of factors

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DDFR	0.038738	0.007243	5.348443	0.0001
C	3.982478	23.41046	0.170115	0.8669
R-squared	0.627241	Mean dependent var		4.736842
Adjusted R-squared	0.605314	S.D. dependent var		162.425
S.E. of regression	102.042	Akaike info criterion		12.18795
Sum squared resid	177013.5	Schwarz criterion		12.28736
Log likelihood	-113.7855	Hannan-Quinn criter.		12.20477
F-statistic	28.60585	Durbin-Watson stat		2.470801
Prob(F-statistic)	0.000053			

Source: EViews output for the Regression Model

$GNIPC = 3.983 + 0.039FR$

The adjusted R^2 value states 0.61. Where 61% of the living standard of the Sri Lankan citizens is explained by FR while 39% of the living standard of the Sri Lankan citizens is explained by the variables other than FR.

Hypotheses Testing

Table 4: Summary of the hypotheses

	Hypotheses	Acceptance
H1	There is a significant impact from foreign reserves towards the living standard of the Sri Lankan citizens	Accepted
H2	There is an impact of export income on the living standard of the Sri Lankan citizens	Accepted
H3	There is an impact of foreign debt on the living standard of the Sri Lankan citizens	Accepted
H4	There is an impact of foreign remittances on the living standard of the Sri Lankan citizens	Rejected

Source: Developed by the researcher

Conclusion

Based on the Scale Coefficient the most influential variable of the multiple regression model is the export income and the foreign remittances is the least influential variable of the multiple regression model. In developing countries anything that can contribute to the foreign reserves improvement in this case should be revealed and encouraged by the government authorities. There is positive relationship and significant impact between the foreign reserves and the living standard of the Sri Lankan citizens. Also, there is positive relationship and significant impact between the export income and the living standard of the Sri Lankan citizens, there is positive relationship and significant impact between the foreign debt and the living standard of the Sri Lankan citizen and there is positive relationship and insignificant impact between the foreign remittances and the living standard of the Sri Lankan citizens. Therefore, the researcher can conclude that the foreign remittances have become insignificant to explain the dependent variable which is the standard of living of the Sri Lankan citizens is due to the fact that mismanagement of the policy makers purely. Sri Lanka is in need of a foreign reserves stabilizing fund in the future to face crisis situations and to overcome those crisis situations efficiently and effectively.

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Entrepreneurship & Small Business

The impact of eco-friendly business practices on the firm's performance of the Small and Medium Enterprises in the manufacturing sector of Western province in Sri Lanka

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Introduction

In Sri Lanka with the current trend, they show a growing inclination to implementing Eco-friendly business practices to enhance the organizational performance and then achieve the competitive advantage and the sustainability. Small and medium - Scale enterprises are the backbone of the national economy and influences economic growth as it is comprised of more than 75 percent of the total number of enterprises. (Ministry of Industry and commerce.) Even though the government has identified the significance of the SMEs in the manufacturing industry of Sri Lanka, the impact of Eco-friendly Business Practices to enhance the organizational performance of small and medium enterprises, which were not, addressed in previous researches. The extensive academic research has explored the eco-friendly business practices (Joseph Sarkis 1997; A review on Green manufacturing: It is important, Methodology and its Application, I.D. Paul, Grila. Bhole J.R.Chaudhari ICMPC 2014) much less number of researches has investigated the eco-friendly business practices in the small and medium - scale enterprises and impact of it are to the performance of the manufacturing sector in Sri Lanka.

Past research on Eco-friendly Business Practices in small and medium businesses has concentrated on the environmental conscious business practices (Joseph Saris 1997, Winifred L. Isomer, Dr. Jan. P. Bennett, Jim Pearce) and the barriers and drivers for green business practice adoption for SMEs (Junia A. Purwadani, Gilbert Michaud, 2021) has also discussed. Sri Lanka as a developing country largely depends on small and medium enterprises whereas an environmentally friendly business practices play a major role in the corporate world; the contribution to the performance in the manufacturing sector was not clearly discussed in the literature. Consequently, even though SMEs have dominated Sri Lanka's GDP, (Kumadinei Dissanayaka, Nayani Melegoda, S.P. Premaratne, Sudheera Ranwala,2019) We have an incomplete picture of the impact of the performance in the manufacturing sector in Western province where it has the large contribution in SMEs in Sri Lanka. This is certainly addressing the lack of previous literature sources on the topic in the Sri Lankan context.

Against this background, the purpose of this research is to answer the research question: "What is the impact of Eco-friendly Business Practices on the Firm's Performance of small and Medium Enterprises in the Manufacturing sector of Western Province in Sri Lanka? The main objective of this research is to investigate the impact of Eco-friendly business practices on the firm's Performance of SMEs in the Manufacturing sector of Western Province Sri Lanka.

More specifically this research has three sub objectives:

- To examine the impact of Green Purchasing practices on the Firm's Performance of the Small and Medium Enterprises in the Manufacturing Sector of Western Province in Sri Lanka.
- To examine the impact of Green Manufacturing practices on the Firm's Performance of Small and Medium Enterprises in the Manufacturing Sector of Western Province in Sri Lanka.
- To examine the impact of Eco designing practices on the Firm's Performance of the Small and Medium Enterprises in the Manufacturing Sector of Western Province in Sri Lanka.

This paper has four parts. First, it reviews the extant literature relevant to Eco-friendly Business practices and SMEs in the manufacturing sectors in Western province of Sri Lanka. Then the research methodology is presented and data analysis techniques are discussed and summarized. The paper concludes with a discussion of theoretical and managerial implications and directions for further research.

Methodology

The conceptual framework was designed based on the previous studies conducted by the scholars and their findings from the previous literature sources.

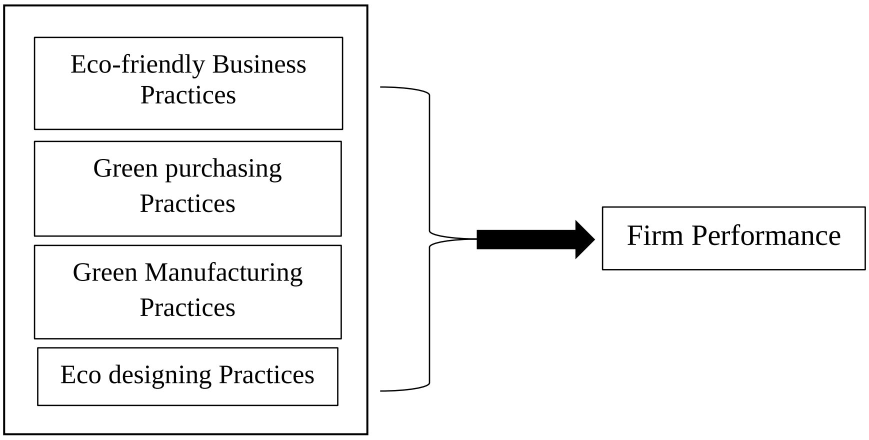

Figure 1: Conceptual Framework

The study adopted descriptive survey design, which involved quantitative deductive approach. This research uses the survey tool and descriptive study type to conduct the investigations on the impact of Eco-friendly business practices on the firm performance of small and medium businesses in the Manufacturing industry of Sri Lanka. For this research researcher employed a self - administered questionnaire to collect data from the sample of respondents.

The population was selected as all the small and medium businesses in the manufacturing industry of the Sri Lankan context. According to a press release on key indicators of industry Trade and Service Sector Economic Census 2013/2014, issued by the Department of Census and Statistics, there are 71126 small Scale establishments and 10 405 medium scale establishments in Sri Lanka. For this research employees at the managerial level of these firms in the EDB registration database were selected with the encountered constraints of dealing with a very vast population, financial limits and the difficulties in reaching respondents, 200 samples of respondents were obtained from the employees at the managerial level of SMEs in the manufacturing industries registered in the EDB. The sample size was taken as it was mentioned in the proposal itself and this was not based on the Morgan table. Furthermore, it was narrowed geographically to the Western province in Sri Lanka. Accordingly, 25 SMEs in the manufacturing industry were selected, randomly from the list in the EDB. From each SMEs 08 respondents were taken into consideration. Moreover, random Sampling techniques were used.

Contemporary research used primary data. Primary data were collected from the respondents using a self- administered Likert scale questionnaire. For the purpose of convenience, the questionnaire was distributed among the respondents using online platforms. Before the collection of data, a consent form was distributed. This action was done at both the individual level and the organizational level. Collected and compiled data were analyzed using Statistical Package for Social Science (SPSS). A reliability and validity analyses were performed at the beginning of the analysis. Cronbach's alpha was used to test the reliability of the data set. Therefore, the total reliability of the data set is represented by a reliability level of 0.97 which provides a high degree of consistency of the data. Validity test was run to see if the questionnaire satisfies the criteria for validity or not. It was examined using Pearson Correlation test, which is used to measure the strength and direction of the linear relationship between the independent and dependent variables. Green purchasing, Green manufacturing and eco-designing had the following correlations respectively. 0.893, 0.876 and 0.895. According to the correlations, they were strongly valid. The questionnaire was structured majorly in two sections such as demographic analysis and the variable analysis; while demographic analysis was performed, present a comprehensive view.

Findings

The research Sample was consisted of 200 managerial employees from SMEs in manufacturing enterprises in western province of Sri Lanka. According to the data, collection process the study's response rate is 96.5 percent.

Under the descriptive statistics, there are minimum and maximum values for each independent, dependent and demographic variable as well as their Mean and Standard Deviation. According to the academic qualifications, period of employment, green purchasing, eco designing and firm performance characteristics all accounted for five maximum values. In addition, except for age and employment level, all demographic variables indicated the minimal values by accounting for Green purchasing has the greatest mean (4.395), while the period of employment has the largest standard deviation (l.008).

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.918[a]	.843	.841	.17539	1.759

a. Predictors: (Constant), Eco-Designing, Green Manufacturing, Green Purchasing
b. Dependent Variable: Firm Performance

Source: Author's Estimation

According to the model summary table, multiple correlations is 0.918 which says the model's most influencing factor as the model's dependent variable which is firm performance. The coefficient of determination is 0.843, indicating that 84.3% of dependency for firm performance on the independent variables; green purchasing, green manufacturing and eco designing. Multiple correlation was used to examine how well a given variable can be predicted using a linear function of a set of other variables. Furthermore, at 1% of significance correlation analysis demonstrates substantial positive associations between firm's performance and green purchasing, green manufacturing and eco-designing. According to the correlation analysis, all of the hypotheses of the current study were supported, revealing a positive correlation between firm performances at SMEs in manufacturing firms in western province of Sri Lanka.

Durbin - Watson test statistics is 1.759, which falls in between 1.5 - 2.5 signifying the fact that the residuals of the regression model are independent and tend to be appropriate. In relation to the regression ANOVA results probability of F test statistics happened to be highly significant as the P value is 0.00 short of the 5% threshold.

Table 2: Hypothesis Testing Summary

Hypothesis	Significant	Acceptance
H1 – *There is a significant positive relationship between green purchasing practices & firm performance of SMEs in the manufacturing industry*	0.000 with Positive Correlation	H1 Accepted
H2– *There is a significant positive relationship between green manufacturing practices & firm performance of SMEs in the manufacturing industry*	0.000 with Positive Correlation	H2 Accepted
H3 – *There is a significant positive relationship between eco-designing practices & firm performance of SMEs in the manufacturing industry*	0.001 with Positive Correlation	H3 Accepted

Conclusion

The Concept of Eco-friendly business practices were identified as a go-to-go strategy that is adopted by many businesses in the current world. As per the findings of the investigations, many issues arise to the environment are caused by the industrialization and business developments. With the emerging trends and changes of the people life style and attitudes, businesses who are willing to achieve growth and success must contribute positively to the nature and the environment than the negative impact it causes. The manufacturing industry in Sri Lanka largely contribute to the local national economy hence it is important to identify the impact of the industry to the environment and the ways of reducing the negative impact. Accordingly, as the environmental conscious business practices, in this research the researcher identified green purchasing, green manufacturing and eco design. Moreover, through this research it explained the relationship between these eco-friendly business practices and the organizational performances.

When considering the findings of the researcher derive by evaluating the available literature sources, several scholars put forward their ideas on the Eco designing and the Firm performance. According to them Eco designing have a greater impact on the manufacturing process, environmental performances of the business and ensuring the high quality operational performances, as a whole increase the organizational performances (Rehema, et.al., 2016), (Wagner, 2005) . The same relationship identified through the literature sources are supported by the actual data analysis of the contemporary research. According to the findings of the researcher through the analysis of the data collected from the respondents, it shows a significant positive relationship between the eco designing practices and the firm performances.

Therefore, it can be concluded that, all the relationships identified through the literature review were supported by the findings of the data analysis, hence all the three hypotheses are accepted by through the analysis of the data collected from the respondents. The researcher suggests the future researchers to investigate on more independent variables. Furthermore, when considering the limitations only the Western province and the Manufacturing sector were selected to examine the firm's performance. Future researchers are suggested to investigate the other sectors and other provinces such as Northwestern province.

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Factors effecting women entrepreneurship: special reference to final year female business management undergraduates in state universities of Sri Lanka

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Introduction

Entrepreneurship makes a higher contribution to the gross domestic product of Sri Lanka each year. But in the Sri Lankan context, women's participation in economic activities is less than compared of men. According to the export development board, it was shown that female participation in economic activities was 40% in 2018, and it is significantly lower than men, 73%, unpaid workers' maid up 20.4% of the workforce for women, and 3% for men. Small and medium enterprises contribute 45% of the gross domestic product in Sri Lanka, but only 25% are owned by women, and Sri Lanka is the 20th largest gender gap participation in the world. Women's participation in economic activities gives benefits to different parties, such as women themselves, men, children, society, not only that women's employment leads to better outcomes for children and it improves children's education, and health, higher income for women helps to higher survival rates for female children. That is why the improvement of women's entrepreneurship is very significant. Because of that researcher study about factors effecting women entrepreneurship based on final year female business management undergraduates in state universities of Sri Lanka.

Entrepreneurship is what people do to take their careers and dreams into their own hands and lead them in the direction they want (Ferreire, 2021). Entrepreneurship is considered as the backbone of the industry, and they come up with innovative ideas, which contributes to social and economic growth. Every year, thousands of students graduate from universities all over the world but only a few students start their own businesses and most of them prefer to go to paid jobs. This will be the main reason for make unemployment among them (Ishara & Saleem, 2017). Many researchers identify several factors that influence to entrepreneurship but do not give attention to university education, there is research being done using female students of Atlantic Canada University to analyze how the university environment and support system on the precursors of entrepreneurial intention fill this gap, and they discover that university environment and support system positively affect entrepreneurial intention. They recommended assessing the efficacy of its innovation and entrepreneurship initiatives in promoting entrepreneurial activities by understanding its entrepreneurial efficacy, the institution will be better equipped to raise the perceptions of venture feasibility and desirability, thus increasing students' perceptions of opportunity (Brazon , et al., 2019). The objectives of this research is to identify factors effecting final year female business management undergraduates' participation in entrepreneurship state universities in Sri Lanka and identify the most significant factors that affect female management undergraduates' participation in entrepreneurship.

Methodology

According to the Sri Lanka university statistics 2016, the target population of the current study consists of 3185 final year female business management undergraduates. The unit of analysis was the individual final year female business management undergraduates. According to the Krejcie and Morgan table sample size would be 346 undergraduates under a confidence interval of 95%. The sample was calculated by choosing three universities by adapting the convenience sampling method. Sri Jayewardenepura 166, Kelaniya 84, and Wayamba 96. A standard questionnaire was distributed to collect data. The questionnaire consists of 36 items and is measured using a five-point Likert scale from 1 to 5. The researcher distributed 346 questionnaires and collected 322quetionares. Accordingly, the respondent rate is 93% and the majority of 151 (46.89 %) undergraduates were from Sri

Jayewardenepura University, while 82 (25.47%) were from Kelaniya and 89 (27.64%) from Wayamba University. The Cronbach's alpha value of the variables between 801 to 961, all the values greater than 0.7 and indicates that the multi-item scale is reliable.

The researcher analyzed data using descriptive statistics (mean, Std. Deviation and variance), and person correlation was used to test relationships between independent variables (financial capabilities, family support, educational support, self-confidence, and social attitudes towards women) and dependent variable (entrepreneurship). Not only that regression analysis also used test hypothesis, for that researcher used SPSS version 26. The conceptual framework (Figure 1) depicts the variable and the associations between such variables identified in the current study.

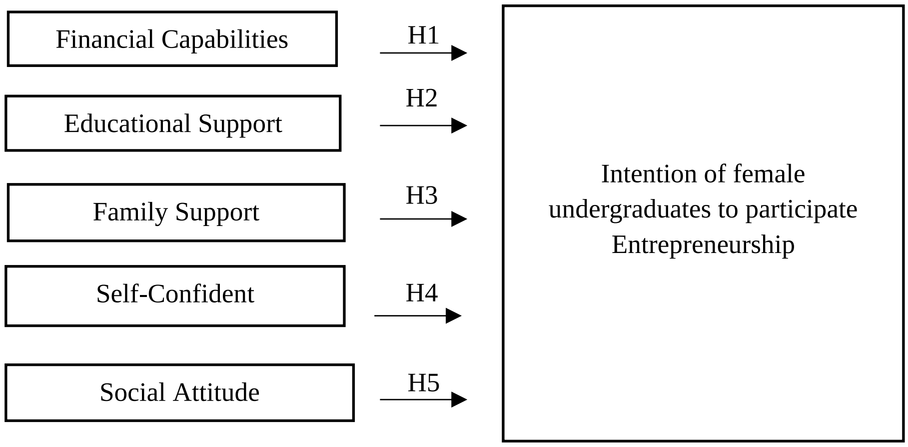

Figure 1: Conceptual Framework

The following Hypothesis were developed with the support of extant Literature.

H_1: There is a significant relationship between the financial capabilities and intention of female undergraduates to participate entrepreneurship.

H_2: There is a significant relationship between the educational support and intention of female undergraduates to participate entrepreneurship.

H_3: There is a significant relationship between the family support and the intention of female undergraduates to participate entrepreneurship.

H_4: There is a significant relationship between self-confidence and the intention of female undergraduates to participate entrepreneurship.

H_5: There is a significant relationship between the social attitude toward women and the intention of female undergraduates to participate entrepreneurship.

Findings

The study was conducted to analyze the factors effecting women's entrepreneurship special reference to final year female business management undergraduates in Sri Lanka. The researcher uses both descriptive and inferential statistics to discuss the final output of the study. The researcher can recognize the basic nature of a variable using descriptive statistics, such as mean, standard deviation, variance, maximum and minimum. The mean value of the dependent variable, entrepreneurship, is 2.0062 (Std. Deviation 0.65887). It implies that female undergraduates agreed with entrepreneurship intention. Financial capabilities, educational support, family support, self-confidence, and social attitudes toward women had the mean value and standard deviation of 2.1079 (0.86659), 2.3106 (0.67931), 1.8890 (0.70731), 2.1418 (0.87229), and 2.1124 (085360). All the mean values of the independent variable are very close to two, which suggests that most of the undergraduates agreed with the independent variable.

In the current study researcher used inferential statistics such as person correlation and regression analysis techniques to test hypotheses and measure relationships between independent and dependent variables. Following Table 2 shows the correlation between the dependent variable and independent variables.

Table 1: Pearson Correlation Coefficient

Depended Variable	Statistic	Financial Capabilities	Education Support	Family support	Self-confident	Social attitudes
Entrepreneurship Intention	Person Correlation	.800**	.429**	.782**	.744**	.735**
	Sig.(2-tiled)	.000	.000	.000	.000	.000

Source : Based on Analyzed Data 2022

According to the Pearson correlation value of the independent variables, All the variables show a positive linear relationship towards Entrepreneurial Intention. Financial capabilities, family support, self-confidence, and social attitudes towards the women; all variables, correlated with entrepreneurial intention at 0.800, 0.782, 0.744, and 0.735, indicating a strong positive realationship between variables and entrepreneurship intention, Because the correlation coefficient value is in between 0.5 to 1. Here educational support coefficient value is 0.429 and it's between 0.3 to 0.49 so it has a positive moderate relationship with the entrepreneurship intention. And here P values of each variables $p < \alpha$ (0.000 <0.05). It indicates that there was a significant relationship between Entrepreneurship and financial capabilities, entrepreneurship and educational support, entrepreneurship and family support, entrepreneurship and self-confidence, and entrepreneurship and social attitudes toward women. So H_1, H_2, H_3, H_4, and H_5 Hypothesis were accepted.

Not only that, according to the regression statistics R-value is 0.861 for this study and it, suggests that all the IVs predict DV at a good level and, the R squre value of 74.2% (0.742) indicates that independent variables explained 0.742 variances in entrepreneurship intention. Not only that, according to the result all the IVs statistically significantly contribute to the prediction entrepreneurial intention P (0.000) < 0.05 , H_1, H_2, H_3, H_4, H_5 , accepted statistically proven ($F(5,316) = 181.499$, $P < 0.05$). The regression model of the current study was as follows.

$EI = 0.512 + 0.452FC + 0.361EC + 0.429FC + 0.179SC + 0.183SA$

Conclusion

According to the findings of the current study, it was suggested that there was a significant relationship between Entrepreneurial Intention and selected independent variables, financial capabilities, educational support, family support, Self-confidence, and social attitudes toward women. According to those findings this study support government to promote and enhancing women's entrepreneurship and give clear direction to policymakers to make entrepreneur-friendly policies. Not only that educational institutions need to take action to increase women's entrepreneurship.

Financial institutions can make easy access for financial resources, provide easy loan facilities and equal access to financial resources for both men and women. Family members can give support women to balance their work life and family life properly. Educational institutions can encourage women to start their own ventures by giving sufficient knowledge regarding entrepreneurship, and by developing their skills educational institutions can enhance women self-confidence, if the society will accept women's participation in economic activities, if there no gender gap these things always encourage women entrepreneurship.

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The impact of green quality management applications on the performance of small & medium scale enterprises: evidence from SMEs operated in fast moving consumer goods in Gampaha district

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Introduction

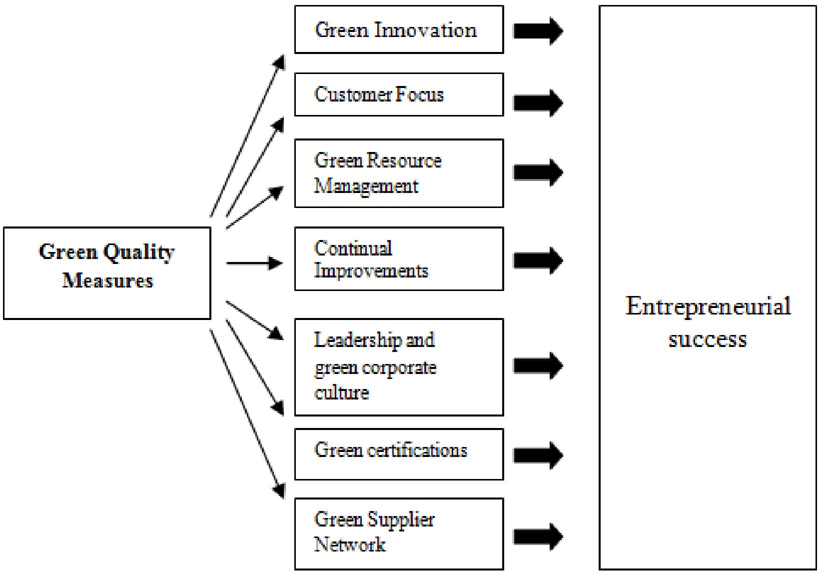
Green quality relevant concerns are emerging and becoming as a socio-economic criteria in utilizing the operational efficiency as well as the eco-friendly reputation in performing entrepreneurial actions. Ensuring green quality in each stage of business operations from production to distribution has become as an unavoidable element in green entrepreneurial practices. Conversely in general the enterprises are using customer focus and orientation, continual improvement, leadership, training and education, leadership & working culture, resource management, quality certifications and supplier network management. In fact the leading global enterprises have adopted the perception of green entrepreneurship in diminishing ecological hazard and directing new green prospects. 50% of the leading enterprises in U.S and 60% of the global enterprises proportionate more investment in green strategies in their business activities (Global Green Economy, 2020). Considerations of the green quality measures and management have been emerging in the contemporary trading sectors. Adopting and applying the green quality components are still insignificant in the developing countries in general. People who initiate the venture with the ideologies of profit- oriented and pollution ignorant have been outdated in the contemporary situation due to the scarcity experienced for the natural resources parallel to the rise in global population and loss of comfort life (Volery, 2002). The contemporary society is open to adopt innovative forms of business formations among sustainable enterprises which incorporate environmental issues and social wellbeing into the consideration at highest priority (Randika, 2021).

The scope of this study evolves the quality applications and measures that create the value proposition for the existing and the new customers while it gains the competitive edge and the enterprise value addition through anticipated mark up, entrepreneurial goodwill and business existence middle of higher degree of competition among the other ventures in the industry. As the major objective of the study, is to examine the influence of the quality management approaches towards the customer value creation. Moreover, empirically explores the most significant factors of the quality management concerns that are highly influencing on the process of customer value proposition as well as the value addition for the enterprises. According to Samarasinghe (2017), success of SMEs does not imply on either the business knowledge or trade knowledge of the entrepreneur but the entrepreneurs should be with productive in making effective decisions and need to have basic educational knowledge to survive in the market. Further, the study emphasizes that capital and investment is having a significant relationship with SMEs' sustainability.

Green thinking pattern of the market including consumers and producers has contributed for the intensification of green entrepreneurship in the contemporary situation. Approximately more than 75% of the enterprises known to be at the smaller and medium scale business entities where majority of the entrepreneurs only the hold the green thought, philosophy and practices part and partially as per their suitability and capability. Especially in Sri Lanka currently green labeling procedures are heavily concerned. The Green Labeling System of Green Building Council Sri Lanka offers the valuable opportunity to the environmentally responsible product manufactures to brand their product which will give them a competitive advantage among traditional products. It is a voluntary scheme where the manufactures and designers can achieve recognition for their valuable interest to producing nature friendly products further it examines the green marketing implications on consumer purchasing intension for fast moving consumer goods (Green standards, 2018).

Methodology

A sample of 300 enterprises operating at small and medium scale has been chosen out of 3550 registered ventures under the Gampaha district using cluster sampling method (Divisional secretariat statistics 2020). The case study design and narrative approach have been employed as the research design using quantitative method. The fast moving consumer goods have been focused as to examine the explicit as well as the implicit effect of applying green quality measures and standards. Descriptive and inferential techniques along the primary data collection aided the study to investigate the factual impact of the quality management application towards customer value proposition. The ground theory of total quality management has been scrutinized to imply the conceptual ideas to explicit the green quality concerns.



Source: Comprised empirical model by author

Figure 01: Conceptual frame work

The above given figure illustrates the model variables of green innovation, customer focus, leadership & corporate green culture, green resource management, continual improvement and green suppliers' network that are impact on the value creation process of the SMEs. The variables are listed as per the summary of the literatures used on the concern of green quality as well as total quality management. Descriptive analysis has been used to view the demographic profile of the respondents and the inferential techniques such as co relational analysis and regression analysis have been used to testify the finding of the study.

Findings

The study includes 300 samples enterprises and 58% of them are Males and 42% are females (Figure 01). 54% of the entrepreneurs belong to the age group of 36 to 50. The demographic profiles are shown through figure 02.

In the view of socio-economical perspective green quality measures and management act as revolutionary solution to the contemporary social, economic and environmental challenge. Therefore, the green quality aspects and the application of the green quality management are the combination of the green knowledge and perceived green values in the direction of stimulating the value addition for the parties concerned (Dale, 2019). As per this the study revealed that 95% of the entrepreneurs are valuing and adopt set of green quality measures and indications of their business in terms of profitability and the sustainability (Figure 3).

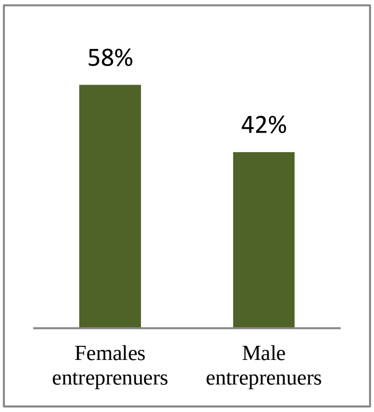


Figure 1: Sex of Entrepreneurs

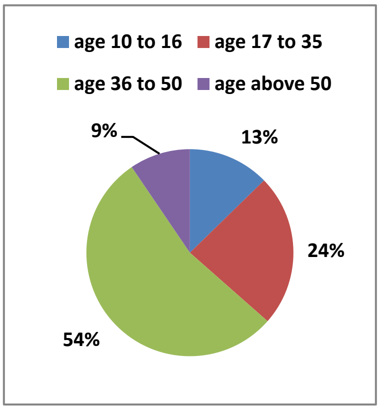


Figure 2: Age of Entrepreneurs

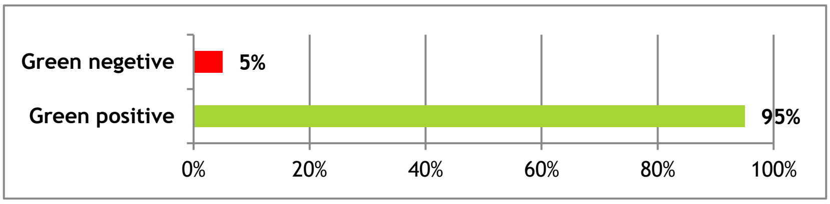


Figure 3: Adopting Green Quality Measures

Sustainability of an enterprise is the process of meeting the competitive requirement of enterprise and market. The model variables of green innovation, customer focus, leadership & corporate green culture, green resource management, continual improvement and green suppliers' network are on apprehension in many studies. According to this specific study green innovation, customer focus, green resource management, green suppliers network are significant in creating value addition and pertaining green value for the entrepreneurs attached to the SMEs. Following table displays the results of the study.

Table 2: Coefficient & Correlation Table

Model variables	Standardized Coefficient	t- Value	P - Value
Constant	0.368	1.612	0.108
Green innovation	0.254	2.082	0.039*
Customer focus	0.097	1.267	0.020*
Green resource management	0.035	1.521	0.010*
Continuous improvement	0.034	0.298	0.106
Leadership and corporate culture	0.036	0.438	0.136
Green certification	0.318	2.962	0.003*
Green supplier network	0.101	1.405	0.042*

Green innovation is prominent in perusing customer willingness (p=0.03). SMEs need to concentrate green creativity and the uniqueness to gain their competitive advantage (Leow, 2020). Fulfilling customer expectation and anticipating the green target market are the way in which enterprises can be profitable and allocative efficient (Juriah & Anis, 2021). Which is acceptable as per the study (p=0.02). green resource management has proven the significant relation towards value creation of SMEs (p=0.01).Usage of green process and technology along the nature friendly as well as sustainable materials would upgrade the goodwill for the enterprise and which is one of the major constraints that help to survive in the competitive market (Barney, 1991). According to Sardo & Serrasquerio (2017) green certification and green standards of the products would highly impact on the profitability and the sustainability of small and medium scale enterprises irrespective to the time scale. The study has a positive correlation among green certification and value creation of the enterprises (p=0.003). Building up the green network through green capital and materials would enhance the enterprises to fabricate the green economy (Chandima, 2019). Green suppliers' network has a significant co relationship towards value creation. Adaptation of the innovative technology, subsistence quality assurance, continual research and development should be focused much though they are challengeable for the enterprises that operate at small and medium scale. When it's considered about green product it can be referred as any products those are manufactured through green technology and that caused no environmental hazards are called green products (Padagama, 2019). Any green product supposed to expose its greenness through eco labeling, certification, co brand, standards and green marketing mixtures to the consumers and to the market. Green marketing is focusing on customer benefits heavily the rate of consumers for certain products shows rapid growth (Schaper, 2017). Going green is a major contributor to the triple bottom line of business as people, profit and planet. Similarly going green requires a substantial shift in corporate culture as well as strategic decisions to be in line with consumers' environmental beliefs and attitudes (Noor, 2015). The entrepreneurs and green entrepreneurs are differed from the way of business initiation and their trading practices. As being the green entrepreneurs it's essential to fulfill the personal expectation in maximizing profit as well as they needs to fulfill the social expectation in maximizing social welfare (Ali & Ralf, 2015). Nearly 30% to 40% increment seen in green trading growth in Sri Lankan context. In deed this can be a processing stage of green revolution of Sri Lanka (Samarasinghe, 2012). In Sri Lanka Green marketing raises gradually the voice against production, consumption, and/or disposal of such products that anyway harm consumers, the society, and the environment. Basically green trading comprises with production of pure and green based quality products in protecting he ecological concern of the environment. With the increased level of environmental pollution and social issues, both consumers and business organizations are concerned with the natural environment in Sri Lanka (Bandara, 2018).

Conclusion

Perceiving and applying the quality concerns to the business functions would not only support for the operational efficiency but also it holds the business at the going concern for a long term. The application of quality management would differ from firm to firm according to the scale, objective and the nature of production. Many entrepreneurs in the present context of Sri Lanka replicate the transformation of entrepreneurship to the green entrepreneurship the importance given by the community. Recognition of top green entrepreneurs would motivate the green entrepreneurs as well the green consumers. The knowledge of quality management based on green and environment friendly measure need to be expatriated to the entrepreneurs and the enterprises as to begin and explore the trade with green value.

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Finance

Impact of risk tolerance and demographic characteristics on the investment behaviour of working women in the Matale district

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Introduction

Investment behaviour is the term used to describe the actions taken by individual investors when they look for, assess, purchase, and evaluate investment items, as well as when they sell them when necessary (Nyamute 2016). This paper is an effort to analyse the impact of risk tolerance and demographic characteristics on the investment behaviour of working women in the Matale district. Working women need to be financially secure and independent due to the changing economic situation. Women's investment preferences have evolved throughout time in terms of their overall profile (Cunha, Meira, and Orsato 2021). Data were acquired from both the working women in the Matale District and the women who had permanent residence in the Matale District but worked in another district. To identify the relationship with investment behaviour, three factors; risk tolerance, demographic characteristics and financial literacy were considered.

A preliminary study utilizing questionnaires and surveys was conducted using 15 respondents. And the ultimate intention was to check whether most working women were investing their money in security and their children's plan. But really, the investment behaviour of working women should be aware of the various investment plans and the financial requirements. Accordingly, this study aimed to reveal the investment behaviour of working women in the Matale district and focus on the demographic characteristics, risk tolerance and financial literacy influencing their investment behaviour. The main objective is, to identify the relationship between risk tolerance and demographic characteristics on the Investment behaviour of working women in the Matale District. Sub objectives are to identify the relationship between financial literacy among Investment behaviour of working women to identify the relationship between risk tolerance and age and to identify the relationship between risk tolerance and monthly income level of working women. Investment behaviour is risky since it depends on the future's unpredictability. The main theories and explanations of investment behaviour are risk propensity, risk preference, and attitude. Investment behaviour examines the interaction of conflicting demographic characteristics, individual awareness, and perceived attitudes toward risk in influencing the stock market behaviour of individual investors (Kengatharan 2019). Along with the investors' cities, income level, and knowledge have positive correlations while having negative correlations with their marital status, gender, age, education, and occupation (Gomes 2001). The gender, age, family size, and social ceremony expenses are statistically significant on the saving and investment decision of high school teachers (Wubie, Dibaba, and Wondmagegn 2015). Risk tolerance is the degree of loss an investor is willing to accept while investing. The ability of an investor to take a risk, which is influenced by a variety of factors, is a major factor in the investment decision (Thanki and Baser 2019). Risk tolerance has a positive significant relationship with the saving and investment decisions of women in Malaysia (Zakaria et al. 2017). Professional women review investment decisions considering their goals and choose investments without taking risks (Anon 2021). The financial literacy level of working women in developing countries is an important factor affecting women's savings and women's investment behaviour (Rai, Dua, and Yadav 2019). Individuals' level of financial literacy has an impact on their awareness of financial products as well as their investing preferences (Chaulagain 2021).

Methodology

The research question of this study is whether there had a relationship between risk tolerance, demographic characteristics and financial literacy on the investment behaviour of working women. In addition, the researcher analyses the relationship between risk tolerance based on age level and income level. The hypotheses developed by the researcher are Ha: There is a significant impact of age level on risk tolerance and Ha: There is a significant impact of monthly income level on risk tolerance. Using the simple convenience sample approach, the primary data was gathered by questionnaires. 200 working women were given an online questionnaire, and 200 of them responded. Investment behaviour and factors influencing investment behaviour were addressed through questionnaire questions. Professional women in Matale District compensate for the study's population. 200 working women make up the sample. Using the SPSS 26 version, the collected data was separated into several categories, tabulated, processed, and meticulously investigated. The data were analysed using simple frequency distribution, descriptive analysis, reliability test, correlation analysis, regression analysis, and hypothesis testing.

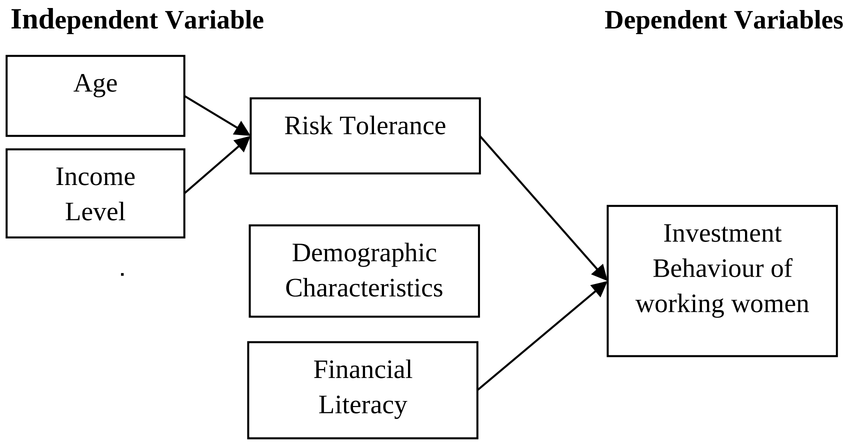

Figure 1: Conceptual Framework

Findings

Reliability essentially assesses the consistency and accuracy of the data. When Cronbach's alpha is greater than 0.7 it means the reliability of internal consistency. According to the reliability test, Cronbach's alpha values for investment behaviour, risk tolerance, demographic characteristics, and financial literacy are .827,.795,.864, and .789 respectively. All Cronbach's alpha value has been greater than 0.7, which indicates that they all exhibit internal consistency. According to the rule, the validity analyses KMO measure greater than 0.5 and the significance value should be less than 0.05, as per the validity test KMO measure 0.628 and the significance value is 0.000, both requirements are met. Therefore, the data set is valid for further analysis.

Table 1: Correlation

		Investment Behaviour	Risk Tolerance	Demographic Characteristics	Financial Literacy
Investment Behaviour	Pearson Correlation	1	.766**	.742**	.668
	Sig. (2tailed)		.000	.000	.000
Risk Tolerance	Pearson Correlation	.766**	1	.569**	.564
	Sig. (2tailed)	.000		.000	.000
Demographic Characteristics	Pearson Correlation	.742**	.569**	1	.513
	Sig. (2tailed)	.000	.000		.000
Financial Literacy	Pearson Correlation	.668	.564	.513	1
	Sig. (2tailed)	.000	.000	.000	

***. Correlation is significant at the 0.01 level (2-tailed).*
Source: SPSS Software

As per table 01, the significance values are less than 0.005 it indicating that all indicates are significant. There exists a strong positive linear relationship between the investment behaviour of working women and risk tolerance, demographic characteristics, and financial literacy and it is 0.766, 0.742 and 0.668 in values respectively.

Table 02 shows the results of the regression model. All indicates are significant because their p-values are less than 0.05. Consequently, the regression equation might incorporate all three variables.

Table 2: Coefficient Analysis

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**Collinearity Statistics**	
	B	**Std. Error**	**Beta**			**Tolerance**	**VIF**
(Constant)	29.032	2.174		2.703	0.000		
Risk Tolerance	0.276	0.057	0.332	1.862	0.000	0.673	1.283
Demographic Characteristics	0.275	0.065	0.287	1.196	0.000	0.351	1.286
Financial Literacy	0.073	0.060	0.073	1.216	0.006	0.452	1.000

a. Dependent Variable: Investment Behaviour
Source: SPSS Software

$$\left.\begin{array}{l}\textit{Investment Behaviour of}\\ \textit{Working Women in Matale}\\ \textit{District (Y)}\end{array}\right\} = 29.032 + 0.276\,X_1 + .275\,X_2 + .073X_3$$

X_1 = Risk Tolerance, X_2 = Demographic Characteristics, X_3 = Financial Literacy

According to the above regression model, when there is no effect considered factors, The investment behaviour of working women is 29.032. When risk tolerance is increased by one unit, the investment behaviour of working women is increased by 0.276 units. When the demographic characteristics are increased by one unit, the investment behaviour of working women is increased by 0.275 units and when financial literacy is increased by one unit, the investment behaviour of working women is increased by 0.073 units.

The R square of this model is 0.672 and it indicates that approximately 67.2% variation of the total variation of the investment behaviour is described by the considered factors of the model. As the value for the R square is more than 60%, It can be concluded that the regression model is well-fitted.
By using hypothesis analysis, the researcher aims to identify whether age has an impact on risk tolerance also whether income level has an impact on risk tolerance. ANOVA test is conducted to examine the hypothesis.

Hypothesis 01:
Ha: There is a significant impact of age level on risk tolerance.

According to the Anova test, the sig value is 0. 0032 is less than 0.005 therefore, it means age level is statistically significant on risk tolerance.

Hypothesis 02:
Ha: There is a significant impact of monthly income level on risk tolerance.

According to the Anova test, the sig value is 0. 071 is greater than 0.005 therefore, it means income level is statistically insignificant on risk tolerance.

Conclusion

Finally concluded that Risk tolerance and Demographic characteristics have a positive significant relationship with the investment behaviour of working women in the Matale district. Furthermore, financial literacy has a positive significant relationship with the investment behaviour of working women in the Matale district. Although age level is statistically significant concerning risk tolerance, income level is statistically insignificant concerning risk tolerance. The limitations of this study are only focused on three factors that impact investment behaviour, Data is collected only from the Matale district, therefore recommended to for academics, evaluate the impact of each demographic characteristic on the investment behaviour of working women and evaluate the relationship among risk tolerance and financial literacy, evaluate the investment behaviour in another district both males and females.

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The effect of financial knowledge, attitude, experience and income level on individual financial behavior: evidence from finance sector work force in Sri Lanka

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Introduction

The theory of financial behavior explains how an individual plans and organizes his/her income in order to meet financial needs. From the perspective of psychology, the goal of financial behavior is to estimate and comprehend the implications of financial markets (Olsen, 1998). Financial Behavior has a significant impact on the well-being of individuals in society, household, nation, and the global community. Financial knowledge, attitude, experience, income and education level have an influence on financial behavior of people. Behavioral finance theory is a branch of psychology that applies to the field of finance (Suryanto ,2017). Financial knowledge, financial attitudes and financial behavior have a reciprocal relationship (Clark & Goulet, 2002).

There are several previous studies which have done relating to this topic area. Arifin (2017) has defined the financial behavior as the capacity of an individual to analyze and understand the total effects of financial action on an individual's conditions and taking correct decisions regarding cash management. According to Tang & Baker (2016), demographic factors, market factors, lifestyle factors and behavioral factors effect on different financial behavior of individuals. Asmin et al. (2021) concluded that financial knowledge has a significant impact on financial behavior because, other than having a positive attitude, knowledge of financial management is as important in one's daily life. Hirdinis & Lestari (2021) concluded that financial attitude influences financial behavior in a positive and significant way. Ameliawati & Setiyani (2018) concluded that when a person is having more experience in finance, he/she is having a perfect behavior in managing finances. Further, Prihartono & Asandimitra (2018) stated that individuals are able to manage their finances well when they are having a higher income.

Financial Behavior has become an important and necessary for all the people. In Sri Lankan context, several studies have done based on various context such as undergraduate students, SME sector employees, government teachers, banking sector etc. But there is no substantive empirical study to analyze the factors affecting individual financial behavior of people in finance sector, Sri Lanka. Since the finance sector workforce engage more in financial activities, the researcher believed that the real picture of financial behavior of individuals can be measured. Therefore, the main objective of this research is to examine the impact of financial knowledge, financial attitude, financial experience and income level on individual financial behavior of people in finance sector, Sri Lanka.

Methodology

This study is a correlational study which aimed to examine a relationship and the unit of analysis is individuals as researcher focused on individuals' behavior. Further, this is a cross-sectional study which the researcher collected data at once. (Sekaran, 2003). Researcher collected primary data through an online questionnaire. As the researcher tried to analyze the patterns of a behavioral aspect of individuals, the most suitable type of data are primary data. Researcher used non – probability, convenience sampling method. The population of this study was the Finance Sector workforce in Sri Lanka which counted around 183,000 people researcher selected sample size as 170 individuals from the population based on non – probability convenience sampling method. (Krejcie et al., 1996)

The conceptual framework of this study consisted with four independent variables which Financial Knowledge, Financial Attitude, Financial Experience and Income Level and the dependent variable Financial Behavior (Hirdinis & Lestari, 2021; Arifin, 2017).

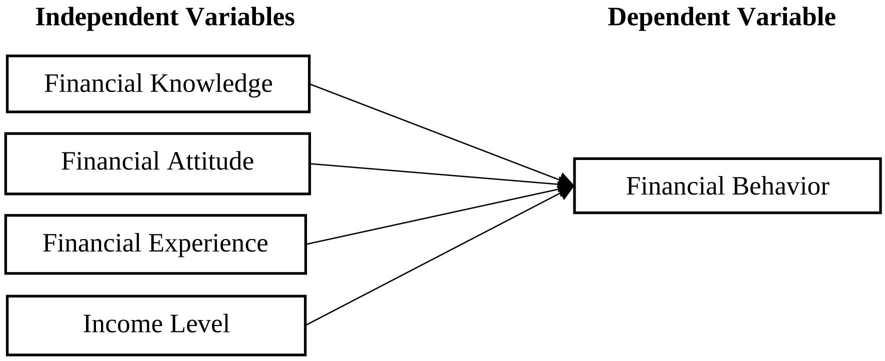

Figure 1: Conceptual Framework of the Study

Researcher developed below four hypotheses to test in order to achieve the research objectives.

H1: Financial Knowledge has a significant impact on Individual Financial Behavior of people in Sri Lanka

H2: Financial Attitude has a significant impact on Individual Financial Behavior of people in Sri Lanka

H3: Financial Experience has a significant impact on Individual Financial Behavior of people in Sri Lanka

H4: Income Level has a significant impact on Individual Financial Behavior of people in Sri Lanka

Findings

According to the findings of Reliability Analysis, there is an excellent reliability of the statements which used to measure the variables as Cronbach's Alpha for the research model is 0.850. According to the normality test, Skewness values of four independent variables and the dependent variable were between -2 and +2 and the Kurtosis values are between -7 and +7. It can be concluded that data collected under the variables are normally distributed. The Variance Inflation Factor (VIF) for all four independent variables were below 2 and the tolerance level for all variables were between 0.65 – 0.8 which means no any significant multicollinearity between independent variables. Researcher conducted the correlation analysis to test the relationship between independent variables and dependent variable using Pearson Correlation Coefficient. Results showed that positive coefficients for all four variables which means there are positive relationships between each independent variable and dependent variable. Finally, researcher conducted the Multiple Regression Analysis and drawn below results.

Table 1: Multiple Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.180	.358		.503	.616
	Financial Knowledge (FK)	.274	.062	.293	4.439	<.001
	Financial Attitude (FA)	.207	.109	.124	1.895	.060
	Financial Experience (FE)	.336	.076	.308	4.435	<.001
	Income Level (IL)	.173	.055	.206	3.177	.002

a. Dependent Variable: FB
Source: Survey Data (2022)

Below research model can be developed according to the results.

$\hat{Y} = B0 + B1FK + B2FA + B3FE + B4IL$

$\hat{Y}$ = *0.180 + 0.274 Financial Kowledge + 0.207 Financial Attitude +0.336 Financial Experience +0.173 Income Level +* $\mathcal{E}i$

$\hat{Y} = 0.180 + 0.274FK + 0.207FA + 0.336FE + 0.173IL + \mathcal{E}i$

The regression equation shows, when all variables of the model is zero, still there is an effect of 0.180 on Dependent Variable.

Table 1 shows all four independent variables are having positive Beta Coefficients. Hence, results shows that all four variables positively influence on Financial Behavior of People in Sri Lanka. The P (Sig.) value of Financial Knowledge, Financial Experience and Income Level are less than 0.05 and t values are higher than 1.96 which concludes that those variables significantly influence on Financial Behavior of people in Sri Lanka. However, the P (Sig.) value of Financial Attitude is higher than 0.05 (0.60) and t value is less than 1.96 (1.895). That shows that Financial Attitude does not significantly influence on Financial Behavior of people in Sri Lanka. The results drawn from this study are aligned to the existing literature of Hirdinis & Lestari (2021), Arifin (2017), Asmin et al. (2021), Prihartono & Asandimitra (2018b) and Ameliawati & Setiyani (2018) which stated that there is a significance influence from Financial Knowledge, Financial Experience and Income Level on Individual Financial Behavior. However, the results drawn from this study on Financial Attitude (FA) is not aligned with the existing litearuture Hirdinis & Lestari (2021).

According to the results drawn from entire study, results of the Hypothesis Testing were as follows.

H1: - Accepted, H2: - Rejected, H3: - Accepted, H4: - Accepted

Conclusion

The results of the study indicate that Financial Knowledge, Financial Experience and Income Level significantly influence on Financial Behavior of people in Sri Lanka. But, Financial Attitude does not significantly influence on Financial Behavior of people in Sri Lanka.

The findings of this study will be beneficial for financial institutions to predict their future activities since the performance of those is depending on the financial behavior of individuals. Researcher suggested to improve financial knowledge of people in Sri Lanka conducting seminars, workshop symposiums and improve the financial experience by motivating to use credit cards and debit cards for daily spending. Further, researcher suggests to conduct a study on the same topic area using higher number of respondents which covers individual in all sectors of the country and also further studies can be done on Financial Behavior of Middle Income Earners in Sri Lanka, the Impact of economic downturn of Sri Lanka in 2021 -2022 on Financial Behavior of People and what are the factors affecting Personal Finance Management of Individuals in Sri Lanka.

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Impact of investment behavior of investors on investment decision making: with special reference to generation Y investors in Sri Lanka

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Introduction

Investment decision making is a challenging activity for investors, especially in the dynamic environment with multidimensional alternatives. Therefore, it is indeed important to assess whether people are educated enough to navigate everyday financial decisions effectively. Studies done by Meditions et al. (2007) and Evans (2006), demonstrate investors utilize repeated patterns of irrational behavior and deviate from rationality, and it will raise the risk associated with investment and cause volatility in the financial markets. Investors not following the traditional trends of decision making when making investment decisions and deviating from efficient market hypotheses is a major problem. When investors fail to make rational decisions in the financial market, it becomes a critical issue in managing finance and it creates failures in generating accurate and timely information (Rana et al., 2014).

Having better knowledge regarding all factors which affect the investment decision making behavior of individuals in making rational investment decisions is very important to the stability and growth of the financial markets and the economy as a whole (Cao et al., 2020). According to the Journal of Service Management, Generation Y is defined as the generation of people born in the 1980s and early 1990s. In the phase of economic development, it is important to assess whether the future investors, movers and transformers of the economy, have the necessary knowledge of financial concepts and perform well in order to make rational investment decisions in the financial market. To the researchers' knowledge, there were no previous studies carried out covering a broader aspect, including financial literacy, risk tolerance and behavioral factors on financial decision making among generation Y investors in the Sri Lankan context. The researchers investigated how financial literacy, prospect factors, and behavioral factors influence generation Y investors' investment decisions in Sri Lanka.Therefore, the core objective of this study is to identify deterministic factors influencing the investment behavior of Generation Y investors in Sri Lanka.

This research will facilitate in recognizing the use of investment behavior of individuals in investment decision making and will help to understand how financial literacy, risk tolerance and behavioral factors will affect the investment decision making. The research questions are;

RQ01: Does financial literacy have a significant impact on investment decision making?

RQ02: Does Risk Tolerance have a significant impact on investment decision making?

RQ03: Does behavioral factors have a significant impact on investment decision making?

To gain a better understanding of how generation Y investors in Sri Lanka make investment decisions, researchers looked at some of the most influential factors suggested by various theories, including the Life Cycle Hypothesis, traditional finance, behavioral finance, efficient market hypothesis, and prospect theory. According to previous researchers, investors in the markets are not necessarily rational in their decisions. Therefore, other factors such as financial literacy, risk tolerance, behavioral factors might affect them when they make their investment decisions. Studies conducted by Kumari (2020) concluded that financial literacy positively and significantly influenced undergraduates' investment decisions. Studies conducted by Newton (2016) and Hala et al. (2020) concluded that risk tolerance has a positive and significant effect on investment decision making. Newton (2016) further explained that one of the possible barriers for generation Y investors to make rational investment decisions is the biases related to behavioral factors.

Methodology

Through reviewing existing studies and theories, the following model was developed to carry out the research.

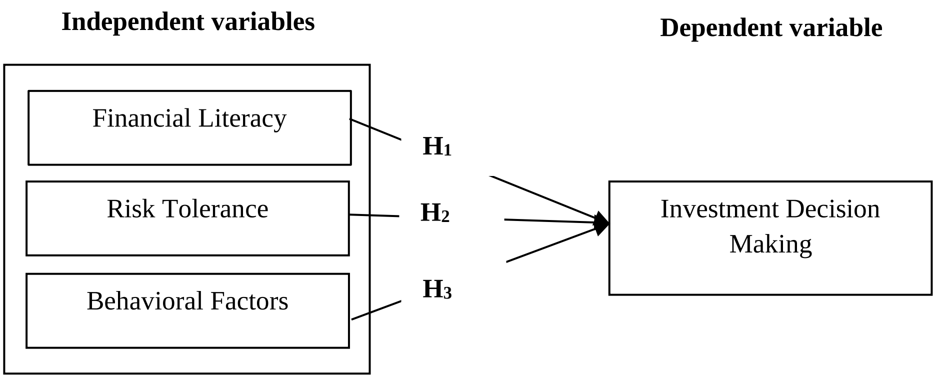

Figure 1: Conceptual framework

The selected dimensions of the investment behavior which are, financial literacy, behavioral factors and level of risk tolerance are identified as the independent variables and the investment decision making is identified as the dependent variable of the study. Moreover, under the behavioral factors, researchers have considered three sub-dimensions which are, overconfidence bias, anchoring and herding behavior, The target population of the study is the generation Y investors in Sri Lanka. For the fulfillment of the objectives of the study the researchers have used the convenient sampling method. The sample size comprises 200 individual investors who are currently age in between 23 – 40 in Sri Lanka. This data was collected using a structured questionnaire This study employed descriptive statistics, correlation analysis and multiple regression to analyze data.

Findings

To test the reliability of the variables, Cronbach's Alpha value was used. Confirming the internal consistency, values for all variables were reported greater than 0. 75. To determine the nature and strength of the relationship between independent variables and dependent variable, Pearson's correlations were calculated. The results of the Pearson's correlation value indicate that the financial literacy is having a moderate positive relationship with the dependent variable, investment decision making and the rest of the independent variables are having strong positive relationship with the dependent variable.

Table 1: Correlation Matrix

	ID	FL	BF	RT	OB	AN	HV
ID	1	.591**	.765**	.612**	.679**	.750**	.720**
FL	.	1	.720**	.544**	.675**	.699**	.647**
BF			1	.590**	.944**	.932**	.929**
RT				1	.479**	.604**	.576**

Source: SPSS Output, (2022)

Results of the regression analysis showed that 62.6% of the investment decision making is explained by investment behavior. Further, ANOVA table reflects that significant value of the model was 0.000 which is less than 0.05. Therefore, it can be concluded that the model is significantly.

Table 2: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.791[a]	.626	.619	.35098

Source: SPSS Output, (2022)

Table 3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.605	.228		2.651	.009
	FL	.024	.072	.022	.332	.740
	RT	.268	.063	.243	4.245	.000
	BF	.556	.063	.606	8.762	.000

Source: SPSS Output, (2022)

Table 4: Hypotheses Testing

Hypotheses	Regression Result	Result	Accepted/Rejected
H1: There is a significant impact of financial literacy on investment behavior of individuals in making investment decisions.	insignificant	(0.74 > 0.05)	rejected
H2: There is a significant impact of risk tolerance on investment behavior of individuals in making investment decisions	Positive significant	(0.00 < 0.05)	Accepted
H3: There is a significant impact of behavioral factors on investment behavior of individuals in making investment decisions.	Positive significant	(0.00 < 0.05)	Accepted

Source: Researcher constructed output, (2022)

Findings of the study revealed that except “Financial literacy” all other selected independent variables have positive and significant relationships with investment decision making. Even though there is a positive relationship between the financial literacy and investment decision making the variable was not found significant. This is supported by previous study conducted by Hala *et al.* (2020). They concluded that, loss and regret aversion variables have a positive and significant effect while financial literacy variables have no significant effect towards investment decision making.

Conclusion

Sri Lanka is a developing economy in Asia with a different ethnicity and many cultural characteristics similar to other Asian countries. In this study, researchers focused the investigation of factors influencing individual investment behavior on investment decision making with special reference to generation Y investors in Sri Lanka. The entire study was carried out based on 200 individual investors who are in the group of generation Y. The researcher discovered a positive and significant relationship between risk tolerance and behavioral factors such as overconfidence bias, anchoring, and herding behavior with investment decision making among generation Y investors in Sri Lanka while carrying out the research objectives. Results proved that financial literacy has a positive yet insignificant relationship with investment decision making. Therefore, the researcher concludes that generation Y investors may deviate from rationality because of these behavioral biases they possess when making investment decisions, even though they are financially literate.

It would be useful if future researchers could conduct their studies in the same context with an improved sample size. The results of the study have proved the existence of behavioral biases. Therefore, necessary actions have to be taken to educate future investors about the behavioral biases they possess when making investment decisions. Authorized parties have to take the necessary steps to develop policies to increase awareness and knowledge of the above matter. Since there are a considerable number of behavioral biases that exist other than the ones that are already tested in the study, future researchers can conduct deeper and broader observations on other investor sentiments.

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Impact of microfinance on women's empowerment during the COVID-19 pandemic

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Introduction

In the recent past, considerable interest has grown in microfinance as a means of eradicating poverty and empowering women. The COVID-19 outbreak has severely impacted the microfinance industry. Economic progress and nation-building depend on the active involvement of women in the workforce. However, due to the pandemic, the level of poverty among women is rising as a result of the severe disruption of women's entrepreneurial activity. The main goal of this study was to determine how microfinance affected women's empowerment during the pandemic by mainly focusing on the Sri Lankan context. The study focused on four independent factors, namely micro-credit, micro-savings, micro-insurance, and training. Women's empowerment was the sole dependent variable that was included. In particular, the study focused on the COVID-19 pandemic period.

Microfinance institutions and financial inclusion in general, are indeed impacted by the present crisis given the nature of their portfolios and the activities of their clients (Microfinance, gender equality, and COVID-19: the unravelling of progress on women's micro-entrepreneurship, 2021). Although data on the COVID-19 pandemic's effects on microfinance institutions are not yet available, has been emphasized that one can anticipate a further decline in microloans in the years to come (Bayona, 2020). The most recent research has shown that microfinance can effectively increase women's empowerment in COVID-19. However, there are no significant factors that might be used to determine if microfinance activities have significantly aided women's empowerment throughout the pandemic.

Even though related studies have been carried out in the global context (KARIM, 2021) (Mustafa, 2018), a dearth of research has been conducted in the Sri Lankan context. The empirical literature in Sri Lanka contains several studies on the relationship between microfinance and women's empowerment, and the majority of these studies supported the assumption that microfinance had a good impact on women's empowerment. However, the current study focused on microfinance for women's empowerment during the COVID-19 pandemic. Therefore, the objective of the research studies was to investigate the relative impact of micro-credit, micro-savings, micro insurance, and training on women's empowerment during the COVID-19 Pandemic Period.

Methodology

This study sought to find out what are the microfinance factors which significantly affected women's empowerment during the COVID-19 pandemic and also the sub-questions to, check whether micro-credit, micro-savings, micro insurance and training facilities affected women's empowerment during a pandemic. Women's empowerment is seen as the dependent variable, with microfinance as the independent variable. Businesswomen engaged on a small scale in Sri Lanka are the unit of analysis. The researcher has chosen to focus on women who engage in microbusinesses in Sri Lanka as the study's overall population. The researcher used a convenient sampling method with 100 women who are engaged in microbusinesses in Sri Lanka. The primary data was collected through a self-administered questionnaire using Google forms. Viber and WhatsApp were the social media technologies used to distribute the survey. Data analysis was done using quantitative research methods. Consequently, this study used correlation analysis and multiple regression analysis to test the hypothesis.

Findings

According to the study's analysis of respondents, it was noted that most of the respondents were between the ages of 18 and 25. It accounted for the highest proportion of respondents (46%), while the age range of 26 to 35 accounted for the second-highest proportion (38%). Geographically, Matale district had the largest percentage of respondents (27%) and Kurunegala district had the second-highest percentage of respondents (12%), The analysis of the data was done using inferential statistics. "Cronbach's Alpha" values were used by the researcher for each factor to assess reliability. The overall significance of the model was evaluated using an ANOVA analysis. Correlation and regression analysis were carried out to evaluate the relationship between the independent and dependent variables. This study's main objective was to look at how microfinance affected women's empowerment throughout the COVID-19 pandemic phase. The researcher developed four hypotheses in order to investigate the significance of the effects of microcredit, micro-savings, micro-insurance, and training on women's empowerment during the COVID-19 outbreak. As a result, the regression analysis has produced the results listed below.

Table 01. Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	-.180	.220		-.821	.414
Micro Credit (X1)	.237	.082	.256	2.884	.005
Micro Insurance(X2)	-.019	.088	-.015	-.216	.830
Micro Savings(X3)	.360	.089	.336	4.056	.000
Training(X4)	.471	.112	.350	4.205	.000

a. Dependent Variable: Women Empowerment

Source; SPSS Output, 2022

According to the research finding, it was revealed that micro-credit, micro-savings, and training have a significant positive impact on women's empowerment during the COVID-19 pandemic period, while micro-insurance has been identified as a non-significant variable.

Microcredit was identified by Hashemi in 1996 as an essential element of women's empowerment. Ali (2012) revealed that micro-credit services in Sri Lanka have a favorable effect on women's empowerment. Yogendrarajah (2012) has also demonstrated how giving people a little loan for a shorter period of time enhances their quality of life. Many researchers have discovered that microcredit has a positive effect on poverty reduction (Awan, 2015; Alnaa, 2015; Idris, 2015). The current research study also proved that microcredit in Sri Lanka had a favorable effect on women’s empowerment even throughout the pandemic era. Micro-savings were another element that affected the empowerment of women during the pandemic. In a study carried out focusing on microbusinesses in Ampara district in Sri Lanka, Perera (2020) also stressed the relationship between microfinance savings and women's empowerment. Previous researchers mentioned that micro insurance could result in a situation where commercial profit is combined with the social advantages of reducing poverty among the rural poor through methodical risk management. (Amudha, Selvabaskar, & Motha, 2014). On the other hand, Chandrarathna (2021) has shown that micro-insurance considerably increases the likelihood that female business owners in the Colombo District will be successful in their ventures. Bernard (2017), however, asserts that there is no link between microinsurance and the empowerment of women. The current study also highlighted the fact that micro-insurance was not a significant component of women's empowerment in Sri Lanka throughout the pandemic period. According to Thilakaratne (2005), the availability of training resources is the most significant factor in women entrepreneurs' satisfaction. According to Sridevi (2005) and Khan (2011), training assists microfinance clients and has a positive impact on business expansion. Women may also benefit from the training programmes offered by microfinance organizations. Furthermore, the results of the current study prove that training has played a vital role in empowering women during the pandemic.

Conclusion

Overall, the results of the study showed that microfinance had a favorable effect on women's empowerment during the COVID-19 pandemic. Therefore, it can be concluded that micro-credit, micro-savings, and training have had a significant positive impact on women's empowerment during the COVID-19 pandemic period, while micro-insurance was identified as not a significant variable. The primary contribution of this study was to fill the gap in the literature due to the minimum amount of research on the effects of microfinance on women's empowerment during the COVID-19 pandemic period in the Sri Lankan context. Additionally, this study can be used as a resource for all female entrepreneurs for the successful management and expansion of their businesses. Microfinance institutions can be used to create necessary facilities for the development of women's entrepreneurship and to maintain that infrastructure so that such businesses can survive and grow. Hence, these findings ought to be helpful for microfinance institutions as they rank their service offerings and reorganize their operations in light of the COVID-19 pandemic's results.

Additionally, this study will ultimately be helpful for understanding and comparing the elements affecting women's empowerment during the COVID-19 pandemic for both local institutions and other international micro finance institutions. These research findings will help policymakers adjust how their policies are implemented to manage risk in unforeseen circumstances. Therefore, as a policy recommendation, it can be stated that regulators of microfinance institutions should create a policy that will regulate the rate of interest charged. The most recent technology should be adopted by microfinance organizations to facilitate electronic fund transfers. It should provide the opportunity for more business women to get training and so gain empowerment. Microfinance institutions should lower the cost of training sessions or offer them as a complimentary free service to all of their clients. Micro-savings should be redesigned to better suit the demands of the client, making withdrawal procedures simple and should shorten the time required for follow-up withdrawals in the event of any unforeseen circumstances.

The research study was, however, constrained by the sample's restrictions, access and time constraints, primary data collection, wider coverage, and political conditions. On the other hand, by taking these restrictions into account, future researchers will have the opportunity to conduct similar research in numerous locations, focusing on different business areas. It is also possible to compare pre-and post-pandemic conditions in the same research study to determine the type and extent of microfinance's impact on women's empowerment. Other external variables can also be incorporated into the model, such as infrastructure, knowledge, and education, which also might have an impact on the empowerment of women.

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Impact of financial variables on systematic risk: A study based on companies listed in Colombo Stock Exchange

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Introduction

The systematic risk of a firm is extremely important because it illustrates the risk that the company faces in comparison to the risk that the market faces. There are some researches in the international context (Gu & Kim, 1998; Chiou & Su, 2007). Still, there is a lack of studies on the topic of the impact of financial variables on systematic risk in the Sri Lankan context. Therefore, the objective of this study is to examine the impact of financial variables on systematic risk in companies listed in the Colombo Stock Exchange. The researcher selected four main variables, liquidity, profitability, operating efficiency, and financial leverage based on the (Biase & Apolito1, 2012).This study primarily tries to answer the question "Is there any impact of financial variables on systematic risk in companies listed in the Colombo Stock Exchange" .

The Theoretical framework is based on the Capital Asset Pricing Model (CAPM) (Sharpe, 1964; Lintner, 1965). Systematic risk is a stock's volatility due to the market's volatility denoted as beta. Previous research has demonstrated that the number of firm-specific fundamentals has an impact on systemic risk, i.e. the beta. To investigate the influence of financial policies on systematic risk, there are different types of variables that have been considered in prior studies (Logue & Merville, 1972; Lee & Jang, 2007). This study calculates companies return by using collected monthly closing prices.

In Sri Lankan context, stock return cannot be calculated using Capital Asset Pricing Model due to the difficulty of calculating each firm specific risk-free rate. As a result, we can calculate return using Ln function (Dayarathne & Darmarathne , 2008).

$$\boldsymbol{Stock\ Return} = \boldsymbol{LN}(\boldsymbol{P}(\boldsymbol{t})/\boldsymbol{P}(\boldsymbol{t}-\mathbf{1}))$$

LN = Natural Logarithm
P(t) = Closing share price of current month
P(t-1) = Closing share price of previous month

Beta has calculated as standard deviation using Excel based on the monthly returns.

Methodology

The population for this study consisted of 97 companies that were listed on the Colombo Stock Exchange in the Food, Beverage, and Tobacco sector, the Capital Goods sector, and the Material Sector based on the Market Capitalization. Out of these 97 companies, a sample of 68 companies were chosen using a simple random sampling and availability of resources. The most recent five years of data, from 2017 to 2021, were covered in this study. Data was gathered using secondary sources.

With the help of reviewing existing studies and theories, the following model was developed to carry out the research.

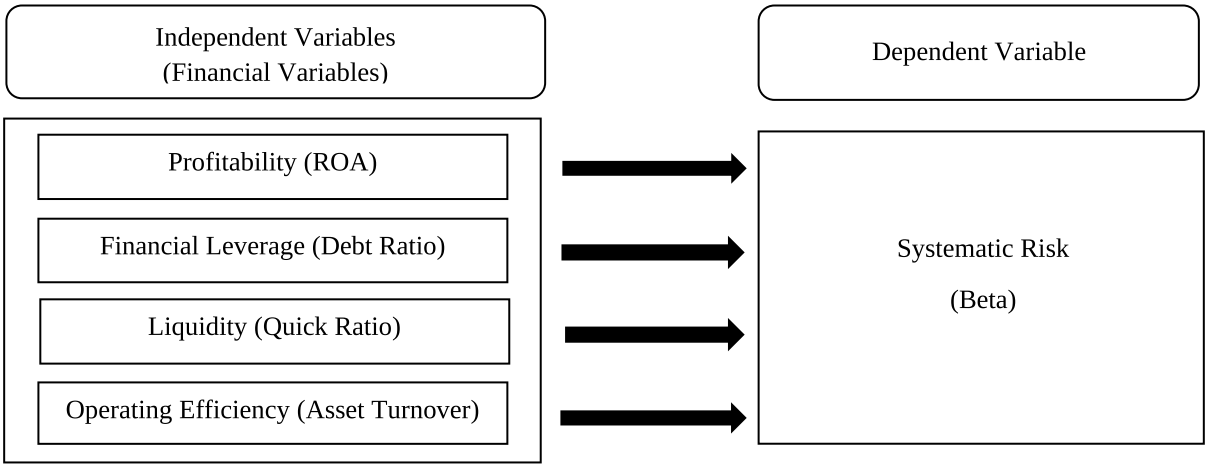

Figure 7: Conceptual framework

Source: Researchers Developed (2022)

The following model addressed in this study.

$$\boldsymbol{Beta = \alpha + \beta_1 PF + \beta_2 FL + \beta_3 LQ + \beta_4 OE + \varepsilon}$$

Where,
dependent variable = Beta = systematic risk, α = the intercept coefficient, β = coefficients of the other independent variables, PF =Profitability, FL = Financial Leverage, LQ = Liquidity, OE = Operating Efficiency

Based on the result, following model has proposed.

$$\boldsymbol{Beta = 0.5767 - 0.0118LQ - 0.111OE + 0.0412}$$

The development of the hypothesis in this study base on earlier studied which shown as follow,

H1 - There is a significant impact of financial variables on systematic risk.

H1a - There is a significant Negative impact of Profitability on systematic risk.

H1b - There is a significant Positive impact of Financial leverage on systematic risk.

H1c - There is a significant Negative impact of Liquidity on systematic risk.

H1d - There is a significant Negative impact of Operating efficiency on systematic risk.

H2 - There is a significant relationship between financial variables and systematic risk.

Findings

Descriptive Statistics

The descriptive statistic method takes into consideration the mean, median, maximum, minimum, and standard deviation. According to the descriptive analysis, the mean measure of systematic risk for the sampled three-sector companies is 0.42128, with a range of 0.00 to 4.0602. On the other hand, the profitability of the sampled companies ranged from -3.064216 to 6.083798 with a mean of 0.074593. That indicates that the average rate of return on investment is 7.46%. Then the financial leverage has a mean value of 0.2111 and the variability of its standard deviation is 0.4856. That means an average of 48.56% of the assets are financed by debt. Liquidity varies from 0.0445 to 16.947 with an average score of 1.4815 and a standard deviation of 2.2877, which indicates the listed companies on average have enough cash and receivables to cover their current liabilities. Ultimately, the operating efficiency of the sampled companies ranges from 0.0015 to 6.0837 with a mean of 0.9427.

Correlation Analysis

The use of a correlation helps determine the kind of link that exists between the variables in this study, as well as its direction and the significance of that link. According to results the operational efficiency and standard deviation have a high correlation of 0.2042. At the 0.05 and 0.01 levels, the significant value of 0.204 for the correlation coefficient of asset turnover ratio revealed that systematic risk had an insignificant negative correlation with operating efficiency. This conclusion contradicted prior findings (Chee-Wooi, Hooy, & Lee, 2010; Nawaz, et al., 2017). The liquidity variable's correlation coefficient was -0.0281, with a significant value of 0.6047, indicating that the quick ratio had an insignificant negative correlation with systematic risk at the desired levels, as their significant values were greater than 0.05, implying that these variables had no correlations with systematic risk. Financial leverage had an insignificant negative correlation between leverage and systematic risk.

Regression Analysis

The researcher used the regression method to examine the relative strength of the independent variables' effects on systemic risk. The Hausman test is used to choose between fixed and random effect models. The null hypothesis for the Hausman test was that the random effect model was favoured over the fixed effect model. Therefore, the random effect model was proposed.

Table 1: Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.576741	0.041277	13.97248	0.0000
PF	0.039259	0.043908	0.894107	0.3719
FL	-0.171331	0.084313	-2.032095	0.0429
LQ	-0.011855	0.008543	-1.387638	0.1662
OE	-0.111006	0.027190	-4.082667	0.0001

Source: E-views Data Analysis

The R-squared value implies that all explanatory variables explain for 5.81% of the variance in systematic risk. The adjusted R-squared is 0.04689, indicating that two significant variables which financial leverage and operating efficiency account for 4.689 percent of the variance in systematic risk, but profitability and liquidity are not. The value of F-statistics is 5.169, demonstrating that the whole model is significant.

When profitability has a coefficient of 0.03926 which rises when the beta of those three sectors rises in the study. Financial leverage has a -0.1713 coefficient which is negatively linked with systematic risk, which means that as Financial leverage increases, the systematic risk of these three sectors decreases when other parameters remain constant. The third variable demonstrates that liquidity is adversely associated with beta. The results demonstrate that increasing liquidity reduces systematic risk, but the outcomes are not statistically significant (0.0429). Operating efficiency has a considerable and negative impact on systemic risk, which is -0.1110 coefficient.

Conclusion

A firm's purpose is to maximize its return for both the firm and its investors. When a high expected return is combined with a low risk, the highest return can be achieved. Data from the Colombo Stock Exchange on 68 non-financial corporations from 2017 through 2021 is used. According to prior research, six hypotheses have been developed to test the above-mentioned factors. Estimation methods include descriptive statistics, correlation, and regression analysis. According to regression analysis, there is an insignificant positive relationship between profitability and beta, a significant negative relationship between financial leverage and beta, an insignificant negative relationship between liquidity and systematic risk, and a significant negative relationship between operating efficiency and beta. According to Pearson Correlation, profitability, financial leverage, and liquidity are insignificantly affected by systematic risk. Operating efficiency has a significant influence on beta. The findings showed that there are negative associations between beta and the variables of profitability, financial leverage, liquidity, and operating efficiency of firms listed on the CSE. Based on the results, Investors should retain sound knowledge of systematic risk and return in order to make the right judgments about which firms to invest in. Leaders in the industry should strive to manage a competitive market. Only non-financial businesses were included in the research and considered a few independent variables are limitation of this study. All determinants of systematic risk were not being taken into consideration. Therefore, future researchers can expand their studies based on the findings of this research.

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Impact of liquidity on firm's profitability: With special reference to listed manufacturing companies in Sri Lanka

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Introduction

All corporate organization's activities depend heavily on liquidity and financial leverage, therefore, for an entity to operate efficiently and successfully, its financial managers and owners must demonstrate tremendous concern for the results of the firm's performance. Managers are the Company's decision-makers. They have many responsibilities and duties. Working capital is a special responsibility of managers in management. Therefore, executives should be worried about the company's short-term and long-term financial positions, since the short-term is the foundation for long-term operations and survival. Managers are responsible for ensuring the continuous running of the production cycle efficiently and quickly addressing the short-term financial obligations as well as maximizing the level of profit to ensure the company's prosperity.

The assets required to ensure the payment of debts to persons and organizations that it interacts with over the course of business and production are available to a firm with a high solvency position. In contrast, if a company's financial resources are insufficient to cover its debts, it may lose its solvency and shortly declare bankruptcy. The overall goal of the study is to determine the impact of liquidity ratios on the profitability of publicly Manufacturing Companies in Sri Lanka. For this purpose, two different forms of liquidity ratios were used by the Researcher. The General objective is to identify the impact of liquidity ratios on the Profitability of listed manufacturing companies in Sri Lanka. Researchers expected to use two types of liquidity ratios for achieving this objective. There are Current ratios and quick ratios for used calculating the liquidity position of companies.

The majority of theoretical and empirical studies support the premise that liquidity might positively affect company profitability. The panel data approach and multiple regression analysis were used to conduct the study's analysis of the data. According to the findings of the research, factors such as firm size, cash conversion cycle, current asset ratio, and current asset turnover were found to have a favorable (Hongl & Sena , 2019) and significant influence on a company's overall performance.

Liquidity plays a vital role in the successful operation (Akinleye, 2019) (Hamza, 2020) of any business venture. Bhundia (2012) defines liquidity as the ability to meet expected and unexpected demands for cash through ongoing cash flow or the sale of an asset at fair market value. Liquidity means how quickly you can get your hands on your cash which can be expressed in terms of ratios, namely, current ratio, cash ratio, free cash flow, etc. The current ratio is the ratio of the current assets to the current liabilities and it measures the margin of liquidity; Cash Ratio is the ratio of a company's total cash and cash equivalents to its current liabilities and free cash flow represents the cash a company generates after cash outflows to support operations and maintain its capital assets.

According to Malik (2011), profitability is one of the most important objectives of financial management since one goal of financial management is to maximize the owner's wealth, and profitability is a very important determinant of performance. Therefore, insurance companies are important to both businesses and individuals as they channel funds and indemnify the losses of other sectors in the economy and put them in the same positions as they were before the occurrence of the loss. In addition, insurance companies provide economic and social benefits to society by preventing losses, reducing anxiety and fear, and increasing employment.

Methodology

This study focused primarily on the liquidity and profitability variables in Sri Lanka's listed manufacturing firms. According to this research topic, data are collected from the firm's annual reports; financial statement balance sheets of 20 companies in Sri Lanka manufacturing companies for the period of five years from 2017-2021. The secondary data which is essential to identify the literature related to the research will be collected through various published and unpublished research, journals, books, and newspaper articles. The capacity to propose or formulate an idea or notion is known as conceptualization. The influence of Liquidity characteristics on profitability is defined using the following ideas or variables.

This study targeted the listed manufacturing companies on Colombo Stock Exchange (CSE), Sri Lanka. The study was composed of twenty manufacturing companies from the manufacturing sector of CSE for the period of five years from 2017-2021. In CSE, 283 companies are listed under the 20 sectors. Among them, 20 companies are listed in the manufacturing sector. This Population is 31 companies; 20 manufacturing companies were selected to gather the secondary data.

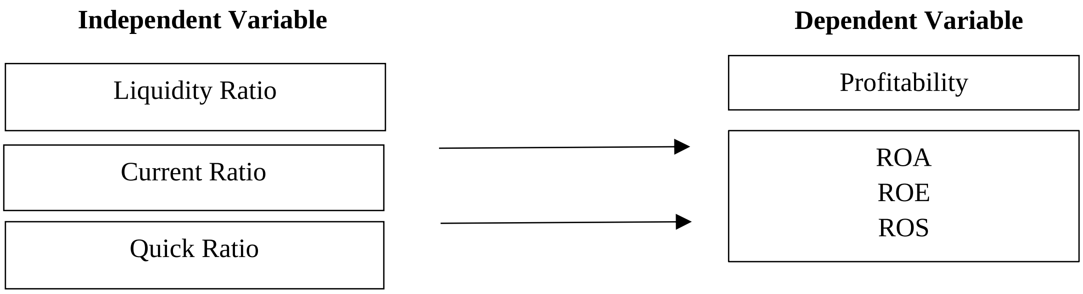

Figure 1: Conceptual framework

Sources: developed by the authors (2022)

Model Specification,

Under the model development

$P= \beta 0+ \beta\ 1LR+ \beta\ 2LR\ \mathcal{E}$……….

P=Profitability
L=Liquidity

$ROA= \beta 0+ \beta 1CR+ \beta 2QR\ \mathcal{E}(I)$
$ROE= \beta 0+ \beta 1CR+\beta 2QR\ \mathcal{E}(II)$
$ROS= \beta 0+ \beta 1CR+\beta 2QR\ \mathcal{E}(III)$

Where:
ROA = Return on Assets, ROE = Return on Equity, ROS = Return on Sales, CR = Current Ratio, QR = Quick Ratio, ε = Error Term, ε constant β1, β2 are coefficients of variables.

Findings

To analyze the correlation between independent and dependent variables, Pearson's correlation coefficient was used. The correlation value between CR and ROA is 0.209. It indicates that there is a significant and weak positive relationship between CR and ROA. The correlation value between CR and ROE is 0.150 and it indicates a significant and weak positive relationship between above CR and ROE. The correlation value between CR and ROS is -0.164 and it indicates an insignificant and weak negative relationship between above CR and ROS. The correlation value between QR and ROA is 0.248 moderate positive correlation & indicates a significant & positive relationship between QR & ROA. The correlation value between QR and ROE is 0.188 moderate positive correlation & it indicates a significant & positive relationship between QR and ROE. Another one is the Correlation value between

QR and ROS is -0.175-week negative correlation & which indicates the insignificant relationship between QR and ROS.

Table 1: Results of Correlation Analysis

Correlation Probability	ROA	ROE	ROS	CR	QR
ROA	1.000000				
ROE	0.816677	1.000000			
ROS	0.075343	-0.015859	1.000000		
	0.4563	0.8756			
CR	0.209702	0.150952	-0.164368	1.000000	
	0.0363	0.1338	0.1022		
QR	0.248200	0.188855	-0.175920	0.986534	1.000000
	0.0128	0.0599	0.0800	0.0000	

Sources: developed by the author (2022)

The regression analysis shows that there are weak positive correlations between the independent variable’s Current ratio and Quick ratio with dependent variables’ Return on Assets, Return on Equity, and Return on Sales. However, the individual significant value under coefficients tables shows that there is a significant relationship between the Current ratio and Quick ratio with each dependent variable under three models, Return on Assets, Return on Equity. Further, there is no significant relationship between the Current ratio and Quick ratio with each dependent variable's Return on Sales. Generally, manufacturing companies hold a higher amount of inventory level.

This study shows that there is a significant relationship between CR and QR and the ROA based on the P-value. They are 0.02 and0.009 respectively. It shows that there is a significant relationship between CR and QR and the ROA based on the P-value. There are 0.028 and0.013 respectively. However, when it is considered the individual significance of each factor, there CR and QR have an insignificant impact on ROS since it has a p-value greater than a 95% confidence interval.

Conclusion

The study on Liquidity and financial leverage in manufacturing firms are the common issues facing the survival and operations of firm performance with which information on them is seriously hidden. This paper investigated the effect of liquidity and financial leverage on the performance of manufacturing firms quoted on the Ghana Stock Exchange from six different sectors. The statistical results of the study indicated that liquidity (LIQ) measured by current assets to current liabilities has a positive significant effect on return on equity (ROE) used as a proxy for firm performance.

The scope of the study ought to be broadened by further refining the framework that was utilized in this study and investigating extra facets of this domain. It is possible to convey a good comprehension of such difficulties if it is done in this manner. There is no question that the population of the study ought to be broadened to include listed companies in every industry. It is important to choose a sample that is as representative as possible. The increase in the size of the population will help to contribute to the reduction of potential sampling or non-sampling errors, such as response errors, measurement errors, population definition errors, data analysis errors, and so on. The research shouldn't be restricted to using only one data source like it was for this study, which relied on annual reports. It is better to rely on primary data since it is more powerful because it is acquired for a specific study objective than it is to rely on secondary data.

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Impact of microfinance on household income: Special reference to Kopay DS division in Jaffna district

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Introduction

A Micro Finance Institution (MFI) is vital to provide the financial and non-financial services to poor in developing countries. It focuses on micro credit, savings and insurance and other financial and non-financial services to the low-income people of a country. More than Thirteen (13) million micro entrepreneurs worldwide have benefited through microcredit, by using the loan facilities in order to improve their wealth and their families out of poverty (Rathiranee & Semasinghe, 2015). Microfinance is not a new concept. It has existed since the 18th century. The first organization to receive attention was the Grameen Bank, which was started in 1976 by Muhammad Yunusin Bangladesh. It is visible that, although few are enjoying in a well-standardized lifestyle, many are living even without one-time meal in our society.

In Sri Lanka there is variety of MFIs providing financial and non-financial services for Poor people.AccordingtoYogendrarajah(2014)andPremaratne(2009),Suchinstitutionsare as follows: Licensed Commercial banks (eg:-HNB), Licensed specialized banks (eg:-RDB), Registered Finance Companies(eg:-The Lanka Orix and Leasing company, SANASA/TCCS, Samurdhi bank Societies (SBSs), Cooperatives, CRB, Women's Development Cooperatives, Other MFIs (NGOs/Limited Liability companies/Companies limited by guarantee). Income includes every form of income, e.g., salaries and wages, retirement income, near cash government transfers like food stamps, and investment gains. Generally, people can use their income to consume the day-to-day expenditures and any excess income could be saved by them in any financial institution like banks. Therefore, income level can be measured by the extent of increase or decrease in earnings or profit, saving, consumption of the people. Thus, this study attempts to investigate whether the microfinance impacts on household income level on the Kopay Ds division in Jaffna District.

There are many arguments on microfinance and the result has been an immense debates and inconsistent. Morduch(1998) argues that access to credit assists poor to smooth their income and consumption. Khandker (2005) also emphasizes that microcredit reduces the poverty among poor by increasing consumption and growing income. On the other hand, Ditcher (2007) strengthens that the provision of credit may jeopardize the livelihood of the poor by putting them further down in the valley of debt thus keeping them below poverty line instead of taking them out. Likewise, Khandker (1998) stresses that microcredit program should not be the sole instrument of poverty reduction.

Further, there are most of the researches have been done in the microfinance in global level as well as in the Sri Lankan level, however there is a limited Knowledge on the household income and poverty through the microfinance programs in Kopay DS Division. Since 39.47% of the total population of Kopay DS division is fallen into, the category of income is Under Rs. 5000 per month as at December of 2018 (Statistical handbook, 2019). Hence, there is a need to identify the poverty alleviation. Therefore, researcher could consider this gap and has formulated the problem statement as follows "To what extent the Micro finance impacts on the house hold income in the Kopay DS Division?" The main objective of the study is to investigate the impact of Microfinance on Household income level in Kopay DS Division. This study helps to accelerate effectiveness and efficiency of the Microfinance and provide the better suggestion to the government to adopt in their policies, which related to Micro finance. Academics can gain knowledge and ideas of Micro finance aspects and House hold income from this study, and this finding will be contributed to the empirical evidence to the future researchers.

Methodology

Cluster sampling method was used in this study and Samurdhi families were selected as sample from 4 Grama Niladhari(GN) division. In Jaffna district Kopay, division was selected. It consists 31 Grama Niladhari, where 4 GN were selected such as Kopay north(J/262) with the total of 427 Samurdhi families, Irupalai South (J/257) with the total of 510 Samurdhi families, Urelu (J/267) with the total of 579 Samurdhi families and Urumpirai south(J/265) with the total of 875 Samurdhi families. Fifty Beneficiary families from each Girama Niladhari division have been selected randomly and issued questionnaires per each GN divisions with total population of 2391 of Samurdhi families. From 200 samples, the researcher could only collect 177 Questionnaires and 23 were not responded. The following hypotheses have been formulated based on the literature review.

H1: There is a significant positive impact of microcredit on Household income
H2: There is a significant positive impact of livelihood on Household income
H3: There is a significant negative impact of welfare on Household income

Table 1: Operationalization for Concept and variables

Concept	Variables	Measurement Indicator
Microfinance	Microcredit	Loan size Interest rate Repayment
	Livelihood activity	Employment opportunity Training, Technical assistance
	Welfare activity	Food stamp Housing Planning Social welfare payments
Household income	Income level	Income Saving consumption

The following model is expressed to investigate the impact of Microfinance on Household income in Kopay DS division.

Household income$= \beta 0+ \beta 1\ MC+ \beta 2\ LA + \beta 3\ WA+ \varepsilon it$

β0, β1, β2, β3	-	Regression Coefficients,
MC	-	Microcredit
LA	-	Livelihood activity
WA	-	Welfare activity
ε	-	Error term.

Findings

Majority of the respondents that is 125(70.6%) of them are getting monthly transfer also more than half of the respondents (58.2%) never received any social welfare payments. Since this could only receive if they are receiving, monthly cash transfer. Around 84.7% of the total respondents are not getting any livelihood technical or training facilities, as this is not in active in the Kopay DS division except Kopay GN division (J/262). However, these activities are existing in the Samurdhi scheme but could not be in practical in Kopay DS division. Based on the discussion with the samples, only in J/262 (Kopay north) division has conducted this kind of training or assistance Activities like Providing saplings and seeds, training for cattle fostering & sewing, Training on Agriculture, embroidery training. According to the regression result, also it is noted that LA is not impact on household income.

Correlation Analysis

The Pearson correlation was made to identify the pattern of relationship or strength of the relation between the following two variables, microfinance and income level.

Table 2: Correlation Matrix

	Income level	Micro credit	Livelihood activities	Welfare activities
Income level	1			
Micro credit	0.451**	1		
	0.000			
Livelihood activities	0.244**	0.226**	1	
	0.001	0.002		
Welfare activities	0.202**	0.148	0.297	1
	0.007	0.049*	0.000	

***. Correlation is significant at the 0.01 level (2-tailed).*
**. Correlation is significant at the 0.05 level (2-tailed).*

The correlations table 4 reveals that there is a positive significant relationship between microcredit and income level (r=0.451**p=0.000<0.01) while Livelihood activity is significantly positively linked with income level (r=0.244**, p=0.001) at 1% level. Moreover, there is a positive significant link between welfare activity and income level. (r=0.202**, p=0.007) at 1% level.

Table 3: VIF Analysis

	Collinearity Statistics	
	Tolerance	VIF
Micro credit	.942	1.062
Livelihood activities	.878	1.139
Welfare activities	.905	1.105

Dependent Variable: Income level

Based on the table, the VIF values of 1.062, 1.139, 1.105, meaning that the VIF values obtained are between 1 to 10, it can be concluded that there is no multicollinearity symptoms. From the output of reliability statistics table obtained Cronbach's Alpha value of 0.704 is higher than 0.6, it can be concluded that this research instrument is reliable, whereas a high level of reliability.

Table 4: Regression Analysis

	Coefficient	Std. Error	t	Significant value
Constant	1.643	.293	5.616	0.0000
Microcredit	.398	.067	5.949	0.0000
Livelihood activity	.107	.063	1.696	0.092
Welfare activity	.115	.076	1.510	0.133
R-squared	.234			
Adjusted R-squared	.221			
F-statistic	17.662			
Prob (F-statistic)	0.000			
Durbin-Watson	1.868			

Dependent Variable: Income level

The output coefficients table 5 shows the value of adjusted R Squared is 0.221. These statistics shows the ratio of explained variation to total variation converting the 0.221 to a percentage, it is concluded that approximately 22.1% of the total variance in income level can be determined by all dimensions of microfinance as the independent variable in this model. Further, the model reveals that the remaining 77.9% of variability was not explained in this model. It is observed that the model is good fit because the sig (F-statistic) is less than 0.05.

Further the table 05 presents the regression coefficients, their associated statistics and p values. The results indicated that the microcredit has a positive and significant impact on household income level (ß=.398, p=0.0000<0.01). Therefore, Hypothesis 1 has been accepted. Meanwhile, Livelihood activity and welfare activity show insignificant impact on income level with the p value of 0.092 and 0.133 respectively. So that Hypothesis 2 and hypothesis 3 has not been accepted. Most of the beneficiaries are given Samurdhi loan to build or renovate the house, and to start or build a self-employment. Others do

Cattle fostering, Agriculture, extend the petty venture for example fruit shop, and consumption by using Samurdhi loan. Also, few of them get loan to fix electricity, to build a sanitary facility and to fix water facility for their house.

Conclusion

This study has been conducted to examine the impact of microfinance on household income level in Kopay DS Division. 177 Samurdhi beneficiary families have been selected as sample from 4 GN divisions in Kopay. The results of the study reveal that microcredit has a positive and significant impact on income level whereas livelihood activity and welfare activity have not significant impact on income level. Further this study suggests that the livelihood activity and welfare activity needs to improve its policies and services to achieve the objective of microfinance institutions. A livelihood activity is not active in huge extent. Therefore, it is suggested to adopt relevant technical training facilities for clients. This may lead to improve the employment of self-employment of clients especially in unemployed youngsters. For example, Sewing, agriculture, Handicraft business. For the future research, it can be suggested to observe other microfinance instruments too and can concentrate on women empowerment.

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Impact of liquidity ratios on profitability of licensed commercial banks in Sri Lanka

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Introduction

Liquidity management is very crucial factor for all the ventures in world wide. Among all ventures of financial system in Sri Lanka, banks play the major role because it has performed 63% of financial sector. Therefore, the current study investigates the impact of liquidity ratios on profitability of licensed commercial banks in Sri Lanka.

Since the huge economic crisis of Sri Lanka in 2022, Inflation rate was increased and the depreciation of Sri Lankan rupee was enhanced. So, people started to withdraw money from banks and invested in to real assets instead of deposit money. In that time, liquidity issue of the banks was created.

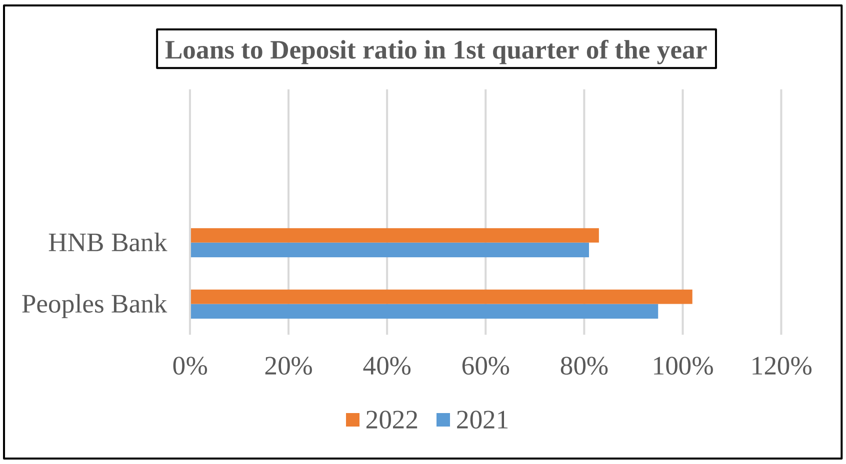

Figure 1: Loan to deposit ratio in First quarter of the year

According to figure 1, respective bank's Annual reports, loan to deposit ratio of two banks in the 1st quarter of 2022 is greater than the 1st quarter of 2021. That means, peoples have taken higher portion of loans in order to invest real asset rather than deposit money to banks during first quarter of 2022 because of the depreciation of Sri Lankan rupee.

Therefore, the prevailing context make research study on profitability and liquidity in Sri Lankan commercial banks more researchable. Therefore, current study examines the impact of liquidity ratios on profitability of licensed commercial banks in Sri Lanka.

Main Research Objectives

- To find the impact of liquidity ratios on profitability of licensed commercial banks in Sri Lanka.

Sub Objectives

- To find the relationship exist between current ratio and return on asset ratio of licensed commercial banks in Sri Lanka.
- To find the relationship exist between loan to asset ratio and return on asset ratio of licensed commercial banks in Sri Lanka.

- To find the relationship exist between loan to deposit ratio and return on asset ratio of licensed commercial banks in Sri Lanka.
- To find the impact of current ratio on return on asset ratio of licensed commercial banks in Sri Lanka.
- To find the impact of loan to asset ratio on return on asset ratio of licensed commercial banks in Sri Lanka.
- To find the impact of loan to deposit ratio return on asset ratio of licensed commercial banks in Sri Lanka.

Literature Review

There are mixed results on this topic when considering past research articles. According to the Pakistan private banking sector, Malik, Awais and Khursheed (2016) have found that mainly there is a negative relationship between liquidity ratios and profitability ratios and sometimes, it has weak positive relationship between these ratios. Moreover, they have expressed return on asset is severely affected by current ratio, quick ratio and liquidity ratio and return on equity is not affected by these three liquidity ratios.

Dr. Nimer (2015) did his research using the evidence from Financial reports of 15 Jordanian banks listed in Amman Stock exchange. According to the ANOVA table results, He explained that liquidity of Jordanian banks through quick ratio has in important impact on these banks profitability through return on assets.

In Ghana, there 9 listed banks. Lartey, Antwi and Boadi (2013) did a study on 7 commercial banks by selecting annual reports in Ghana and try to expressed the relationship between return on asset and temporary investment ratio. The study revealed that there is a weak positive relationship between these two concepts and it proved if banks hold adequate liquid assts, their profitability will be improved as well as adequate liquidity helps banks to minimize liquidity risk and financial crisis.

Methodology

Source of data, Population and sample and Sampling technique

Data was mainly collected from secondary sources through annual reports and the websites of the selected commercial banks in Sri Lanka for past 11 years from 2011-2021. Population of the study is 24 commercial banks listed in Sri Lanka. The sample of six banks representing 78% of banking sector's assets were chosen through purposive sampling technique. The banks used in the sample were Sampath Bank PLC, Peoples bank, Bank of Ceylon, Seylan Bank, Hatton National Bank and the Commercial bank.

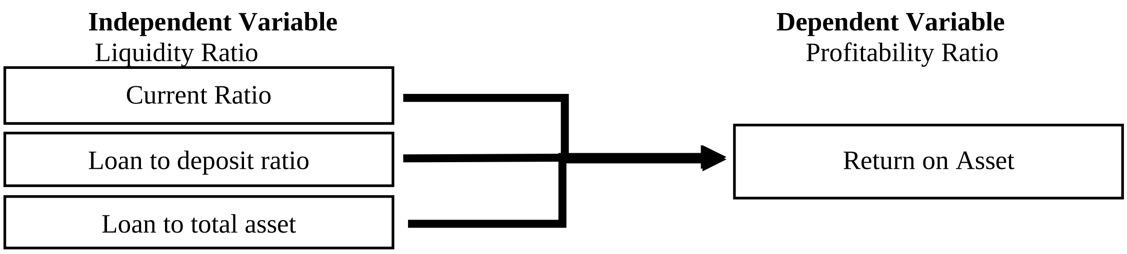

Figure 1. Conceptual framework

Return on asset ratio can be defined as the profitability ratio that measures the net income produced by total assets during a period by comparing net income to the average total asset. Current ratio can be measure through current liabilities divided by current liabilities. Malik, Awais and Khursheed (2016) have use this ratio in their research article.

The loans to asset ratio measure the total loans outstanding as the percentage of total asset. Higher the ratio indicates a bank has higher loan amount and low liquidity. It is used to measure the liquidity of a bank by comparing the banks total loans to its total deposits for the same period

Data Analysis Methods

Descriptive analysis helps to describe, show or summarize data points in a constructive way. The present study used this descriptive analysis technique in order to get a summary of their independent variables and dependent variables. The current study used this correlation analysis in order to find the relationship among independent variables and dependent variable to achieve main objective of the study. Regression analysis is a set of statistical processes for estimating the relationships between a dependent variable and one or more independent variables. Since the correlation analysis is not enough to achieve the main objective of the study, current study used regression analysis also in order to examine the impact of liquidity ratios on profitability of licensed commercial banks in Sri Lanka.

Findings

Descriptive Analysis

According to the descriptive analysis, Mean ROA is 1.72%of selected banks and it ranges between 0.7% and 2.8%. CR has a mean value of 1.08 with the 1.19 maximum value and the 1.03 minimum value. The mean LTAR is 67.89% and it ranges between 54.59% to 77.28%. And also, the LTDR has 88.86% mean value with the 103.09% maximum value and the 74.75% minimum value. LTDR has the highest variability with 54.68% and the ROA has the lowest variability with 0.04% value of the data set. Since skewness of all variables are less than 1, CR, LTDR and LTAR are statistically significant towards the ROA ratio.

Correlation Analysis

Table 1: Correlation analysis results table

	Return on Asset (ROA)
Return on Asset (ROA)	1
Current Ratio (CR)	0.0433379
Loan to asset ratio (LTAR)	-0.025791
Loan to deposit ratio (LTDR)	0.039789

As per the analysis, CR and LTDR has weak positive association with the ROA ratio while LTAR has weak negative impact towards ROA.

Regression Analysis

Table 2: Regression results table

Variable	**Coefficient**	**Std. Error**	**t-statistic**	**Prob**	**R^2**
Constant	-0.047665	0.025801	-1.847399	0.0695	0.187460
X1(CR)	0.043379	0.020352	2.131418	0.0370	
X2(LTAR)	-0.025791	0.017555	-1.469158	0.1468	
X3(LTDR)	0.039789	0.015229	2.612661	0.0113	

According to the analysis, R^2 of the data set is 18.74%. It means that CR, LTAR and LTDR explained by 18.74% of ROA in this model. Since the probability values are less than 0.05, CR and LTDR are statistically significant towards ROA in 95% confidence level while LTAR has insignificant effect toward ROA.

Therefore, regression equation can be written as below.

$$ROA = -0.047665 + 0.043379CR + 0.039789LTDR$$

Malik, Awais, & Khrusheed (2016) and Waleed, Pasha and Akhtar (2016) have explained that the CR has a significant impact of ROA in their research study like the current study has found. But, Ilham (2020) has described that LTAR has a significant impact toward the return on asset ratio, although current study has described it differently. Furthermore, Kajola, Sanyaolu, Alao & Ojunronghe (2019) have described that LTDR has a significant impact on ROA like current study has explained.

Conclusion

This study was conducted to find the impact of liquidity ratios on profitability of licensed commercial banks in Sri Lanka. The regression analysis and correlation among the variables were tested to achieve the research objectives. According to the analysis results, current study has proven that there is a significant and weak positive impact of CR and LTDR on ROA and there is an insignificant and negative impact of LTAR toward ROA of licensed commercial banks in Sri Lanka. Since the situation of Sri Lanka 2022 is worst because of the high inflation rate and the high money depreciation, present study will be really helpful for commercial banks in Sri Lanka in order to maintain their banks activities well. But this study only limited to the Sri Lankan context. Based on the results it is recommended to implement strong strategies and policies to manage liquidity of commercial banks in Sri Lanka.

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Asymmetric information behavior and stock price volatility: Evidence from CSE market

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Introduction

Stock price volatility is an essential phenomenon for an efficient capital market (Hameed & Ashraf, 2006). This is due to an investor can gain profits and avoid losses if the investor can do the price volatility modeling accurately. In simple, stock volatility is the rate at which the price of a stock increases or decreases over a particular period (Fidelity International). Modeling stock price volatility has become a difficult task since stock prices fluctuate as a response to various stock price determinants in random manner. However, modeling the stock price volatility is important in making decisions such as asset pricing, portfolio selection, to manage the risk component of a particular asset portfolio, and efficient estimations can be obtained regarding the asset price movements which will leads to proper market timing decisions (buy, hold, sell). There are uncountable number of variables that influence the price variations of the stock market. That's because there are different sources that can affect stock market prices. Thus, the stock price changes were no longer considered to be independent (Christian, 1998). While there is a general consensus on what constitutes stock market volatility, there is far less agreement on the causes of changes in the stock market volatility (Mala & Reddy, 2007; Hewamana et al., 2022). That is the same stock price volatility determinant has inconsistent empirical results among countries and markets. However, behavioral determinants show consistent results. The reason may be the asymmetric information problem among the traders and market participants. If the investor does not possess the right information at the right time, it creates some irrational volatility patterns with behavioral biases.

President Ranil Wickramasinghe stated in one of his keynote speeches that a few people control CSE and a few people rigged. Top corporate figure and investor Nimal Perera stated in one of his interviews that many listed company chairmen, directors and even regulators are in a closed community and share lots of corporate information knowingly or unknowingly, when they meet each other on a daily basis at informal and formal events. Therefore, it can be observed that asymmetric information and key-player impact is one of main issues in the CSE market.

There are few studies available to recognize the impact of asymmetric information behavior on stock price volatility under the CSE market (Hewamana et al., 2022a; Jaleel & Samarakoon, 2009; Jegajeevan, 2010; Kumara et al., 2014; Morawakage & Nimal, 2015; Morawakage et al., 2018). Available previous studies were used the All Share Price Index (ASPI) to measure the overall CSE market volatility behavior. However, it is unfair to use a total index value to measure the actual market volatility behavior. Because, there are listed stocks available in CSE market representing the ASPI which do not have frequent and continues trading. Therefore, this study has attempted to use an alternative index of S&P20 to identify the impact of asymmetric information behavior on stock price volatility patterns in CSE market. In addition to that this study has recognized to identify the impact of asymmetric information behavior in between two major political shifts in Sri Lanka.

Literature Review

Stock price volatility is an important measurement in various perspectives. Investment portfolio management and asset pricing models the stock volatility is a key input variable for optimum investment decisions (Cox & Ross, 1976; Fama, 1981; Markowitz, 1952; Sharpe, 1964). Further, Goudarzi (2011), Ezzat (2012) and Gokbulut and Pekkaya (2014) mentioned that there is a continuous need for finding out accurate measurement to model the stock price volatility. Nevertheless, the stock price volatility plays a vital role in best practices of investment risk management concepts and tools (Black & Scholes, 1972; Cox et al., 1979; Leavens, 1945).

There are different volatility models available for predicting and modeling the stock price volatility behavior. However, models based on the volatility clustering assumption, deliver better results in modeling stock price behavior. Engle's (1982) ARCH family models are the most prominent stock price volatility models with volatility clustering assumption. Empirical evidences are also in favor with ARCH family models (Hsieh, 1987; Kroner & Lastrapes, 1993; Mccurdy & Morgan, 1988; Mishra & Rahman, 2010; Taylor, 1987). Engle and Ng (1991) attributed arrival of new and unanticipated news is the key cause for the volatility. Furthermore, Black (1976) and Christie (1982) have discussed the leverage effect of stock price volatility in response of market information. EGARCH model is one of advanced ARCH family model which can be used for measuring the asymmetric information behavior in modeling the stock price volatilities (Epaphra, 2017; Goudarzi, 2010; Olowe, 2009).

Basically, there are two types of factors which effect on the stock price volatility behavior, i.e., fundamental and non-fundamental (behavioral) factors. However, it can be observed that fundamental factors no longer provide consistent results about in modeling stock prices (Abugri, 2008; Addo & Sunzuoye, 2013; Anari & Kolari, 2001; Chue & Cook, 2008; Ferrer et al., 2016; Fun & Basana, 2012; Hamrita & Trifi, 2011; He, 2006; Lee, 2010; Marquering & Verbeek, 2004; Qamri et al., 2015; Wongbangpo & Sharma, 2002). Nevertheless, behavioral factors do provide consistent significant results in modeling stock price volatility (Baker & Wurgler, 2006; Coval & Shumway, 2005; Daniel et al., 2020; De Long et al., 1987; Kengatharan & Kengatharan, 2014; Lee, 1998; Lee, 2006; Stracca, 2004). The reason for this inconsistency may be the asymmetric information behavior among the market participants. Investors tend to behave actions based on irrational reasons (non-fundamental factors) due to the inefficiency in distribution of market information.

CSE is considered to be an emerging stock market (Morawakage & Nimal, 2015). Jaleel and Samarakoon (2009) has initiated to find the asymmetric information impact in CSE market. They found that CSE market did not show the asymmetric information behavior and leverage effect. Nevertheless, Jegajeevan (2010) found the presence of asymmetric volatility behavior and CSE market has reacted more to a negative shock than a positive shock at the same size. Similar to Jegajeevan (2010) all other later studies have shown the asymmetric information behavior in the CSE market (Hewamana et al., 2022a; Kumara et al., 2014; Morawakage & Nimal, 2015; Morawakage et al., 2018). Therefore, it can be identified that the impact of asymmetric information behavior is a researchable topic under the Sri Lankan context. Several statements made by well-known persons in Sri Lanka confirm that asymmetric information behavior is present in CSE market.

President Ranil Wickramasinghe stated in his keynote speech that, *"there are many questions about the stock exchange. That a few people control it and a few people rigged"*, at the Reform Now Conference: Let's Reset Sri Lanka held on 5th August 2022 hosted by Advocata Institute. An article titled "Insider Trading Unavoidable?" done by Jithendra Antonio, published in 2011 sheds light on a peculiar detail of Sri Lanka's investor community; the geographical distribution of stock market players aids in the speedy transference of material information as well. In that paper top corporate figure and investor Nimal Perera also noted that many listed company chairmen, directors and even regulators are in a closed community that share lots of corporate information knowingly or unknowingly, when they meet each other on a daily basis at informal and formal events including corporate launches, official functions or even funeral houses, private parties etc. Therefore, the asymmetric information problem is an interesting research topic with reference to CSE market.

However, all previous studies have employed the ASPI index to measure the performance of the stock price volatility behavior. But there is no any study based on an alternative index which can be used to measure the CSE pricing volatilities. This study fulfills that research gap by undertaking the S&P20 index to represent the overall CSE volatility behavior.

Methodology

This study fallowed positivism research paradigm and quantitative research method was applied for achieving its objectives. Data comprises CSE market S&P 20 index daily pricing records spanning in between January 2010 to December 2019 (approximately 2403 observations). 2020 to 2021 period is not considered due to the impact of Covid 19. The S&P 20 index represents the performance of twenty (20) largest and most liquid companies in CSE market. Engle and Ng's (1993) EGARCH model has been undertaken as the statistical model of the study for identifying asymmetric information impact on CSE price volatility (Equation 01). The daily pricing data has been converted into daily price change ratio in order to facilitate the EGARCH model.

$$log(S\&P20_t) = \boldsymbol{\varphi} + \sum_{i=1}^{q} \boldsymbol{\eta}_i \left| \frac{u_{t-i}}{\sqrt{Y_{t-i}}} \right| + \sum_{i=1}^{q} \boldsymbol{\lambda}_i \frac{u_{t-i}}{\sqrt{Y_{t-i}}} + \sum_{k=1}^{p} \boldsymbol{\theta}_k \, log(Y_{t-k}) \dots\dots\dots\dots\dots\dots\dots\dots\dots.(01)$$

Where;

$S\&P20$ = Conditional Price Volatility of S&P20
u = Error Term
φ = Constant Effect
η = ARCH Effect
λ = Asymmetric Effect
θ = GARCH Effect
P = Market Price
t = Time Period

The figure 01 shows the developed conceptual framework of the study based on the past literatures. Accordingly, four impacts have been tested with respect to the CSE stock price volatility behavior. The constant effect measures the current period error of the S&P 20, whereas; market responses identify the investor reaction on the previous volatility shocks (ARCH effect). While the volatility persistence indicates the degree of the continues volatility reaction on market information (GARCH effect). The asymmetric information impact on stock volatility has been tested as the fourth variable of this model.

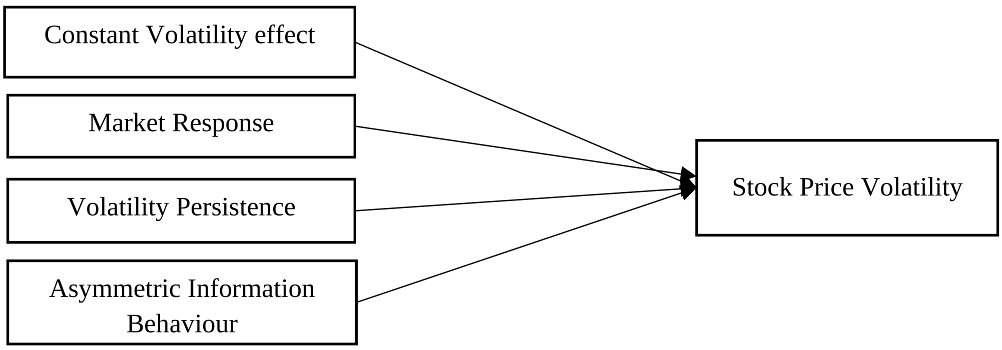

Figure 1: Conceptual Framework

Source: Author Developed

To measure the political impact EGARCH model is considered. Political impact has not been measured through a separate variable and a comparison of outputs in two political changes between two time periods from 2010 to 2014 and from 2015 to 2019 have been considered to identify the political impact of asymmetric information behavior in CSE market. The measurement of political impact through a variable is out of this study. Therefore, that political impact of EGARCH model results cannot be adopted using this research. Only a comparison is done in this study.

Results & Discussion

Descriptive statistics [skewness (0.107735), kurtosis, (43.90255) and JB test (167515.6)] shows that S&P 20 price index did not fallow a normal distribution pattern. Based on the figure 2, it can be observed that the S&P20 daily volatility ratio has a non-constant volatility. This non-constant volatility pattern has been tested from the Heteroscedasticity test. It also further confirmed that selected sample data did not show the constant volatility pattern. Furthermore, the Augmented Dickey & Fuller (ADF) 0.0000 Kwiatkowski-Philips-Schmidt-Shin (KPSS) 0.064843 tests have showed that the sample is free from the non-stationary. Therefore, the S&P20 is appropriate for volatility cluster modelling, and no barrier for undertaking the proposed EGARCH model over the traditional Ordinary Least Square (OLS) method.

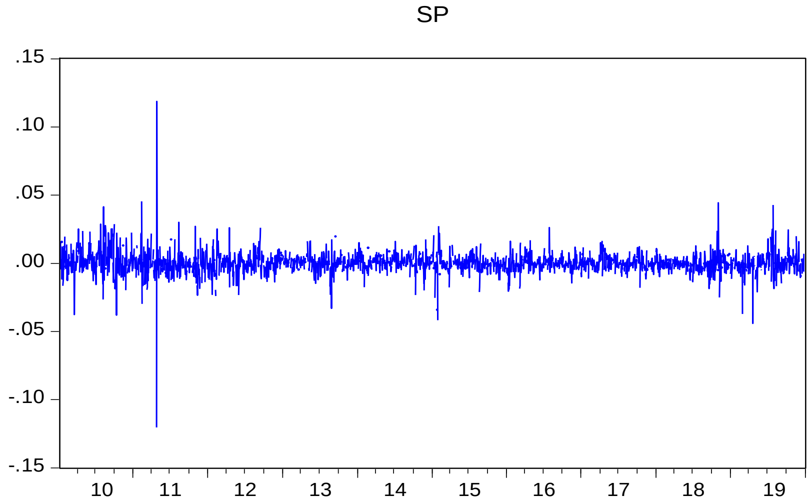

Figure 2: Line Chart of S&P20 Daily Volatility Ratio

Source: Author Developed

The EGARCH test was performed to check the asymmetric impact in S&P20 (Table 1). The results showed that the asymmetric information problem significantly presents under the S&P20 index. This result complies with the other previous studies conducted based on the ASPI index under the CSE market (Hewamana et al., 2022a; Jegajeevan, 2010; Kumara et al., 2014; Morawakage & Nimal, 2015; Morawakage et al., 2018). Therefore, asymmetric information impact has no difference in between ASPI index or S&P20 index.

Table 1: EGARCH statistical output in between 2010 - 2019

Variable	Coefficient	Prob.
Constant Effect	-0.617418	0.0000
ARCH Effect	0.250339	0.0000
Asymmetric Effect	-0.026119	0.0008
GARCH Effect	0.955154	0.0000

Source: Author's Estimation

The second objective of this study is to identify the impact of political change on asymmetric information behavior for the selected sample period. The political clusters have been determined based on the presidential election which was held during 2010 to 2019. Accordingly, two major were recognized for the study. The first cluster is the time period between 2010 to 2014; whereas the second political cluster is the time period between 2015 to 2019.

Table 2: Comparison of EGARCH Statistical Outputs Between Two Political Clusters

Political Cluster I (2010-2014)			Political Cluster II (2015-2019)		
Variable	**Coefficient**	**Prob.**	**Variable**	**Coefficient**	**Prob.**
Constant Effect	-1.001102	0.0000	Constant Effect	-0.690725	0.0000
ARCH Effect	0.330686	0.0000	ARCH Effect	0.191190	0.0000
Asymmetric Effect	-0.094585	0.0000	Asymmetric Effect	0.009651	0.3998
GARCH Effect	0.919224	0.0000	GARCH Effect	0.945764	0.0000

Source: Author's Estimation

According to the study results (Table 2), the second political cluster did not show the asymmetric information behavior except other impacts (Constant effect, ARCH effect, GARCH effect), however, the first political cluster presented the significant asymmetric information problem. Therefore, it can be identified that the political change in between 2010 to 2019 has an impact on asymmetric information behavior in CSE market.

Conclusion

Results of this study complies with the all-other previous studies which have been utilized the ASPI to measure the CSE price variability. Therefore, this concludes that there is no difference in asymmetric information behavior between ASPI and S&P20. Both indexes have the same result for identifying asymmetric information behavior in CSE market. Which confirms that asymmetric information problem presents in CSE market and the leverage effect is present. The second objective is to identify the political change on asymmetric behavior in CSE market. Two time periods have been considered as two political clusters for the sample period. The results showed that the first political cluster has significant asymmetric information behavior; whereas the second political cluster did not show the asymmetric information problem. Therefore, it can be concluded that the political shift in 2015 has impacted on CSE market asymmetric information behavior. This study encourages a further study to identify the other reasons for existence of asymmetric information behavior in CSE market.

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Determinants of digital financial literacy among management interns in Sri Lanka

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Introduction

'Financial literacy has been defined in many ways by different scholars and institutions. According to the Organization for Economic Corporation and Development, financial literacy can be defining as 'A combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing'. But (Bilbao-Osorio, B., Dutta, S. and Lanvin, B., 2014) identified Digital literacy as knowledge on the use of information and communication. Therefore, Digital Financial Literacy consists with financial awareness, knowledge, skill, attitude and behavior which combines with information and communication technology in order to make effective financial decisions and ultimately to achieve individual financial wellbeing. It is very important to explore the determinants of digital financial literacy, because with the current situation where most of people tend to use digital devices, interns have to adapt to use digital devices and they have to deal with digital financing. In the practical world after the COVID outbreak, people use digital devices and they are expecting to have digital service back since it seems to be time saving and cost effective. So it is worth to interns to have some expertise about digital financial literacy. Therefore, the problem statement is "to identify the factors affecting on digital financial literacy among management interns in Sri Lanka". In this study digital financial literacy was the dependent variable where the digital financial awareness, knowledge, skill, behavior and attitude were independent variables. The key objective was to explore the determinants of digital financial literacy and specific objectives were to evaluate the relative impact of each and every independent variable on dependent variable. Research questions were formed to evaluate to what extend the each and every independent variable influence on digital financial literacy. Knowing impacts of these determinants could provide solutions to ensure the financial well-being of the management interns and most importantly to secure them financially from unexpected financial shocks in the near future just like shocks which were happened during the COVID 19.

As the theoretical literature researcher had identified some theories such as, under the expectancy theory of motivation, (Christoslav E. Anguelov, Marianne A. Hilgert, and Jeanne M. Hogarth, 2004) has formed a Financial Practices Index, which is based on the cash flow management, credit management, savings and investment practices. And they have found a positive correlation between finance literacy scores and Financial Practices Index scores, so they concluded that financial knowledge is related to financial practices. (Williamson O. , 1981) was first to define the theory of transaction cost which states that organization always incur cost for the process of acquiring and utilizing resources, which are means of measuring efficiency and effectiveness of organizational designs which used to achieve economic benefits in a given business environment. According to (Lusardi, A., & Mitchell, O.S., 2014) ,the theory of life cycle states that the economic environment, social safety net benefits and consumer preferences are features that shape the life cycle optimization process and that can be achieved by assuming that the individual has financial knowledge to formulate, perform saving and spending behavior plans when dealing with financial markets. Below Meta-Analysis table shows the empirical review of this study.

Table 1: Meta-Analysis

	Name of the Author and Published Year	Sample	Statistical Model and Statistical Software	Conceptual Framework (D/V), (I/V)
01	(N. P. Abdul Azeez and S. M. Jawed Akhtar, 2021)	500 people from the rural areas of Aligarh district.	ordinary least square, multiple regression model	**D/V** Digital financial literacy **I/V** digital financial awareness; digital financial skill and knowledge; digital financial behavior and attitude
02	(Hanuman Prasad, Devendra Meghwal, Vijay Dayama, 2018)	A sample of 268 households	SPSS	**D/V** Digital Financial Literacy **I/V** Digital Financial Transactions, Financial Inclusion, Financial Literacy
03	(Wan Marhaini Wan Ahmad, Ana Shakirah Md Sapir, 2020)	330 respondents	Regression Analysis	**D/V** Financial Literacy **I/V** financial awareness, financial knowledge, financial skills, financial attitudes, financial behaviors
04	(Arthasad L A I, RajapakseR P CR, 2018)	132academics	Independent samples *t*-test and ANOVA test, Probit regressions, Tobit regression test	**D/V** Financial Literacy **I/V** financial knowledge, financial Attitude, financial Behavior
05	(Ana Pavkovic, Mihovil Andelinovic, Domagoj Misevic, 2018)	Suitable Sample of students at the university of Zagreb	OECD/INFE methodology, AMOS 5.0 – a version of SPSS software	**D/V** Financial Literacy **I/V** Financial Knowledge, Financial Attitude, Financial behavior, Practical Knowledge
06	(Menike, 2018)	378 respondents	SPSS and STATA software	**D/V** Financial Literacy **I/V** financial behavior, financial influence, financial attitude, financial knowledge

Methodology

This study was designed based on deductive approach and research paradigm was positivism. Conceptual framework and hypotheses were developed based on the empirical literature. There were five main hypotheses formulated and tested. Those hypotheses formed to check whether there is a significant influence in digital financial awareness, knowledge, skill, attitude and behavior on digital financial literacy. To determine the statistical effect of digital financial literacy among management interns, simple linear regression analysis is conducted. The conceptual framework can be illustrated as shown in Figure 1.

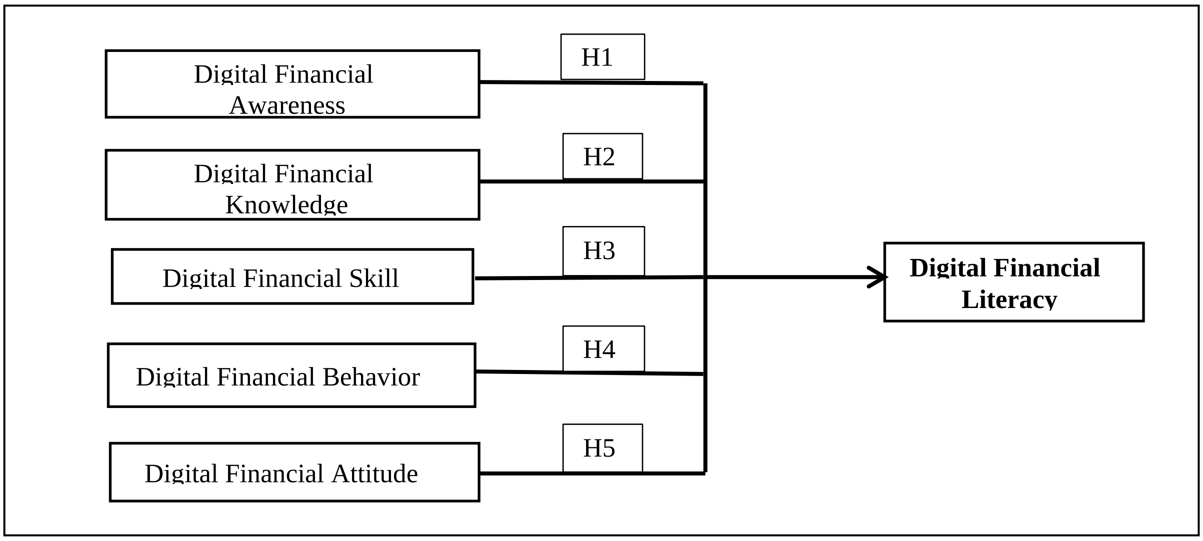

Figure 1. Conceptual Framework

Source: Kumari, 2020

As survey method was adopted to primary data collection, researcher administrated questionnaire was employed as the research instrument. The data for this study was collected using a structured questionnaire which consisted of questions covering digital financial literacy, awareness, knowledge, skill, attitude and behavior. And also the questionnaire was consisted with 6 questions on demographic and socioeconomic factors. The target population was taken from the management interns of 11 state universities which has management faculties in Sri Lanka and it was 4240. According to the Morgan table sample size was 351 but only 270 respondent were collected and it was 76.92%. Findings and conclusions were gathered and analyzed with the help of SPSS version 26 together with the assistance of MS Excel 2016. Further, researcher conducted meta-analysis to find out the determinants which were mostly used by the previous researchers and data screening was done to check whether the researcher has entered all relevant data in to cases. Descriptive analysis was conducted relating to respondent's profiles using frequencies and percentages. After collecting data by using researcher administered questionnaire, such data was analyzed by using regression analysis. Descriptive statistics also used to present mean, standard deviation and percentages in frequency tables. To check the reliability of each mean scale, Cronbach's Alpha coefficient was used. Under Simple regression analysis, correlations among each independent variable, collinearity statistic, Normality, Linearity, Outliers and Homoscedasticity were evaluated. Then the regression model was developed and hypotheses testing was done at 0.05 of significance level.

Findings

According to the statistical analysis, this data set was distributed normally and there was no outlier found. And also this data set had linearity and no multi-collinearity problem. The data was scattered without a pattern and did not show the homoscedasticity problem. The Beta value of the Digital Financial Awareness, knowledge, skill, attitude and behavior were positive the significance value was less than 0.05, which revealed that those five independent variables were positively and significantly affected to the digital financial literacy. However, the most significant independent variable which affected to the digital financial literacy was digital financial awareness and it described 29.40% of the digital financial literacy. The least significant independent variable which affected to the digital financial literacy was digital financial attitude and it only described 10.90% of the digital financial literacy.

Conclusion

The findings of this study could be carefully considered by academia, especially those involved in developing the university curriculum and deciding the compulsory courses for the undergraduates which can provides more knowledge about digital devices as well as digital financial literacy. Lack of financial literacy among public leads to many un-favorable consequences not only at individual level but also at macro economy level. If the public is financially literate, they would make informed financial decisions which would ensure fair pricing and efficient markets, which would promote economic development. The private sector especially, financial institutions along with a favorable institutional framework can achieve a great deal into digital financial literacy by offering training connected to the products they offer to the market. Accordingly, the attention of policymakers should be focused on financial awareness as the least significant factor of financial literacy to encourage as the less performed determinant for enhancing the digital financial literacy level in Sri Lanka. Further, this study makes a special contribution to existing literature and for the policymakers as it provides a clear understanding of significant determinant on digital financial literacy to enhance the overall financial wellbeing of the management interns.

Sample size, lack of previous research studies exactly on determinants of digital financial literacy among management interns in Sri Lanka, used SPSS as data analysis method, time constraint of six months and used only five variables can be identified as the limitations of this study. Therefore, it is recommended for the future researchers to focus on qualitative research method as well as further research can be conducted on some other areas.

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The impact of microfinance on poverty alleviation; Evidence from Monaragala district in Sri Lanka

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Introduction

Microfinance is the provision of financial services to low-income earners in the society with the objective to alleviate their level of poverty (Consultative Group to Assist the Poor [CGAP], 2022). Microfinance service providers primarily provide different financial services to the vulnerable disadvantaged units like poor and low income households, small entrepreneurs and businesses to help them in developing their living standard through self-employment opportunities and various income generating activities (Shankar, 2013). Microfinance was initially begun as microcredit by Mohomad Yunus during the 1970 as to provide small loan facilities to poor women in Bangladesh (Ghosh, 2013). Later it has evolved as Microfinance comprised with more facilities such as microcredit, Savings, Micro insurance and repayment systems among other services (Shankar, 2013).

As explained in the existing theories the Poverty Reduction Approach has proposed that microfinance can be employed as a tool of poverty alleviation and to improve the socio-economic well-being where the Financial System Approach has proposed that by applying commercial finance principles and establishing a financial intermediation system for the poor has supported in identifying financial services such as micro-savings, micro-insurance, and money transfer services for those vulnerable units (woller et al., 1999). Further, in the empirical literature there were no consistency in the study finding. In some of the study findings it revealed that microfinance could eradicate level of poverty in once economy (Appah, John and Wisdom, 2012; Kaluarachchi & Jahfer, 2014), where in some of the study findings it has proved that the level of poverty has gone up after implementing microfinance facilities in the financial system (Sugathadasa, 2018).

The Sri Lankan financial system can be classified in to three as formal, semi- formal and informal sector where microfinance is operating under all of these three sectors. The most highlighting inadequacy in the Sri Lankan microfinance sector is unavailability of a single regulatory framework for all the microfinance service providers in Sri Lanka (Tilakaweera & Chandrawansa, 2017). Thus, the undesirable microfinance practices in the semi-formal and informal market such as illegal deposit mobilization, exploitation of customers through excessive interest rate and unethical recovery strategies are rapidly growing and badly affect to the real objective of poverty eradication (Central Bank of Sri Lanka [CBSL], 2022). Therefore, the primary objective of this study is to identify the impact of Microfinance on Poverty Alleviation with a special reference to the Monaragala District of Sri Lanka. The researcher will achieve the main objective of the study by aggregating the following specific objectives,

- To investigate the significant impact of micro loan amount on poverty alleviation.
- To investigate the significant impact of microfinance repayment ability on poverty alleviation.
- To investigate the significant impact of accessibility of getting a loan on poverty alleviation.
- To investigate the significant impact of interest rate on poverty alleviation.

Methodology

The study used microfinance usage indicators of the customers as the independent variables which were loan amount, repayment ability, accessibility for getting the loan and interest rate. The dependent variable of this study was the poverty alleviation and it was measured by using income level, property ownership, personal savings and lifestyle.

The research framework will show the factors of microfinance on poverty alleviation.

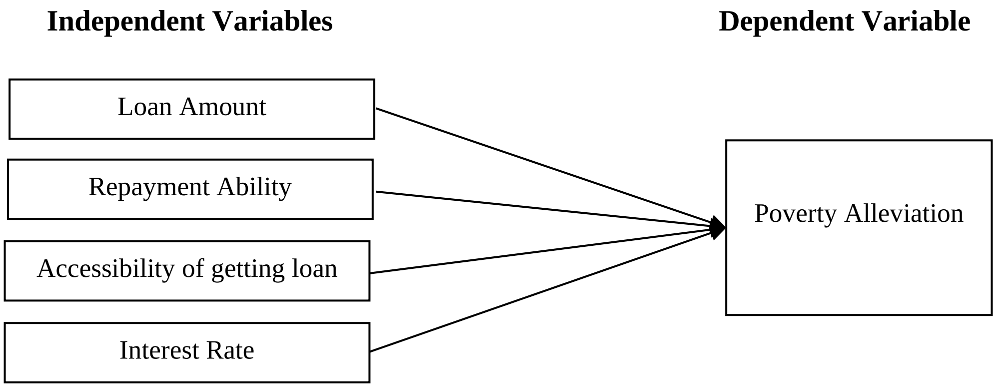

Figure 1: Conceptual framework

Primary data was collected through a structured questionnaire and main study variables were measured using five point likert scale. The population of this study was all microfinance beneficiaries in Monaragala district in the Uva Province. According to 2019 poverty statistics available in the Department of Census and Statistics (DCS) of Sri Lanka, Uva Province records the highest head count ratio which was 28% where Moneragala District records 21% from the total poverty population. Accordingly, 380 microfinance beneficiaries in Moneragala were selected as sample based on Multi-stage cluster sampling method to select sample from the population. The questionnaires were analyzed through SPSS software.

Findings

Researcher distributed 390 questionnaires among microfinance beneficiaries and 380 completed questionnaires were collected for the analysis. The Cronbach's Alpha value of all variables were greater than 0.7 which indicate that scale reliability was acceptable for all the variables. The KMO value was above 0.6 and the significant level of Bartlett's test of Sphericity was less than 0.05, which has confirmed the validity of the data set (Field, 2009).

The demographic profile of the respondents who participated in the study was slightly dominated by female respondents (76%) and the majority of the respondents fell in the 24-49 age group. The majority of the sample were employed. The monthly income level of the majority was less than 20,000 LKR (35%).

According to the descriptive statistics of study variables, all the mean values except the interest rate were closer to 4 which explain that respondents of the study were in an agreeable level that obtaining microfinance facilities has positively affected to the level of poverty of the selected sample. But the mean value of Interest rate was around 3.2 which means that respondents were at a neutral level and closer to be at disagree level.

Correlation Analysis

After tested and achieved all the multiple regression assumptions such linearity, normality, multicolinearity etc. the researcher has performed a correlation analysis to identify the type of relationship and their level of association with the depended variable. The results are presented in Table 1.

Three of the independent variables which were Loan Amount, Repayment Ability and Accessibility of getting loan has shown a positive moderate level relationship with the poverty alleviation where Interest rate was having a low degree of negative relationship with poverty alleviation. All the relationships were significant at 0.001 level.

Table 1: Correlation Analysis

		LA	RA	AGL	IR	PA
LA	Pearson Correlation	1				
	Sig. (2-tailed)					
RA	Pearson Correlation	.520**	1			
	Sig. (2-tailed)	.000				
AGL	Pearson Correlation	.456**	.600**	1		
	Sig. (2-tailed)	.000	.000			
IR	Pearson Correlation	.316**	.594**	.488**	1	
	Sig. (2-tailed)	.000	.000	.000		
PA	Pearson Correlation	.516**	.587**	.689**	-.241**	1
	Sig. (2-tailed)	.000	.000	.000	.000	

***. Correlation is significant at the 0.01 level (2-tailed)*

The R-squared value of the model was 0.596 which means that 59.6% of the problem of poverty was explained by the selected variables to the model. As presented in table 02 above, all the regression weights were statistically significant at 0.001 level which means that all the variables selected to the model were significantly impact on poverty alleviation of the microfinance customers in Moneragala District of Sri Lanka. Among the variables, accessibility to loan was having the highest significant impact on poverty alleviation as it was having the highest regression coefficient of 0.439. Thus, the researcher has achieved its objectives by accepting all four hypotheses that there is a significant impact of loan amount, repayment ability, accessibility and interest rate on poverty alleviation of microfinance beneficiaries in Moneragala Dsitrict of Sri Lanka.

Regression Analysis

Table 2: Regression Analysis

Model	Regression Coefficients	T Statistics	Sig Value
(Constant)	0.860	6.383	0.000
LA	0.184**	4.663	0.000
RA	0.308**	6.905	0.000
AGL	0.439**	12.621	0.000
IR	-0.198**	-6.673	0.000
$R^2 = 0.596$	Durbin-Watson 1.671		

***Significant at .001 percent level*

Conclusion

According to the study findings all four independent variables namely, loan amount, repayment ability, accessibility and interest rate have statistically significant associations and statistical significant impact on poverty alleviation of the microfinance beneficiaries in Monaragala District. Among the variables, accessibility to loan was the most important variable which makes the highest impact on poverty alleviation. As per the descriptive statistics, all the respondents were at an agreeable level that the microfinance usage has made a positive impact on their level of poverty. Accordingly, it can be concluded that the microfinance facilities available in Moneragala District has supported its beneficiaries in alleviating their level of poverty.

As per the study findings the researcher can recommend to its stakeholders including Microfinance service providers, Central Bank of Sri Lanka (CBSL) and Government of Sri Lanka (GOSL) to increase the accessibility of microfinance facilities to poor areas in the country through developing necessary infrastructure, branch network, officers to reach more people since it is the most important factor while incorporating other factors as well in their strategic decision making. Specially, CBSL and GOSL can use microfinance as a policy tool to eradicate the level of poverty and enhance the living standard of such vulnerable units in the country. Further, future researchers can use a higher sample which would represent microfinance beneficiaries around the country and they can include more study variables to measure the microfinance usage other than the study variables in the current study.

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The effect of financial constraints on corporate dividend decision: Empirical evidence from a frontier market

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Introduction

Businesses in developing nations, where capital is scarce and financial institutions are underdeveloped, frequently struggle with financial constraints (Chan, 2014). Financial restrictions in a firm occur due to the inability to get external funds and the decline of internal funds as a consequence of the adverse effect of liquidation (Holt, 2003). External financing restrictions could be brought about by a variety of things, including inefficiencies in the credit market, a lack of financial resources, unstable environments, or a lack of means for enforcing contracts (Stiglitz & Weiss, 1981). Financially constrained businesses do not show a preference for internal funding resources; instead, they spend extra to attract outside financing (Chen and Wang, 2012). When financial constraints are imposed, a firm's different forms of expenditure compete for limited funds, and therefore financial decisions are made concurrently (Kirch & Terra, 2020). This raises the question of whether the internal funds of such constrained firms can be used for dividend distribution. Accordingly, an intriguing angle on the dividend puzzle might be gained by investigating the dividend policy of financially constrained enterprises.

Dividend policy is one of a company's most sensitive areas since shareholders may demand a reasonable return on their investment given the risky investments they undertake. However, when a firm faces financial difficulties, the management strategy for maintaining the dividend policy is crucial. According to Almeida and Campello (2007), financially strapped companies may find it advantageous to use internal funds as an alternative source of capital expenditure because they face a high potential opportunity cost of investment. In contrast to unconstrained organisations, where investment is entirely based on the number of profitable choices available, financially constrained businesses must also take future investment into consideration in addition to present investment. Therefore, financially constrained enterprises are concerned with enhancing their future ability to raise external capital, and such firms use dividends to build their capacity for external financing (Pathan et al., 2015).

According to Kirch & Terra (2020), financial decisions, including dividend decisions, are affected by financial constraints. Financially constrained firms tend to schedule their dividend increase declarations to precede seasoned equity offering announcements (Pathan et al., 2015). Financially constrained firms also pay dividends (Skinner & Soltes, 2011). According to Kim et al. (2021), companies that are financially constrained and pay dividends experience a more favourable influence on R&D than a company that does not.

In contrast, Holt (2003) reported that young firms with a good prospect of development have a greater chance to expand and retain funds, whereas mature businesses pay dividends through internal funds. Similarly, Falavigna and Ippoliti (2021a) discovered a positive correlation between dividend payouts and credit rating class. According to their research, a firm with a AAA rating pays dividends 96.57 times more than one with a D or CCC rating. Hoshi et al. (1991) found that enterprises that are not financially constrained adopt a greater dividend distribution strategy, whereas those that are constrained will utilise internal financial resources to finance their investment plans because external financing is more difficult to obtain. Wahjudi (2020) added that collateralisable assets, which are seen as a financial constraint, have a negative but insignificant impact on dividend policy.

These previous studies led to emerging conflicting arguments regarding the connection between the financial constraints and the dividend policy with no definitive answer. Furthermore, it is difficult to locate research that thoroughly investigates the connection between financial constraints and dividend decisions in frontier markets such as Sri Lanka. Therefore, this study was conducted to investigate the impact of financial constraints on dividend decisions made by listed companies in Sri Lanka, a frontier market.

Methodology

The population of the study consists of 287 listed companies on the CSE as of 31st August 2021. The simple random sampling method was used to select 50 listed firms as the study's sample based on the availability and completeness of data from 2017 to 2021. Panel data regression analysis was conducted to analyse the data.

Referring to the past literature (Whited Wu, 2006; Hadlock & Pierce, 2010; Pathan et al., 2016; Sreenu, 2019; Wahjudi, 2020), the variables were identified, and the conceptual framework was developed.

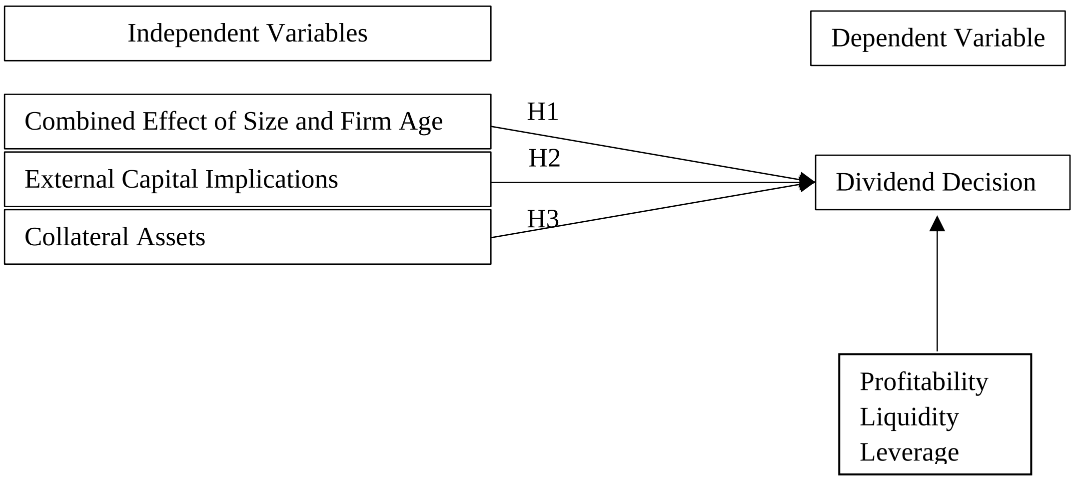

Figure 1: Conceptual Framework

Source: Constructed by the Author

The combined effect of size and firm age is considered based on the calculated value of the Hadlock-Pierce Index (HP Index). According to the HP index, a higher value of the HP index is more constrained (Hadlock & Pierce, 2010). The impact of the External Capital Implications is calculated based on the calculated value of the Whited Wu Index (WW Index). When a firm's WW index takes a higher half value is identified as more constrained, while the WW index takes a lower half value and is identified as less constrained (Whited & Wu, 2006). Collateral assets are indicated through the natural logarithm of tangible assets, referring to Pathan et al. (2016). The dividend decision, the dependent variable, is measured using the dividend payout ratio.

Accordingly, the following hypotheses are developed.

H_1: The combined effect of the size and the firm age significantly affect the dividend decision.

H_2: The external capital implications have a significant impact on the dividend decision.

H_3: The collateral assets have a significant impact on the dividend decision.

The research model is developed as shown by Equation 1, to achieve the objectives of the study.

$$DD = \beta + \beta_1 CSA - \beta_2 ECI + \beta_3 CLA + \beta_4 PRF + \beta_5 LIQ - \beta_6 LEV + \varepsilon \text{ ---------------------------------- } (1)$$

Where,
DD denotes Dividend decision, CSA denotes the Combined effect of size and firm age, ECI denotes External capital implications, CLA denotes the Collateral assets, PRF denotes Profitability, LIQ denotes Liquidity, and LEV denotes Leverage. β is the constant, $\beta 1$- $\beta 6$ are coefficients and ε is the error term.

Findings

According to the outcome of the correlation analysis, it was confirmed that there are no multicollinearity issues among the variables. Regression results are presented in Table 01.

Table 01: Regression results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.712	1.220	-3.043	0.003
CSA	-0.034	0.263	-0.129	0.897
ECI	-0.169	0.281	-0.602	0.548
CLA	0.293***	0.089	3.300	0.001
PRF	-0.010	0.044	-0.237	0.813
LIQ	0.015	0.024	0.610	0.543
LEV	-0.006	0.008	-0.742	0.459

****, ** and * demonstrate statistically significance at level 1%, 5% and %10 respectively*

According to the regression results, the research model can be estimated as follows.

$$DD = -3.712 - 0.034CSA - 0.169ECI + 0.293CLA - 0.01PRF + 0.015LIQ - 0.006\, LEV$$

Hausman test was conducted to select between the fixed effect model and the random effect model. Accordingly, the fixed effect model was indicated as the most appropriate model to interpret the data set. The value of F-statistics (1.629, p-value<0.01) indicates that the evidence provided by the sample data is adequate to prove that the regression model fits the data better. Based on the outcome of the regression analysis, only H3 is accepted, indicating that collateral assets have a significant positive impact on the dividend payout. It implies that the higher the financial constraints, the dividend decision would be significantly affected. These findings agree with Pathan et al. (2015). However, it is indicated that the combined effect of size and firm age, and external capital implications are not statistically significant. Accordingly, H_1 and H_2 are not supported.

Conclusion

The study was conducted with the aim of investigating the impact of financial constraints on the corporate dividend decision in Sri Lanka, which is a frontier market, using a sample of 50 firms listed in the Colombo Stock Exchange. The study's findings reflect that only the collateral asset constraint significantly affects the dividend decision. Accordingly, the higher the collateral assets constraints, the higher the dividend payout. However, the combined effect of size and firm age, and external capital implications are found to be insignificant in affecting the corporate dividend decision. Managers of the companies can consider the findings of the study when they develop the corporate dividend policy, while the findings will shed light when making investment decisions by the investors. For more precise and reliable results, the study might be expanded by incorporating more financial constraints and expanding the sample size.

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Cash flows and firm performance: Evidence from Colombo Stock Exchange

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Introduction

In the contemporary context of competition, businesses strive to improve organizational performance and successfully take on the competition. The cash flow component of earnings is a more accurate indication of company performance than the accrual component since accrual components of earnings are subject to manipulation (Adelegan, 2003). Making financial decisions requires access to information found in the cash flow statement that is absent from the other financial statements. Accordingly, the cash flow statement has evolved in recent years to be regarded as a crucial tool for collecting financial data for interested parties and as a component of financial statements.

Operational, financial, and investment activities are the three basic components of cash flow. The operational activities enable the assessment of the amount of cash a business must have made from daily sales of its goods and services. A company's financing activity reveals whether and to what extent its operations and investing activities have been funded by outside loans and equity, while investment activity displays the cash flow information about the amount of cash the company have generated and utilized to invest in other businesses (Bala, 2017).

When previous studies were examined, it was discovered that the findings were contradictory. Some scholars have found minor effect of cash flows on the financial performance and market performance of the business (Durgham & Durgham, 2010; Al-Saedi, 2014; Bala, 2017, Eton et al., 2019), while some studies have discovered a significant impact of operating, financing, and investing cash flows on corporate performance (Kimonge, 2011; Frank & Oyadonghan, 2014; Liman & Mohammed, 2018; Ni et al., 2018, Aris et al., 2019). Furthermore, some research produces mixed results on the impact of operating, financing, and investing cash flows on the firm performance (Alslehat & Al-Nimer, 2017; Konak, 2018). These contradicting findings urge further research into how cash flows affect a firm's financial performance and market performance.

Furthermore, it was observed that most of the past studies (Alslehat & Al-Nimer, 2017; Frank & Oyadonghan, 2014; Kimonge, 2011; Aris et al., 2019) had been constrained to one specific industry, such as banking, food and beverage, multinational companies, non-government organizations, construction companies, and oil and gas companies which had restricted the study's applicability. Therefore, this research is being undertaken by covering diverse industries on the Colombo Stock Exchange (CSE) in Sri Lanka to fill the identified research gap.

Accordingly, the study is conducted to achieve two objectives;

- To identify the impact of the cash flows on the financial performance of listed companies on the Colombo Stock Exchange
- To identify the impact of the cash flows on the market performance of listed companies on the Colombo Stock Exchange.

Methodology

The study's population consists of 287 listed companies on the CSE as of 31st august 2021. Using the convenience sampling method, 85 listed companies were selected as the study's sample size. The conceptual framework (Figure 01) and research hypotheses are developed, referring to the past literature.

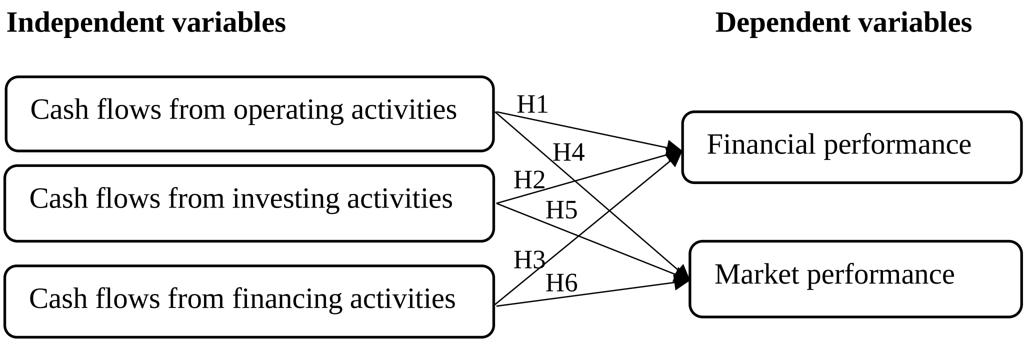

Figure 8: Conceptual framework

Cash flows are indicated by operating, investing, and financing cash flows which are considered independent variables. Firm performance, the dependent variable, is evaluated from two perspectives: financial and market performance. Financial performance is measured using return on assets, whereas market performance is measured through Tobin's Q.

Research hypotheses and the research model are developed as follows.

Hypotheses

H_1: There is a significant impact of operating cash flows on financial performance.

H_2: There is a significant impact of investing cash flows on financial performance.

H_3: There is a significant impact of financing cash flows on financial performance.

H_4: There is a significant impact of operating cash flows on the market performance.

H_5: There is a significant impact of investing cash flows on the market performance.

H_6: There is a significant impact of financing cash flows on the market performance.

Research model

Model 01: $FP = \alpha + \beta_1 OCF + \beta_2 ICF + \beta_3 FCF + \varepsilon$

Model 02: $MP = \alpha + \beta_1 OCF + \beta_2 ICF + \beta_3 FCF + \varepsilon$

Where:

FP = Financial performance, MP = Market performance, OCF = Operating cash flow, ICF = Investing cash flow, FCF = Financing cash flow, α = Intercept, $\beta_1 - \beta_3$ = Coefficients, $\varepsilon =$ Error term

Findings

The results of correlation analysis show that there are no multicollinearity issues among independent variables. Correlation results reveal that operating cash flows were positively correlated with financial and market performance, which is significant. Investing cash flow was positively correlated with financial performance but negatively correlated with market performance, and it is not significantly correlated with both financial and market performance. Financing cash flow has a significant negative correlation with financial and market performance.

Hausman test was conducted to select between the fixed effect model and the random effect model. Accordingly, the fixed effect model was indicated for Model 1 and Model 2 as the most appropriate model to interpret the data set. Regression results are shown for the financial performance (Model 1) and market performance (Model 2) in Table 1.

Table 1: Regression results

Variable	Financial Performance		Market Performance	
	Coefficient	**Prob.**	**Coefficient**	**Prob.**
C	0.95***	0.000	-3.006	0.323
OCF	0.01**	0.046	0.016	0.835
ICF	0.00	0.925	-0.037	0.612
FCF	-0.05***	0.000	0.249***	0.000

****, ** and * demonstrate statistically significance at level 1%, 5% and 10% respectively*
Source: Survey Data, 2021

According to the regression results, the research models can be estimated as follows.

$$FP = 0.95 + 0.01OCF - 0.05FCF$$

$$MP = -3.006 + 0.016OCF - 0.037ICF + 0.249FCF$$

Based on the regression results, H1 is accepted, indicating that operating cash flow has a significant positive impact on financial performance. These findings agree with Frank and Oyadonghan (2014), Alslehat and Al-Nimer (2017), Aris et al. (2019), Konak (2018), and Liman and Mohammed (2018). Furthermore, H3 is accepted, demonstrating that financing cash flow significantly negatively impacts financial performance. These findings are consistent with Kimonge (2011), Konak (2018), Soet et al. (2018) and Aris et al. (2019). In contrast, H2 is rejected, showing that investing cash flow had no significant impact on financial performance. That is in tandem with the findings of Konak (2018) and Alslehat & Al-Nimer, 2017).

At the same time, when considering the market performance, only H6 is accepted, indicating that the impact of financing cash flows on market performance is positive and statistically significant. On the other hand, H4 and H5 are rejected, showing that the impact of operating cash flows and investing cash flows on market performance are statistically insignificant. This finding is consistent with Konak (2018).

Conclusion

The study investigated the impact of cash flows on the firm performance of listed companies on the CSE in two aspects; financial performance and market performance. Findings indicate that the higher the operating cash flows, the higher the financial performance, while the increase in financing cash flows would result in a decrease in financial performance. In contrast, increased financing cash flows lead to greater market performance.

The study findings will provide thorough information about the company's financial performance and market performance, allowing investors to make informed investment decisions. The insights can be used by company management to create a result-oriented cash flow system that will entice investors to take on investment risk.

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The impact of leverage on financial performance among the commercial banks in Sri Lanka

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Introduction

There are twenty-six (26) licensed commercial banks (LCBs) as of 30th march 2021 which are registered under Central Bank of Sri Lanka. A firm's equity consists of both capital and debt; the mix of capital and debt will vary from firm to firm, one industry to another industry based on different factors. On behalf of that, all the banks must pay attention to their financial performance, and also they should be highly connected with the ways which are directly related to firm financial performance. The capital structure is able categorized in terms of the amalgamation of the loans/funds (short-term or long-term) available to the activity of business (Van Horne, 2002) or can be categorized as the combination of equity and debt.

Leverage is one of the methods that companies use as a financing method to increase their capital, and leverage significantly affects firms' performance (Oja, 2012). This research is conducted as a study over leverage, (ROA) Return on Assets, and (EPS) Earnings per Share which focuses on screening out the association between leverage and firm performance. These various financial structures will be affected the firm's financial performance directly. When a firm tends to take more debt, due to the tax benefit, the profitability increases (Van Horne, 2002) but at the same time, its finance cost will increase. LCBs are the most important company of financial bodies within the Sri Lankan financial sector in terms of total assets and the size of services provided.

The traditionally accepted view is when the debt portion is increasing, the company is exposed to the highest risk and highest cost. Simultaneously when the debt percentage increases, it will increase the value of the firm.

Once, Debt is used as a source of finance, "leverage" will arise. Deciding the proportionate mixture of equity, other liability, and debt has been a matter of concentrated hypothetical and empirical investigation over time. LCBs holds the highest market share of the whole monetary system's assets and dominate the financial system. But leverage affects the company's performance in different ways; it can be favorable or unfavorable. The literature (Grinblatt & Titman, 2003); (Pandy, 2008) has defined the combination in terms of the capital structure. The capital structure able to categorize in terms of the amalgamation of the loans/funds (short-term or long-term) available to the activity of business or can be categorize as the combination of equity and debt.

Methodology

The researcher buildup three questions

- Does the leverage affect commercial banks' performance?
- How to identify the nature of leverage and firm financial performance?
- How to analyze the relationship between leverage and firm financial performance?

The researcher used quantitative methods to find out the answers to those questions. The sample is selected as all 10 licensed commercial banks listed in CSE between 2016 and 2020. The data was gathered from secondary sources such as annual reports published on respective banks. This study use leverage as the independent variable (Debt to Equity Ratio) and financial performance as the dependent variable (Earnings per share, Return on assets).

To achieve the research objectives, it is most suitable to refer to secondary data because of the accuracy of the data. The researcher analyzes the data by using correlation analysis and multiple regression analysis. Figure 1 illustrates the conceptual framework of the study.

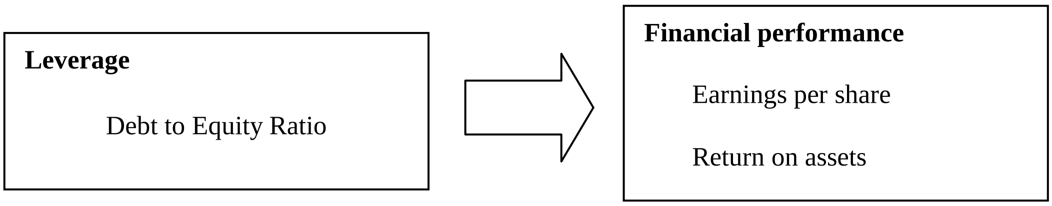

Figure 1: Conceptual framework

Findings

This section comprises the results and findings of the overall study obtained from the data analysis. The researcher examines the descriptive analysis, correlation analysis, and regression analysis to find out the impact of leverage on financial performance: special reference to commercial banks in Sri Lanka.

Descriptive statistics

According to the descriptive analysis the mean value the key independent variable, D/E is 11.74176 while the maximum and minimum values are 20.86734 and 5.327415 respectively. The mean values of dependent variables, ROA and EPS, are 0.017082 and 1353.765 respectively. Maximum values are 0.037565 and 17095.00; minimum values are 0.005607 and 3.310000, respectively.

Test of normality

This test looks at the skewness, kurtosis and Jaque-Bera statistics in order to check the normality the variables. Hypothesis are tested as follows.

Null Hypothesis: Residuals are normally distributed

Alternative Hypothesis: Residuals are not normally distributed.

The researcher used a graphical method to test the normality of the data set. According to the Jarque-Bera test, the researcher can identify variables for ROA was normally distributed because the probability is greater than 0.5. According to the Jarque-Bera test, the researcher can identify variables for EPS was not normally distributed because the probability is lower than 0.5.

Table 11: Correlation Analysis

	D/E	**ROA**	**EPS**
D/E	1.000000		
	………………		
ROA	0.839530	1.000000	
	0.0000	……………..	
EPS	0.496880	0.237913	1.000000
	0.0002	0.0927	……………..

Source: Survey Data, 2022

The debt to equity ratio is positively correlated with Earnings per Share and their relationship is not much strong. If the Earnings per Share is increased debt to equity ratio also increases. Their relationship is significant because the P value is 0.0002 and it is less than 0.05 (5%). The Debt to equity ratio is positively correlated with Return on Assets and their relationship is much strong. If the Return on Assets is increased Debt to Equity ratio increases. Their relationship is significant because the P value is 0.0000 and less than 0.05 (5%).

Correlated Random Effect - Hausman Test

To select the best method between the fixed effect model and random effect model the researcher examined the Hausman test. According to that, the random effect model was suitable for both ROA and

EPS. Based on that the researcher construct the multiple regression model for both profitability indexes as follows

Model 01: EPS = -533.0657+160.69405D/E it

Model 02: ROA = 0.017719 – 5.24E-05D/E it

Where:
ROA = Return on Assets, EPS = Earnings per Share , D/E = Debt to Equity, α = Regression constant term, β_1, β_2, β_3, β_4, β_5, β_6 = Regression coefficients for the respective variables of the determinant, ε = Error term , i,t = Firm, Year.

Linearity test
Linearity is the property of a mathematical relationship or function which means that it can be graphically represented as a straight line. Good research in the regression model there should be a linear relationship between the independent variable and dependent variable.

Table 12: Summaries the linear relationship of each independent and dependent variable

	Linear relationship	
Variable	ROA	EPS
D/E	Positive	Positive

Source: Survey Data, 2022

Regression Analysis
A positive coefficient tells when the independent variable increases, the dependent variable also increases. A negative coefficient sign tells when the independent variable increases, the dependent variable decrease. According to the values in the regression analysis of the bank, profitability measured by Earnings per share and return on assets can be buildup as follows.

Model 01: EPS it = -1312.696 + 132.6628 D/E it

Model 02: ROA it = 0.019821 - 0.000295D/E it

Where:
ROA = Return on Assets, EPS = Earnings per Share, D/E = Debt to Equity, α = Regression constant term, β_1, β_2, β_3, β_4, β_5, β_6 = Regression coefficients for the respective variables of the determinant, ε = Error term, i,t = Firm, Year.

Conclusion

Through using multiple regression analysis by using a random effect model, it suggests that the model explains around 82% of the variation in the dependent variable, EPS and around 80% of independent variables predict the dependent variable of ROA. According to the multiple regression model overall, considering the independent variable significant because the P (F-statistic) value is less than 0.005 (5%) and its value is 0.0000. When considering the individual independent variable D/E (Debt to Equity ratio) not statistically significant in explaining EPS (Earnings per Share) and ROA (Return on Assets) at 5%.

According to the correlation analysis, the researcher found that the Debt to Equity ratio has a positive relationship with both ROA and EPS. It means when the D/E increases (Leverage increase) performance of the firm also increases. Under linear regression analysis (linearity test) positive relationship between the independent variable and dependent variables. D/E and ROA have a positive relationship and also D/E and EPS have a positive relationship.

This research paper will help future researchers and econometricians to make decide on the financial sector of Sri Lanka. There researcher experienced such problems throughout the research when collecting and analyzing data. Therefore, the researcher recommended for future researchers take large sample size and used more advance statistical tools to eliminate the limitations of the research.

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Effect of macroeconomic variables on financial performance of listed commercial banks in Sri Lanka

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Introduction

Banks represent the most important component of the financial sector of an economy because they play a critical role as the providers of liquidity in monitoring services, as the producers of information, and ultimately as the facilitators of the economic growth of the country through all these services. The general role of commercial banks is to provide financial services to the general public and businesses by ensuring economic and social stability, and sustainable growth of the economy.

There are various factors that affect the profitability of banks in any economy. Most of the studies divide the determinants of commercial banks' performance into two categories, namely internal and external factors. Otambo (2016) shows that macroeconomic variables jointly influence the performance of the banks. Changes in macroeconomic variables present opportunities as well as threats to the industry players concurrently; those who prepare for the changes shall realize gains from opportunities that arise thus fostering their financial performance, while those who are unprepared might suffer from the threats and might, in turn, impact their financial performance negatively, Mueni (2016).

Various studies have found that relationships between macroeconomic variables and the performance of commercial banks are different. Some studies say that there is a significant relationship between macroeconomic variables and financial performance and some say that there is no significant relationship. Many studies (Otambo, 2016; Mueni, 2016; Tora, 2018) have found and expressed that macroeconomic variables affect the financial performance of commercial banks. Some (Pradhan and Shrestha, 2016; Gautham and Gautham, 2021) have found that there is no connection between macroeconomic variables and financial performance. Guruswamy & AbdurkerimHedo (2016) Shows that some variables express a significant relationship with financial performance while others are not. The majority use two, three, or four variables from the interest rate, unemployment rate, exchange rate, and inflation rate and do not use gold price together with other macroeconomic variables even though the gold price is used as a single variable for research studies, Robiyanto (2018).

Thus, the problem of this study is that the relationship between the macroeconomic variable and financial performance of commercial banks has differed from one study to another as well as country to country according to their economy using common macroeconomic variables. As Sri Lanka experiences political and economic instability for a longer period, and recently, encounters an economic crisis, this context would be a unique laboratory for this type of investigation. Accordingly, we ask the research question that how macroeconomic variables affect the financial performance of listed commercial banks in Sri Lanka? Based on the above general-focused research question, we strive to achieve the following set of objectives.

Research Objectives

- To examine the association between macroeconomic variables and financial performance of the licensed commercial bank in Sri Lanka.
- To establish the effect of macroeconomic variables on financial performance of the licensed commercial bank in Sri Lanka.

Methodology

The study mainly focuses to discover the impact of macroeconomic variables on listed commercial banks' financial performance in Sri Lanka. There are 24 licensed commercial banks in Sri Lanka out of which 13 are foreign, and 11 are local. We identified all these twenty-four banks as the population while randomly selecting 16 banks as the sample. Data is collected for seven (7) years from 2015 to 2021 over secondary data sources; banks audited annual reports, Central Bank Annual Reports (CBSL reports), and relevant databases.

Independent variables are the inflation rate, Exchange rate, Interest rate, GDP Growth rate, and Gold price. Financial performance was measured by Return on Assets (ROA) which is the dependent variable of the study. This study sought to investigate using positivism research philosophy as this uses a quantitative research path and explanatory research design. To achieve the key objectives of the study, we implement correlation analysis and regression analysis as the main statistical tools.

Findings

According to Descriptive analysis, ROA indicates Sri Lankan banks attained, on average, a good performance. The maximum is 2.33 while the minimum is -3.3 showing a 79.67% deviation. The mean value is 0.974. It is noted that the banks have maintained stable financial positions of banks operating profitability over the period. As the researcher assumed 1 is equal to 100 rupees, the maximum value of the Exchange rate is 2 while the minimum is 1.44. GDP Growth rate has a 2.699 deviation from maximum to minimum. During the period gold price shows a 0.79 deviation. The inflation rate and interest rate fluctuate highly over the period showing 2.93 and 2.04 of standard deviations respectively.

Under Correlation analysis, there is a strong positive relationship between the exchange rate and the profitability of commercial banks over the period. Correlation between GDP Growth rate and ROA has a statically weak negative relationship. Correlation coefficient between Gold price and ROA is negatively associated while the inflation rate and ROA are positively associated. There is a statically weak negative relationship between interest rates and the profitability of the banks.

Table 01: Correlation Matrix (Pearson Correlation Analysis)

	EXR	GDP	GP	INF	INT	ROA
EXR	1.0000					
GDP	-0.4769	1.0000				
GP	0.9283	-0.6356	1.0000			
INF	0.4196	0.1677	0.5279	1.0000		
INT	0.8133	-0.6932	0.8178	0.0966	1.0000	
ROA	0.9366	-0.1240	-0.0625	0.0746	-0.1298	1.0000

Source: Survey Data, 2021

Table 02: Regressions (Random-effect)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.9357	1.3865	-1.3961	0.1656
EXR	4.0816	1.7217	2.3705	0.0196
GDP	-0.1873	0.0982	-1.9089	0.0590
GP	-1.7254	0.8319	-2.0740	0.0405
INF	0.1799	0.0869	2.0701	0.0409
INT	-0.0278	0.0656	-0.4238	0.6725

Source: Survey Data, 2021

In Table 02, we show the regression results random-effect model as suggested by the Hausman test. According to the Probability value of the random effect model of regression analysis, the researchers identified the GDP Growth rate and inflation rate both have a significant positive impact on ROA. On the other hand, the Exchange rate and Gold price have a significant negative impact. Thus we have enough evidence to accept the hypotheses at a 5% significant level. But, Interest rates negatively affect financial performance measured by ROA and reject the hypothesis according to a 5% significant level. Analysis results of Gold price and profitability relationship are not theoretically match.

R- Squared value of the analysis is 0.04945. The independent variables cumulatively determine 4.95% of the dependent variable (ROA).

Conclusion

The researcher recommends that bank management to attract foreign currency to the banking system by giving special benefits like increasing interest rates for foreign currency investors. Commercial banks may able to increase their financial performance further under continues risen of the Exchange rate. Under GDP Growth rate, interest rate and the gold price the researcher recommends considering equally on the economic condition of the country and the profitability of the banks. Inflation is not good for the public but it seems businesses perform well during a period of higher inflation. Here with the positive impact, commercial banks perform favorably. Giving concessionary loan facilities and promoting and introducing new loan types for lenders for businesses, agriculture, or for entrepreneurs under concessionary interest rates may be favorable to both banks and the economy. Therefore GDP as well as interest income will be increased while increasing the profitability of banks. When the GDP increases, it may show a good condition for banks, investors as well as lenders because hold lending rates become constant (stable) as much as possible.

The researcher couldn't get a time period as long period because of lack of data collection in licensed commercial banks. Not only that the researcher had to limit the sample to 16 banks because of the inability to collect data from foreign banks. Another limitation is that the research findings could only be applied to commercial banks and cannot apply to other industries.

By the way, the researcher also recommends that the same study be replicated in another developing economy setup as Sri Lanka's while using more than seven years period. This shall serve to enrich the existing literature on the effect of macroeconomic variables on licensed commercial banks' financial performance.

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Impact of the board of directors, audit committee, and ownership structure on corporate performance: Sri Lankan evidence

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Introduction

Every firm strives to achieve its goals and objectives in an environment that is highly competitive and uncertain. Corporate operations should be properly managed and supervised while overcoming internal and external threats. Large modern companies have particularly been impacted by such environmental obstacles (Christensen et al., 2010). To achieve its organizational aims and goals, such a corporation needs managerial monitoring, transparency of business transactions, and shareholders' activism. This ultimately enables firms to maximize shareholders' wealth and mitigate the self-interested behavior of the management. We argue that such managerial monitoring can be better implemented through independent boards and frequent board activities while an efficient audit committee can reduce corporate opacity. Besides, concentrated ownership to large shareholders can mitigate the free-riding behavior of the management.

In the unique institutional framework of Sri Lanka, this study revisits how good governance practices contribute to corporate performance. Sri Lanka, as a follower of Anglo-Saxon model of corporate governance (Senaratne, 2011), we particularly focus on typical agency issues pertinent to a developing market context. Thus, the objective of this study is to describe the explanatory power of the corporate board, audit committee, and ownership structure characteristics towards corporate performance. Generally, in Asian economies, a stark informational environment exists between dominating owners and other minority shareholders (Claessens and Fan, 2002). Particularly, it is quite typical in many nations that the majority of owners hold leadership positions in companies, who tend to maximize their own benefits at the detriment of other shareholders.

The main driving force behind this study is the fact that investors' rights are not adequately protected in Sri Lanka due to a weak institutional structure and insufficient law enforcement (Buachoom, 2018). As a result, the attraction of investors into the equity market could be limited, and consequently, fund flows to the banking system, which may, in turn, control a considerable part of the whole economy. Codes of best practices of corporate governance could be an alternative mechanism that encourages stock corporations to adopt generally accepted good practices that are supposed to assure shareholders' wealth maximization. Sri Lankan firms typically exhibit a concentrated ownership structure where families and individuals control the corporate sector via control pyramids or intermediate private firms. Therefore, the expected role of the board of directors and its sub committees may not be desirable resulting expropriation of corporate resources at the cost of other shareholders.

We follow the arguments of agency theory (Jensen and Meckling, 1976) which postulates that overseeing management and considering potential solutions to agency issues between management and shareholders are the two of primary duties of the directors' board. Fama and Jensen (1983) state that outside board members act as arbitrators, resolving disputes between managers and reducing management opportunism. According to Hambrick and Mason's (1984) upper echelons theory, managerial attributes, which comprise psychological traits and observable characteristics, determine organizational outcomes differently. Resource dependency theory (Pfeiffer, 1972) suggests that board of directors is a tool for reducing a company's reliance on its surroundings, but the responsiveness to this dependency is dependent on the board's size and makeup, which should be in line with the external environment's conditions (Pfeiffer and Salancik, 1978).

Methodology

The study's scope is limited to a sample of 152 non-financial firms from a total of 296 companies listed in the Colombo Stock Exchange as of the end of 2019. Data is prepared as panel (balanced) data consisting 1064 firm-year observations for a period of seven years from 2013 to 2019. We disregard years after 2019 as the country encountered abnormal economic surroundings because of Covid-19 pandemic. Corporate performance (Corp. Perf.) is the dependent variable which is proxied by return on assets (ROA) and Tobin's Q (Q). The characteristics of board of directors, audit committee, and ownership structure are taken as independent variables. Such board-related attributes include board independence (Board. Indep.), board size, dual role of board leadership (Dual Role), and board meeting frequency (Board Meet.). Measures of audit committee comprise audit committee independence (Audit Indep.), audit committee size (Audit Size), and audit committee meeting frequency (Audit Meet.). The ownership structure is represented by ownership concentration (Own. Con.), family ownership concentration (Fam. Own.), and managerial ownership (Manag. Own.). Firm size, firm age, leverage (Leve.), and presence of big-4 audit firms (Big Audit) are considered as control variables. We implement correlation analysis, and panel regression analysis with different model specifications to generate our outcomes. Thus, the general regression model of the study is as follows:

$$\begin{aligned} Corp.\ Perf._{it} = {} & \beta_0 + \beta_1 Board.Indep._{it} + \beta_2 Board\ Size_{it} + \beta_3 Dual\ Role_{it} + \beta_4 Board\ Meet._{it} \\ & + \beta_5 Audit\ Indep._{it} + \beta_6 Audit\ Size_{it} + \beta_7 Audit\ Meet._{it} + \beta_8 Own.Con._{it} \\ & + \beta_9 Fam.Own._{it} + \beta_{10} Manag.Own._{it} + \beta_{11} Firm\ Size_{it} + \beta_{12} Firm\ Age_{it} \\ & + \beta_{13} Leve._{it} + \beta_{14} Big\ Audit_{it} + year\ fixed\ effects + \varepsilon_{it} \end{aligned}$$

Findings

Table 01 shows that return on assets and Tobin's Q of an average firm amounts to 10% and 1.45 respectively. While a board of directors consists of eight directors on average, about 40% of directors belong to the independent category. The CEO also holds the board chair position in 31% of firms. Nearly five board meetings are held during a financial year. Though the audit committee size is relatively small (3 members), its majority of members seem independent. More than four audit committee meetings are conducted within a year. Ownership is highly concentrated in the sample firms (77%) out of which large familial shareholders account for 59%. The proportion of equity stake held by the management is 9%.

Table 01: Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
Corporate Performance Measures					
Return on Assets	1064	0.10	0.26	-1.62	4.16
Tobin's Q	1064	1.45	1.71	0.22	19.27
Board, Audit Committee, and Ownership					
Board independence	1064	0.39	0.12	0.00	0.88
Board size	1064	8.18	2.21	3.00	17.00
Dual role of board leadership	1064	0.31	0.46	0.00	1.00
Board meeting frequency	1064	4.70	3.31	0.00	21.00
Audit committee independence	1064	2.34	0.93	1.00	4.00
Audit committee size	1064	3.27	0.77	2.00	7.00
Audit committee meeting frequency	1064	4.53	1.85	0.00	18.00
Ownership concentration	1064	0.77	0.14	0.00	1.16
Family ownership concentration	1064	0.59	0.49	0.00	1.00
Managerial ownership	1064	0.09	0.26	0.00	6.19
Firm Specific Variables					
Firm size	1064	21.99	1.30	18.11	25.74
Leverage	1064	0.93	1.99	-23.52	32.65
Firm age	1064	28.81	17.21	1.00	91.00
Presence of big-4 audit firms	1064	0.93	0.25	0.00	1.00

Table 02 exhibits how corporate performance measures correlate with board, audit committee, and ownership characteristics. Return on assets is positively contributed by the independence boards and audit committees, frequent board and audit committee meetings, and concentrated ownership. In relation to market-based measure (Tobin's Q), positive reactions are made by the dual role of the CEO and ownership concentration. Managerial ownership does not seem to converge the interest between managers and shareholders as it is negatively related to corporate performance indicators. Besides, increased board size seems undesirable for unanimous decisions as it negatively associates with corporate performance measures.

Table 02: Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12
ROA	1.00											
Q	0.30	1.00										
Board. Indep.	0.01	(0.08)	1.00									
board size	(0.04)	(0.08)	(0.17)	1.00								
Dual Role	(0.09)	0.01	(0.05)	(0.08)	1.00							
Board Meet.	0.01	(0.07)	0.22	0.21	(0.18)	1.00						
Audit. Indep.	0.01	(0.03)	(0.02)	0.08	(0.04)	(0.06)	1.00					
Audit Size	(0.04)	(0.10)	0.09	0.30	(0.04)	0.23	(0.02)	1.00				
Audit Meet.	0.04	(0.04)	0.05	0.16	(0.02)	0.24	(0.12)	0.16	1.00			
Own. Con.	0.03	0.15	0.04	0.07	(0.04)	(0.09)	0.20	(0.03)	0.04	1.00		
Fam. Own.	0.13	0.23	0.00	(0.01)	0.01	(0.04)	0.01	(0.07)	0.04	0.07	1.00	
Manag. Own.	(0.02)	(0.07)	0.06	0.00	0.04	(0.03)	0.05	(0.01)	0.02	(0.02)	(0.05)	1.00

Source: Survey Data, 2022

Table 03: Regressions

	Dependent Variable			
	Return on Assets		Tobin's Q	
	(1)	(2)	(3)	(4)
Board independence	0.087	0.191*	-0.189	-0.061
Board size	-0.002	-0.002	-0.019	-0.011
Dual role of board leadership	-0.030	-0.002	0.074	0.084
Board meeting frequency	0.005	0.013***	-0.005	-0.004
Audit committee independence	0.012	0.015	0.062	0.072*
Audit committee size	-0.017	-0.025*	-0.011	-0.006
Audit committee meeting frequency	0.002	-0.001	-0.012	-0.015
Ownership concentration	0.092	0.212	1.315***	1.016**
Family ownership concentration	0.147***	0.114**	1.183***	1.111***
Managerial ownership	-0.001	0.019	-0.047	-0.021
Firm size	-0.008	-0.015	-0.081	-0.306**
Leverage	0.001	0.001	0.012	0.006
Firm age	0.004	0.001	0.008***	0.006
Presence of big-4 audit firms	0.034	0.166**	0.100	0.063
Constant	0.095	-0.016	2.042	7.198
R^2	0.0305	0.0073	0.1219	0.0423
Random-effect	yes	no	yes	yes
Fixed-effect	no	yes	no	no
Year dummies	yes	yes	yes	yes
Groups	152	152	152	152
Observations	1064	1064	1064	1064

Source: Survey Data, 2022

Table 03 presents how board, audit committee, and ownership structure characteristics regress against return on assets and Tobin's Q. While models (1) and (3) are estimated as random-effect models, models (2) and (4) belong to fixed-effect models. As suggested by Hausman test, random-effect models carry higher explanatory power compared to fixed-effect models. In model (2), board independence and board meeting frequency positively and significantly relate to return on assets. This result is consistent with Buachoom (2017) who find that board independence and board meeting frequency improve business performance. Audit committee independence also shows a positive relation with Tobin's Q in model (4). In overall, concentrated ownership to large shareholders, particularly for families, exhibits a significant positive impact on both return on assets and Tobin's Q (Models (1) - (4)). Large firms show poorer market performance (Model (4)), but longer-tenured firms could be attractive to market participants (Model 3). Hiring one of the big-4 auditors contributes to higher accounting return (Model (2)).

Conclusion

This study argues that stricter monitoring implemented by board of directors, audit committee, and large shareholders could mitigate self-interested behavior of management resulting higher accounting-based as well as the market-based performance of firms. As our results indicate, such monitoring can be better implemented if the board of directors and the audit committee comprise many independent directors. As frequent board meetings could enhance firm value, we suggest that frequent gathering of directors would better monitor corporate operations and provide necessary reviews. Large shareholders monitoring seems to be overlooking, particularly in family firms, large familial shareholders direct their business into success. Though large shareholders are more likely to monitor corporate operations, they may, in turn, expropriate corporate resources. Therefore, such expropriating behavior of large shareholders could be an agenda for future research.

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Factors affecting people's reliance on informal financial sector in Sri Lanka: Special reference to Northwestern province

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Introduction

Informal sector is a worldwide phenomenon. There is no clear and established definition for the informal sector, be it related to financial or any other types of activities. Informal sector refers to the non-institutional or unorganized financial sources, which consist mainly of friends and relatives, moneylenders, traders, pawnbrokers, and landlords engaged in lending activities and borrowings from such sources. Even though formal finance institutions are fairly spread and located across Sri Lanka, people still tend to rely on informal finance. Informal financial instruments are mainly used among people who do not have access or cannot supply formal systematic savings and credit facilities (Edirisinghe, 2015). Stynwand (2008) has revealed that easy access, ability to obtain funds speedily and the absence of collateral requirements play a key role in motivating households to use informal sources. In here researcher stated the research problem with the support of survey results and new paper articles as follows.

Statistics Department of Central Bank of Sri Lanka published "Economic and Social Statistics of Sri Lanka (ESS)" on 2020 with the objective of providing single source of information that contains economic and social statistics related to Sri Lanka and neighboring countries. The distribution of number of loans obtained by households during the reference period revealed that 12.2%of loans were from informal financial sector.

Table 1: Economics and Social Statistics of Sri Lanka

Distribution of Number of Loans by Formal and Informal Institutions					
	Value (Rs. Million)				
	2015	**2016**	**2017**	**2018**	**2019**
Formal Institutions	4620046	5438604	6318684	7542263	7922853
Informal Institutions	795844	962672	1057097	1137046	1102738
Total	5415890	6401276	7375781	8679309	9025591
	Value (%)				
	2015	**2016**	**2017**	**2018**	**2019**
Formal Institutions	85.30539	84.96125	85.66800	86.89935	87.78210
Informal Institutions	14.69461	15.03875	14.33200	13.10065	12.21790
Total	100	100	100	100	100

Source: ESS 2020 Report

Department of Census and Statics Conducted survey in Northern Province and they collected the household income and expenditure data. The survey result shows the people's access credit rate as 62 percent were from informal and 54 percent were formal financial sector (news survey CBSL, 2015).

In Kurunegala district 80% involved in pyramid scheme and it is noted that bank officials, teachers, police officers, private sector employees, member of the forces and many others who hold senior position fallen to this pyramid scheme and other 20 percent people attend to brainwashing lectures conducted by the racketeers (Daily mirror, 2016). In Kurunegala District over 5000 people caught for a Pyramid Scheme and lost 1.5Billion. this was operated as a network marketing, but really operate a pyramid scheme to violate banking Act. (Lanka Deepa, 21st March 2021). An illegal finance company in Kurunegala District defrauded Rs.10Bn from 944 depositors. (Daily mirror, 09th October 2021).

Though there are number of research conducted on informal financial sector in other countries, the empirical and theoretical gaps justified that it is rare to find the literature related to informal finance in Sri Lanka. Thus, the purpose of the study is, to investigate factors associated with reliance on informal financial sector and to examine different informal financial sources which Sri Lankan community mostly use. To achieve that, four objectives were formulated.

- To examine the impact of financial knowledge on people’s reliance on Informal Financial Sector.
- To identify the effect of financial behavior on people’s reliance on Informal Financial Sector.
- To identify the impact of attitude towards personal finance on people’s reliance on Informal Financial Sector
- To investigate the impact of Legal and Regulatory factors on people’s reliance on Informal Financial Sector

Methodology

The researcher used a deductive research approach in this study. Furthermore, the researcher used a quantitative approach in this study. This research is purely based on primary data. The primary data means the data observed directly from the people. This study collects data through self- administered questionnaire. The target population of this study consisted of a focused group of males and females who are dealing with Informal Financial Sector in Sri Lanka while sample of this study consisted of a group of people who are dealing with Informal Financial Sector living within the Northwestern province. And as the sampling technique, convenience sampling was used because the data was collected from people who were available at the time and were easily accessible. The researcher has selected 384 people of Northwestern province in Sri Lanka who are dealing with Informal Financial Sector as the sample, to find out "Factors affecting People’s reliance on Informal Financial sector in Sri Lanka". Finally, the collected data were analyzed using SPSS. With the help of previous literatures of several authors (Karunagoda, 2007; Subika Farazi, 2012; Edirisinghe, 2015), the following model was conceptualized to carry out the research.

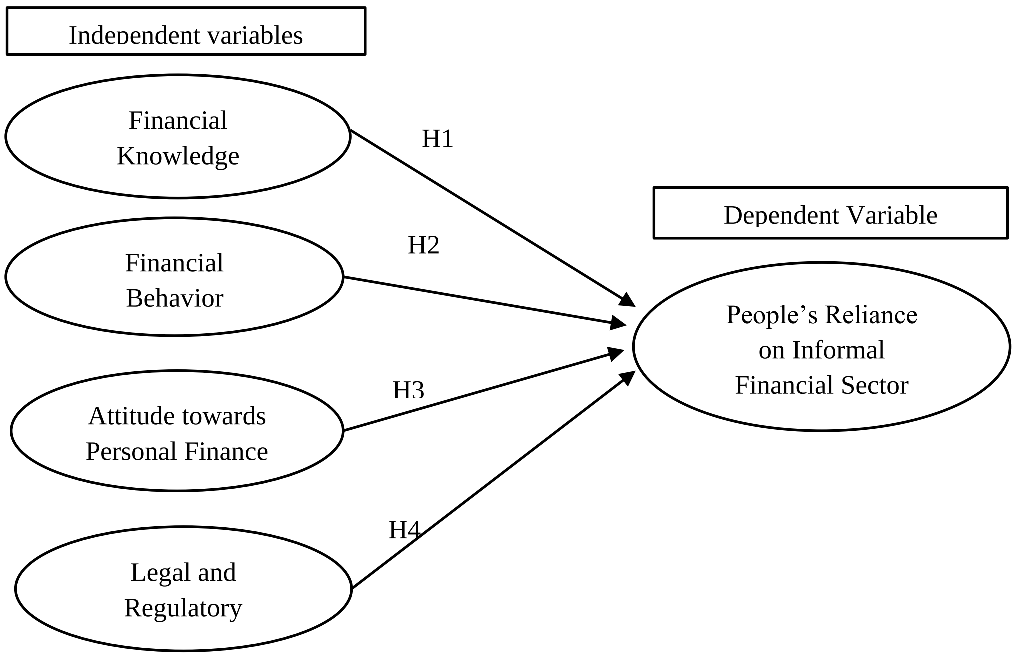

Figure 1: Conceptual Framework

Hypotheses,

H1: There is a significant relationship between financial knowledge and reliance on informal finance

H2: There is a significant relationship between financial behavior and reliance on informal finance

H3: There is a significant relationship between attitude towards personal finance and reliance on informal finance

H4: There is a significant relationship between weak laws and regulations and reliance on informal finance

Findings

Questions of the study were classified as Reliance on Informal Finance, Financial Knowledge, and Financial Behavior, Attitude towards personal Finance and weak laws and regulations. Hence, the Cronbach alpha was used to test the consistency of questions. Cronbach's alpha values were derived above 0.7 which means that questionnaire has a high degree of consistency and accuracy.

Through frequency analysis of different sources of informal finance, the results show that the most preferable financing source is loan from family/friends. 35.2% of the respondents prefer pawning in Informal. 37of the respondents of the sample prefer to use personal borrowings.2.9% of the respondents prefer to use other informal sources such as pyramid scheme.

Researcher tested the assumptions of Normality of Data, Absence of Multicollinearity, Homoscedasticity, and Linearity of Data before running Multiple regression. All the assumptions were fulfilled in the data set of the research, So the researcher could use the data set to produce good results.

After that researcher used Correlation Analysis to investigate relationship between independent variable and dependent variable. In this analyze, all independent variables are positively correlated with the dependent variable, and all factors are significantly affected to the dependent variable (People's Reliance on Informal Finance). Then researcher tested the hypothesis by using the multiple regression analysis.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.853[a]	.728	.725	.224

a. Predictors: (Constant), Legal, Financial Knowledge, Financial Attitude, Financial Behavior
Source: SPSS output

From the regression analysis, researcher has found that the Value of R Square is 0. 728.This means dependent variable (people's reliance on Informal Financial Sector) can be explained or represent 72.8% by the independent variables of financial knowledge, Attitude towards personal finance, Financial Behavior and Legal and regulatory factors.

Table 3: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.643	4	12.661	253.393	.000[b]
	Residual	18.937	379	.050		
	Total	69.579	383			

a. Dependent Variable: Informal Finance
b. Predictors: (Constant), Legal, Financial Knowledge, Financial Attitude, Financial Behavior
Source: SPSS output

The overall regression model is statistically significant.

Table 4: Coefficients

		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
Model		**B**	**Std. Error**	**Beta**	**t**	**Sig.**	**Lower Bound**	**Upper Bound**
1	(Constant)	0.092	0.183		0.502	0.616	-.0268	0.452
	Financial Knowledge	0.036	0.044	0.028	0.812	0.417	-0.051	0.122
	Financial Behavior	0.369	0.056	0.313	6.549	0.000	0.258	0.479
	Financial Attitude	0.147	0.053	0.118	2.763	0.006	0.042	0.252
	Legal	0.394	0.038	0.477	10.462	0.000	0.320	0.467

a. Dependent Variable: Informal Finance

Source: SPSS output

According to the Table, financial behavior, attitude towards personal finance and weak laws and regulations are statistically significant determinants that effect on people's reliance on Informal financial sector (since, significant value < 0.050). But financial knowledge coefficient is reported as statistically insignificant (Sig. Value > 0.050).

The regression equation model values of and ß in the result are as follows,

$$Y = 0.092 + 0.369FB + 0.147FA + 0.394L + \mathcal{E}\, i$$

Y= people's reliance on Informal financial sector, FB= Financial Behavior, FA= Attitude towards personal Finance, L =Weak laws and regulations

Table 5: Hypothesis testing

Hypothesis Testing	Beta Coefficient	Significance	Accept/ Reject
H1: There is a significant relationship between financial knowledge and reliance on informal finance	0.036	0.417	Reject
H2: There is a significant relationship between financial behavior and reliance on informal finance	0.369	0.000	Accept
H3: There is a significant relationship between attitude towards personal finance and reliance on informal finance	0.147	0.006	Accept
H4: There is a significant relationship between weak laws and regulations and reliance on informal finance	0.394	0.000	Accept

Conclusion

The main objectives of this study were to investigate factors associated with reliance on informal financial sector and to examine different informal financial sources which Sri Lankan community mostly use. Northwestern province was the main geographical area selected for the study and 384 respondents were conveniently selected to distribute questionnaires. Data collected through questionnaires were statistically analyzed to derive at the conclusion. According to the descriptive statistics, it was found that loan from family/friends is the most preferable informal financing method, and this finding is also consistent with the findings of Stynwand (2007).

According to the results of multiple regression analysis, financial behavior, attitude towards personal finance and weak laws and regulations are statistically significant determinants that affect on people's reliance on Informal financial sector. But financial knowledge coefficient is reported as statistically insignificant.

Since the researcher was unable to reach a broad area in this study due to some limitations, other scholars can reach that by considering other districts, other influential factors which were omitted in this study. The findings of this research would facilitate such type of further studies. The government and the formal financial institutions must pay attention to find out the determinants that highly influence people's reliance on the informal financial sector and must take necessary actions to mitigate the risk by involvement in the informal sector. Government and formal institutions can introduce various loan schemes with fair interest rates and less collateral because most of the people who have been involved in those societies are self-employees. With workshops, seminars will be able to change the personal financial attitudes of the people as well.

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Financial management and corporate governance perspectives of Confucianism: Lessons from China

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Introduction

Confucius was an early Chinese philosopher. Since then, he has changed the consciousness of the Chinese people, enlightening them through the brilliance of his teachings and ideas, as seen through their practices. It has been revealed that many Chinese people successfully handle the management system in their organizational process. Confucian principles have always highlighted how individuals should interact with society and how morality should lead them to a better existence. Confucianism plays a fundamental role in financial management and corporate governance. Financial management is at the heart of running a successful business. Successful organizations mainly depend on financial management. Confucian culture can significantly improve the performance of organizations. When discussing corporate governance, it can be defined as the governance of the rulers; governance is the process of the authority vested in the rulers, and they do so, and these rules are enforced and changed. Confucius emphasized that leaders should be kind and compassionate. Therefore, a Confucian business leader should be careful to build friendly relationships and interactions with employees because he has high tasks and relationships.

Financial management and corporate governance are critical factors for every organization worldwide. Without financing, the company faces many problems in its business process. Maximizing the company's and increasing the satisfaction of the interested parties through financial management is challenging for an organization. Companies can solve these problems by using Confucianism. Today, Confucianism plays a crucial role in guiding society. Therefore, this study's primary concern is how Confucianism affects financial management and corporate governance for the success of organizations.

Accordingly, this research aims to discuss how Confucianism behaves according to financial management and corporate governance theories. There are four main objectives in this study:- to describe the relationship between Confucianism and financial management, to describe the relationship between Confucianism and corporate governance, to explore the ways of responding to Confucianism to financial management and corporate governance, and to investigate any motivational factors for being successful with Confucianism in current Chinese firms.

Non-economic elements such as culture and economic considerations have significantly impacted organizational performance in recent years, and these non-economic factors play a vital part in organizational success (Rarick, 2008). The speed and size of China's economic expansion a well-known to everyone. Several key factors contribute to this performance, including the need for different types and forms of growth - knowledge/innovation, service, etc., as well as some ideas that question the sustainability of growth as it slows. Difference, leadership, innovation, and knowledge are also key performance factors. Confucianism smooths out these factors (Rowley and Oh, 2020). This is not unique to China; Confucianism, also known as the Five Asian Dragons, has been a major cultural factor in the economic success of Hong Kong, Japan, Singapore, South Korea, and Taiwan, with Confucius' emphasis on education at all levels. Skill development, hard effort, moderation, patience, and persistence are all attributes that contribute to the Asian Five Dragons' economic prosperity. Confucius' four fundamental precepts have a direct impact on institutional communication. Every Asian nation has inherited traditions, particularly the five Asian dragons (Chen and Chung, 1994).

Using a sample of Chinese listed companies from 2007 to 2017, the researchers found that location-based enterprises with higher Confucian principles were more likely to obtain trade credit than their peers elsewhere. Using the variables of Confucianism based on geographical proximity and Chinese companies from 2004-2015, Chen *et al.* (2020) found that Confucianism adversely affects money holding. The reason suggests that Confucianism minimizes agency problems and therefore reduces the selfish behaviour of management in maintaining large cash reserves. In the same context, Chen, Ye, and Jebran (2019) found that Confucianism is negatively linked to over-investment. Their findings show that informal firms can minimize agency problems and thus limit corporate over-investment. It has been shown that Confucianism, as a code of ethics, can influence corporate behaviour, thereby influencing institutional over-investment. Corporate governance definition by user perspective. The exercise of authority over corporate organizations is known as total corporate governance (Clarke 2004). Confucius's culture is not only a cultural system but also a system of governance. It helps to enhance the institutional governance role of informal institutions by strengthening the cultural building within companies and positively impacting Confucian culture. Confucius's culture helps companies improve the quality of information disclosure, and regulators better regulate the quality of information and investor protection. Moreover, it will be conducive to the standardization and development of capital markets and the promotion of resource allocation efficiency (Cheng, Pan, and Xuan, 2017). Confucianism encourages five qualities: ren (compassion); Yi (righteousness); li (eligibility); Zhi (wisdom); and xin (dependability), in addition to sustaining unity via connections.

Methodology

The research design aims to employ qualitative research methodologies to analyze Confucianism culture, financial management, and corporate governance using historical studies and situations. The text analysis approach is used to analyze the data in this case. Secondary data is also used to supplement the research study obtained through publicly available data sources. Research reports prepared by academic researchers, academic institutions, economists, and others in different fields, books by various authors, handbooks, research papers, magazine articles, news, technological and trade journals, webpages, public documents and statistics, historical records, and other public reports are among the sources of the published data.

Findings

When managerial experts try to explain the financial success of Chinese family businesses and to propose a model for Western organizational practices, they turn to Chinese culture underpinned by Confucian values (Yao, 2013). It is right to say that financial management and corporate governance are the basic foundation of business success, and Confucianism is a bulwark that strengthens that foundation. Confucian principles guide management and corporate governance to success. Thrift, trust, respect for others, hard work, love, and kindness are all embodied in Confucianism. All these attributes provide a basis for critical management theories and organizational management theories. According to discussions, pecking order theory and trade-off theory show that Confucianism rejects debt investment based on breach of trust when choosing between debt investment and equity investment. According to the theory of wealth maximization, Confucianism also points out that the focus should be on shareholder benefits rather than just profit through benevolence and equality. Portfolio theory guides controlling costs and investing frugally. Accordingly, the relationship of Confucianism with all these financial management theories and corporate governance theories is potentially crucial for the success of organizations and everyday life. Getting started on the right foot is simple, but getting to the top can be challenging. Honesty and trustworthiness are hard-to-achieve requirements for a lasting partnership (Hon, 2005).

Conclusion

This study examines the financial management and corporate governance perspectives of Confucianism. When managerial experts try to explain the financial success of Chinese family businesses and propose a model for Western organizational practices, they turn to Chinese culture underpinned by Confucian values. Existing literature suggests that the greater the influence of Confucianism on a company, the greater its profits. Using Confucius' teachings can bring business sustainability, peace, learning, and growth (Wang *et al.*, 2020). Informal institutions (such as religion, culture, and social beliefs) can replace formal institutions regarding statistical disclosure transparency and reduce unethical business practices. Stakeholders are constantly concerned about the quality of listed information. Confucianism provides clear guidance for business organization, daily life, investment, and financial decisions.

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Human Resource Management & Organizational Behavior

Analyzing the factors affecting to employee satisfaction in AIA Insurance Lanka PLC

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Introduction

Job satisfaction describes how content an individual is with his or her job. It is a relatively recent term since, in previous centuries, the jobs available to a particular person were often predetermined by the occupation of that person's parents. But there have variety of factors that can influence a person's level of job satisfaction. Some of these factors include the level of pay and benefits, the perceived fairness of the promotion system within a company, the quality of the working conditions; leadership and social relationships, the job itself (the variety of tasks involved, the interest and challenge the job generates; and the clarity of the job description and requirements). The happier people are in their jobs, the more satisfied they are said to be. Job satisfaction is not the same as motivation, although it is clearly linked. Job design aims to enhance job satisfaction and performance through methods that include job rotation, job enlargement, and job enrichment. Other influences on satisfaction include the management style and culture, employee involvement, empowerment; and autonomous workgroups. Job satisfaction is a very important attribute that is frequently measured by organizations. Motivated employees then develop loyalty or commitment to the firm, resulting in greater productivity and lower turnover rates. However, even with the widespread recognition of the importance of facilitating the relationship between job satisfaction and motivation in facilitating organizational commitment, there are varying perspectives on the means of doing this. The earliest strategy is to use wage increases to link job satisfaction and motivation to organizational commitment (Hill & Wiens-Tuers, 2002). With the recognition that this is not enough to bring about motivation expressed in job satisfaction, other perspectives emerged, giving particular importance to the training and skills development of employees (Woodruffe 2000), applied through the underlying principle of continuous organizational learning. Since this covers only an aspect of human resource management, a holistic approach has emerged that targets the development of a certain quality of employment life (Champion-Hughes, 2001) that covers fair wages, benefits, other employment conditions, and career development to support the facilitation of motivation and job satisfaction directed towards organizational commitment.

Staff discontent essentially causes employee turnover. However, leaving one firm for another is not always due to job dissatisfaction. Higher salary, better benefits, or greater job growth prospects can tempt them away if the talents they possess are in demand. It is crucial to distinguish between workers who quit their jobs because they are dissatisfied and those who do so for other reasons, which is why it is necessary to understand and recognize the difference. The degree of job satisfaction among employees is influenced by a variety of variables.

The goals of this study are to first examine the variables that affect job satisfaction among employees and, second, to identify the organizational implications of the employee turnover rate.

Job satisfaction has been defined as a pleasurable emotional state resulting from job appraisal, affective reaction to the job, and attitude toward the job. (Weiss, 2002) has argued that job satisfaction is an attitude but points out that researchers should clearly distinguish the objects of cognitive evaluation that are affective (emotional), beliefs, and behaviors. This definition suggests that we form attitudes towards our jobs by taking into account our feelings, our beliefs, and our behaviors. Whilst there are numerous definitions, job satisfaction is most commonly defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experience" (Luthans, 2002).

One common research finding is that job satisfaction is correlated with life satisfaction. This correlation is reciprocal, meaning people who are satisfied with life tend to be satisfied with their job, and people who are satisfied with their job tend to be satisfied with life. However, some research has found that job satisfaction is not significantly related to life satisfaction when other variables such as non-work satisfaction and core self-evaluations are taken into account.

A number of existing studies conclude that selected systems benefit workers. In their detailed study of the steel, apparel, and medical instruments and imaging industries (Appelbaum et al. 2000), they surveyed workers regarding their job satisfaction, organizational commitment, and degree of stress on the job. They discovered little evidence that these systems increased stress in general and, additionally, their effects on job satisfaction and organizational commitment were positive. According to Muhammad Javedet.al (2012), there are three practices which have been identified by him as training and development, employee recognition, and rewards.

Flynn argued that rewards and recognition programs keep high spirits among employees, boost their morale, and create a linkage between performance and motivation. The basic purpose of a recognition and reward program is to define a system to pay and communicate it to the employees so that they can link their reward to their performance, which ultimately leads to job satisfaction.

Methodology

The primary and secondary data have been taken into account for the analysis of the research and a conceptual framework has been created as per the literature review. Employee recognition, training and development, and rewards are the selected independent variables. The population of the study consists of all head office employees of AIA Insurance Limited. The sample consists of randomly selected fifty employees from a selected company, covering the head office. Thirty five (35) from the non-executive level and 15 from the executive level

Compared to that, executive level employees are limited. The instrument used in the study was a survey questionnaire developed by the researcher according to the guidance of the supervisor with the intention of gathering data about selected factors and job satisfaction. The questionnaire developed for employees contained a total of thirty questions. The method of analysis includes a statistical analysis, histogram, frequency table, and the use of SPSS software.

The researcher empirically tested three selected factors influencing employee job satisfaction and discovered that all tested practices (training and development, employee recognition, and employee rewards) were satisfactorily adopted in the AIA insurance ltd. According to the statistical results of the research, it has been found that employee recognition and rewards are the most highly adopted practices among considered practices, while training and development are the least adopted practices.

Findings

The results of the study further revealed that there is a positive relationship between selected factors and job satisfaction of employees in the selected organization.

As per the above, there is a moderately positive relationship between employee rewards and job satisfaction. Because the calculated correlation coefficient was 0.558 It is the highest value compared to other correlation coefficient values. On the other hand, the researcher tested the relationship between training and development and job satisfaction of employees. The statistical results showed the correlation coefficient was.279 It means there is a negative relationship between training and job satisfaction.The relationship between employee recognition and job satisfaction of employees in the selected organization reveals a moderate positive relationship, since the correlation coefficient is 0.548

Conclusion

The three selected factors affecting employee job satisfaction found that all training and development, employee recognition, and employee rewards have been adopted satisfactorily in the AIA insurance ltd. According to the statistical results of the research, it has been found that employee recognition and rewards are the most highly adopted practices among those considered, while training and development are the least adopted. So as per the statistical results the management of the AIA insurance Ltd has given higher priority to rewards and employee recognition and the researcher also could be able to observe that they have highly consider about their human resource and spending lot for employee recognition programs to keep a satisfied and loyal work force. Other than that, they have encouraged the performance-based incentive system within the employees.

The results of the study further revealed that there is a positive relationship between selected factors and job satisfaction of employees in the selected organization.

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Impact of reward management on non-managerial employee motivation in private sector hospitals in Sri Lanka

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Introduction

Human capital is a dominant element of today's business world. Employees must be motivated, attracted, and retained in the organization to succeed, receive well-performed jobs, or achieve the company's desired goals. Reward management is the deliberate utilization of the payment system as an essential integrating mechanism through which the efforts of various subunits and individuals are directed towards achieving an organization's strategic objective, subject to internal or external constraints. Motivation is the readiness to put forth much effort to achieve organizational goals, conditioned on the ability of those efforts to meet personal and team requirements. Motivation is a drive that influences people to work hard. It is vital to boosting productivity and performance (Korlen, 2017).

Health care workers need incentives to motivate them to satisfy patients and increase their effectiveness (Hotchkiss et al., 2015; Huber and Schubert, 2019; Schopman et al., 2017). The health sector is particularly complex as it focuses on providing health services, mainly produced by the human resources that staff the health units. The behavior of health workers largely determines the quality of the services under study as a result of their efforts (Musinguzi et al., 2018). One main problem highlighted in the healthcare sector is a limited understanding of the motivation and productivity of health workers (Ministry of Health, 2018). While various initiatives have been undertaken to ensure better deployment and motivation of the health workforce, subnational level disparities remain. Also, with the impact of the Covid-19 pandemic situation on the country's economy, private sector hospitals slashed pay, overtime pay, incentives, and other benefits to their health workers. It had a significant impact on non-managerial level employees. As a result, non-managerial employee motivation declined, and labor turnover increased. Therefore, this study investigates the impact of reward management dimensions such as basic salary, bonus scheme, recognition, and learning opportunities on non-managerial employee motivation in private sector hospitals in Sri Lanka.

Methodology

This study is quantitative and uses a deductive approach. The targeted population of this study was the non-managerial employees of private sector hospitals in Sri Lanka. For this study researcher used the stratified sampling technique. The sample will be selected from 03 leading private sector hospitals in Sri Lanka, representing the highest number of employees out of all the private sector hospitals. The sample was chosen using Morgan's criteria. Required information for this research was obtained from 384 non-managerial employees, 128 each in one private sector hospital from non-managerial employees.

The primary data is the main source of data to be used in the study. Among the primary data collection instruments, this study's main type of data collection is the questionnaire method (Mathers et al., 2009). The questionnaire is to be prepared with Google form and sharing, and data is collected through online methods such as e-mail, Viber, and What's app. Descriptive, correlation and multiple regression analysis will be used to analyse the collected data. Mean median, standard deviation, and variance will be calculated using descriptive analysis. The researcher has developed a conceptual framework that helps to test using data subsequently and is required to describe the causal relationship between variables and factors influencing reward systems on employee motivation.

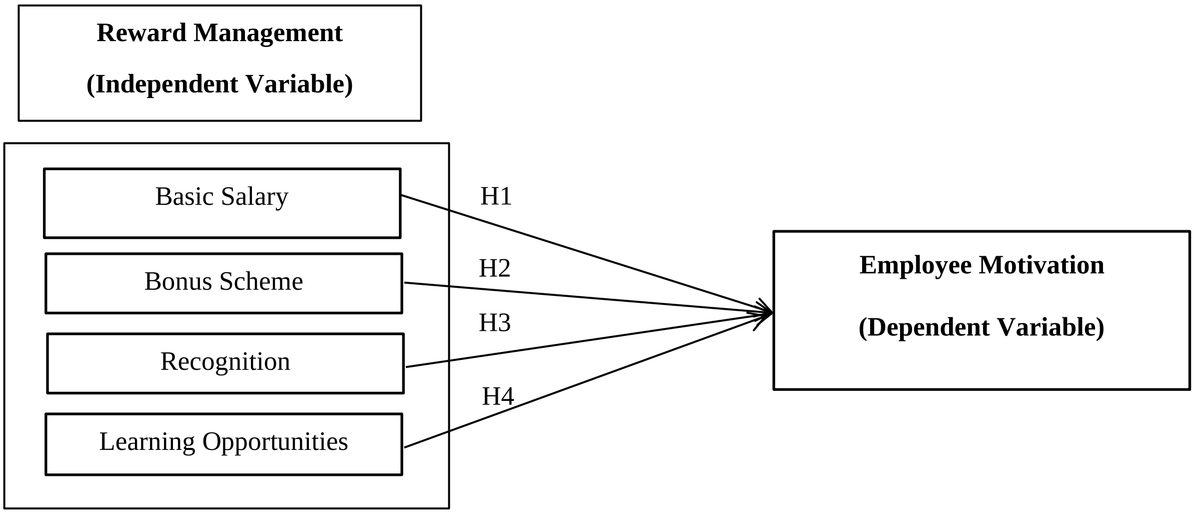

Figure 1: Conceptual Framework

Findings

The study followed to establish the distribution by hospitals of the respondents in the sample selection. The category analysis denoted that the medical represented 44.3%, para medical represented 33.1%, and non-medical represented 22.7% of the entire sample.

Cronbach's alpha values were employed to measure the reliability. If the values of all the variables are more significant than 0.7(>0.7), then all the survey questions are reliable, there is good internal consistency, and it gives credible results. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy values of all the variables is more significant than 0.50 and close to 1.0. Thus, the questionnaire provides adequate coverage by embodying several items representing variables of interest, ensuring the instrument's content validity.

Table 1: Descriptive Statistics

Variable	Mean	Standard Deviation
Basic Salary	3.90	0.686
Bonus Scheme	3.73	0.658
Recognition	3.79	0.680
Learning Opportunities	3.79	0.651

Table 2: Summary of Hypothesis

Variable	B Coefficient	Pearson correlation	Sig.value	Decision
Constant	0.771	-	0.000	-
Basic Salary	0.022	0.528	0.651	Rejected
Bonus Scheme	0.291	0.605	0.000	Accepted
Recognition	0.259	0.652	0.000	Accepted
Learning Opportunities	0.219	0.663	0.000	Accepted

Source: Survey Data, 2022

According to table 1, the alternative hypothesis was accepted for a bonus scheme, recognition, and learning opportunity since b>0. The first hypothesis is rejected for health workers since even the countries unable financially to revise the pay scales for all health workers, yet have the flexibility to alter some salaries, may consider increasing the pay and benefits of high priority groups (Ministry of Health,2021). The second hypothesis of the bonus scheme was accepted for private sector health workers since the effect of performance-related pay for hospital doctors on hospital behaviour found that the 'bonus system' led to improved motivation (Henderson & Tulloch,2008). Employee productivity motivation can be enhanced by providing effective recognition, which provides the result to improve the performance of an organization (Dee prose 1994). Thus, the third hypothesis was also accepted and empirically verified. Employee productivity motivation can be enhanced by providing effective recognition and improving the organization's performance (Dee prose, 1994). The World Health Organization (WHO) migration study suggests improving learning opportunities using open learning courses to provide updated knowledge to medical staff (WHO 2004).

Conclusion

This research summarizes the impact of reward management on non-managerial employee motivation in private sector hospitals in Sri Lanka. Hence, employees are moderately impacted by indicators of their bonus scheme, recognition, and learning opportunities. Limitations of this research considered only four dimensions of reward management, and there was a moderate impact on employee motivation. The sample size was limited to 384 non-managerial employees in private sector hospitals in Sri Lanka. The research only focused on non-managerial employees in the private health sector. This research did not focus on other levels of management.

Management can get an idea about the current situation of the employee through basic salary, bonus scheme, recognition, and learning opportunities of reward management. Salaries bring a feeling of security, allow employees to feel accomplished, and give them a high-status ranking that they enjoy. Well-managed bonus schemes will positively affect employee behaviour, improve productivity by increasing motivation and help businesses meet their overall objectives. Using bonus schemes, employees are rewarded for good behaviour and meeting or exceeding targets. Recognition not only boosts individual employee engagement but has also increased motivation and loyalty to the company, leading to higher retention. Learning opportunities foster employees' initiative and creativity and help prevent workforce obsolescence, which may be due to age, attitude, or inability of a person to adapt themself to technological changes (Arnolf 1971). So, it is recommended to undertake a survey on motivation and health workers to sustain them for a quality service.

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A study on the impact of the Covid-19 Pandemic on graduate employability capital in Sri Lankan state universities

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Introduction

Graduate employability is a significant concern of most higher education institutions worldwide (Nghia, Pham, Tomlinson, Medica, & Thompson, 2020). Employability capital is the collection of individual resources, attitudes, or skills that may directly affect the graduate's employability (Trevor, 2001). However, education is one of the most critical sectors affected by the Covid-19 pandemic across the globe. The COVID-19 pandemic reduces the opportunity for youth skills development and shrinks the employment opportunities for the upcoming fresh graduates (Shahriar, Islam, Zayed, Hasan, & Raisa, 2021). This pandemic badly affected the graduates' employability as the Sri Lankan government closed all the universities in the country on 12th March 2020 and suspended all academic activities (Adaderana., 2020).

Even though several studies have been conducted on employability, employability capital, labor market, and also the Covid-19 impact on the employability of undergraduates in an international context, any previous studies conducted on the same problem were not found in the Sri Lankan context. Accordingly, there is a contextual research gap. Therefore, since there is a dearth of research on Covid-19 and graduate employability capital, and thus the study sets forth to examine the research problem – How does affect Covid-19 on graduate employability capital of state universities' management undergraduates in Sri Lanka? Against the above background, the purpose of this research is to answer the research question: Does the Covid-19 pandemic affect to graduate employability capital of management undergraduates of state universities in Sri Lanka? This research has five objectives to investigate the effect of the Covid-19 pandemic on human capital, social capital, cultural capital, identity capital, and psychological capital of management undergraduates in the state universities in Sri Lanka.

Methodology

The research model of the present study with independent and dependent variables has been depicted in figure 01 based on the empirical research findings of Tomlinson (2017). Figure 1 shows the conceptual framework of the study.

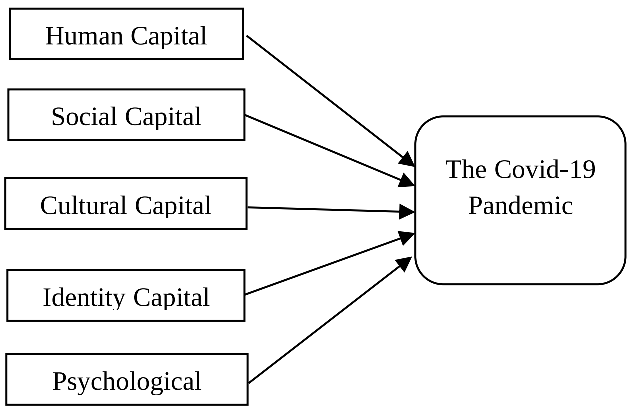

Figure 1: Conceptual Framework

The current study used an explanatory research design, with a major focus on testing hypotheses established based on empirical research findings. The current study is cross-sectional and quantitative because the data is gathered only once and is measured and analyzed quantitatively. The target population of the study consisted of management undergraduates in Sri Lankan state universities. The unit of analysis was the management undergraduates of Sri Lanka. According to Morgan's table (Krejcie & Morgan,1970), the sample size was determined as 377.

Accordingly, the stratified random sampling technique was applied to collect data from 377 management undergraduates for this study as the population of the present study comprised an unequal number of undergraduates in the state universities. This method gives a smaller error in estimation and covers the entire population of the study. This study used a mailed questionnaire, with a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) and it is the best way to collect data fast and easily while this kind of economic situation. The questionnaire consisted of two sections namely demographic data and 18 questions under the Likert scale. Every dimension reported high acceptable internal consistency of reliability (Cronbach's Alpha Values: COVID-19 pandemic = 0.839, human capital = 0.852, social capital = 0.907, cultural capital = 0.895, identity capital = 0.915, psychological capital = 0.912). The cross-sectional study collected data one time from undergraduates. The data analysis of this study involved descriptive statistics for measuring demographic factors. Simple linear regression analysis was used to test the five hypotheses developed based on the empirical findings and the Graduate Capital Model developed by Tomlinson (2017).

Findings

The demographic profile of the 377 respondents has been analyzed based on the descriptive statistics of the present study. It was shown that 50% of the respondents are male and the rest of the 50% are female. Further, 14% of the respondents are in the first year, 22% of the respondents are in the second year, 22% of the respondents are in the third year, and 42% of the respondents are in the fourth year. Table 1 shows the summary of the linear regression analysis conducted in the present study.

Table 1: Summary of the Linear Regression Analysis

Variables	R Square	Sig.	Hypotheses
COVID-19 and human capital	0.827	0.000	Accepted
COVID-19 and social capital	0.938	0.000	Accepted
COVID-19 and cultural capital	0.801	0.000	Accepted
COVID-19 and identity capital	0.786	0.000	Accepted
COVID-19 and psychological capital	0.794	0.000	Accepted

Hypothesis 1: There is a significant impact of covid-19 on the human capital of management undergraduates in Sri Lankan state universities. According to the linear regression results between COVID-19 and the human capital of management undergraduates, 82.7% of the variability of human capital has been explained by the impact of the COVID-19 pandemic. The impact of covid-19 on the human capital of management undergraduates is statistically significant (0.000) and accepted hypothesis 1.

Hypothesis 2: There is a significant impact of covid-19 on the social capital of management undergraduates in Sri Lankan state universities. According to the linear regression results between COVID-19 and the social capital of management undergraduates, 93.8% of the variability of social capital has been explained by the impact of the COVID-19 pandemic. The impact of covid-19 on the social capital of management undergraduates is statistically significant (0.000) and accepted hypothesis 2.

Hypothesis 3: There is a significant impact of covid-19 on the cultural capital of management undergraduates in Sri Lankan state universities. According to the linear regression results between COVID-19 and the cultural capital of management undergraduates, 80.1 % of the variability of cultural capital has been explained by the impact of the COVID-19 pandemic. The impact of covid-19 on the cultural capital of management undergraduates is statistically significant (0.000) and accepted the alternative hypothesis 3.

Hypothesis 4: There is a significant impact of covid-19 on the identity capital of management undergraduates in Sri Lankan state universities. According to the linear regression results between COVID-19 and identity capital of management undergraduates, 78.6 % of the variability of identity capital has been explained by the impact of the COVID-19 pandemic. The impact of covid-19 on the identity capital of management undergraduates is statistically significant (0.000) and accepted hypothesis 4.

Hypothesis 5: There is a significant impact of covid-19 on the psychological capital of management undergraduates in Sri Lankan state universities. According to the linear regression results between COVID-19 and the psychological capital of management undergraduates, 79.4 % of the variability of psychological capital has been explained by the impact of the COVID-19 pandemic. The impact of covid-19 on the psychological capital of management undergraduates is statistically significant (0.000) accepted by hypothesis 5.

Conclusion

Based on the findings the COVID-19 pandemic was a positive and significant impact on five graduate employability capital aspects. Mostly affected graduate capital was the social capital of the COVID-19 pandemic. The other categories of graduate employability capital are also significantly affected by the COVID-19 pandemic. The fewer physical interactions due to online teaching and learning might be the reason for COVID-19 highly affecting the social capital of the undergraduates. The findings of the present study are compatible with Rameez, Fowsar, & Lumna, (2020); Kamaruddin, Ahmad, Husain, & Abd Hamid, (2020). In light of the current Covid – 19 crisis, however, the lecturers should place a specific emphasis on improving undergraduates' employability capital through online teaching and learning platforms. Collaborative activities with the industry such as collaborative research, webinars, workshops, internship training, skills development programs, and group activities need to be organized for the undergraduates via online mode. Because the collaborative activities with industry will create networks to help to negotiate through experience and increase the self-assurance of the undergraduates through real-world professional encounters (Gill, 2020). Meanwhile, undergraduates are recommended to develop their social capital by maintaining an appealing professional profile on professional networks such as LinkedIn, expanding their network with industry experts, and having a strong online presence. Because of the economic recession brought on by the Covid- 19 crisis, the job market has become extremely competitive and constrained in Sri Lanka (Ravindran, 2021). Moreover, the graduate employability capital is affecting the work readiness of the undergraduates (Amarathunga, & Wijethunga, 2021). Future researchers suggested that demographic characteristics such as gender, degree class, ethnicity, undergraduates' residence location, and also university ranking and reputation may have a mediating or moderating effect on the association between COVID-19 and graduate employability capital. Moreover, in light of the current Covid- 19 issue, it is vital to examine efficient approaches for boosting undergraduates' employability capital through virtual modes.

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Mediating impact of employee commitment on the relationship between quality of work life and job performance: Evidence from small scale apparel sector female employees

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Introduction

In today's competitive business environment, the problem that often arises in an organization is how to produce employees with optimal performance and high performance. In order to assist in maintaining maximum employee performance, it is important for the company to maintain the quality of work life (QWL) of its employees. Also, today's competitive business environment has made it more necessary for companies to maintain a highly committed workforce. Thus, committed employees have the ability to enhance the fortunes of the organization through their enhanced work behavior. This study attempts to add to the area of QWL research in developing and enhancing human capital. However, much research in this field has been done in developed countries and developing countries such as Sri Lanka has lesser evidence for research studies in this field (Ikyanyon & Agber, 2020). To bridge this research gap, the present study seeks to examine the mediating impact of Employee Commitment in the relationship between Quality of Work Life (QWL) and Job Performance of the small-scale apparel industry female workers.

The study was carried out in the context of the small-scale apparel industry in the Kandy district which gives high contribution to the Sri Lankan economy and provides job opportunities. There is a tendency researches based on large scale apparel companies not considering to the small-scale apparel companies.

The results of the conciliation analysis conducted by Nayak and Sahoo (2015) show that the relationship between job performance and quality of work life is partially mediated by organizational commitment. This means improving performance because the quality of work life is partly influenced by organizational commitment (Widayanti & Palupiningdyah, 2019). To improve performance through the quality of work life, firstly should create and increase organizational commitment because in commitment usually contains conditional elements that apply to the organization and all members of the organization (Nurluviyana & Sudarma, 2020). A study by Acheampong, Muhammed, and Agyapong (2016) found that organizational commitment partially mediated the relationship between QWL and job performance.

When considering the scope of the study, there is an empirical research gap in this area. Due to the lack of conclusive evidence from empirical findings, further research is needed to explore the relationship between QWL, employee commitment, and job performance in a particular profession in a given country. In light of the above, researcher undertake this study to address the problem of *"How does Employee Commitment impact the relationship between Quality of Work Life and Job Performance of female employees in small scale apparel industry?"* More specifically, this research encompasses with four research objectives:

- To investigate the relationship between QWL and Job Performance.
- To investigate the relationship between QWL and Employee Commitment.
- To investigate the relationship between Employee Commitment and Job Performance.
- To investigate the mediating effect of Employee Commitment on the relationship between QWL and Job Performance.

Methodology

The framework studies the relationships between the QWL and job performance with the mediating effect of organizational commitment. So, this framework is constructed as below.

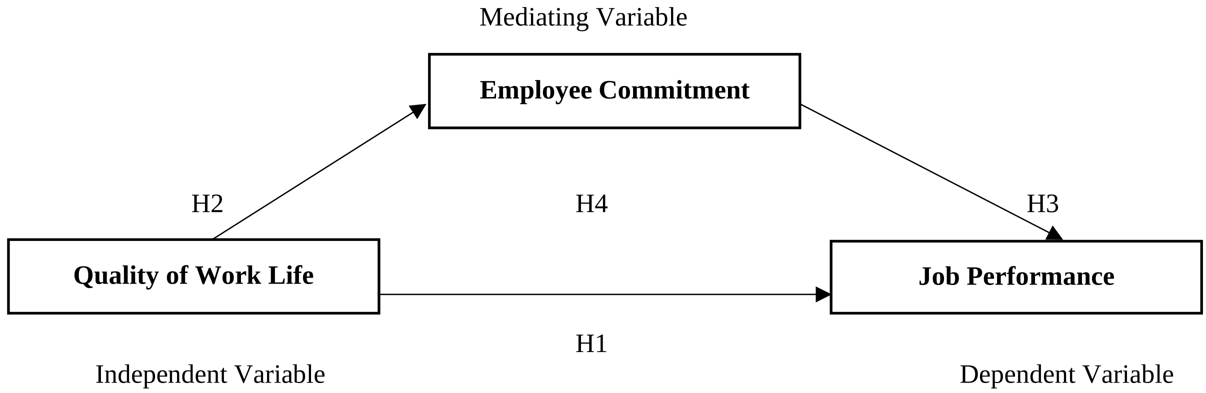

Figure 1: Conceptual Framework

Source: Developed by researcher

The research followed a positivistic philosophy followed by a deductive approach. The research is quantitative in nature and followed a survey strategy. The researcher uses a questionnaire as the primary data collection tool. The respondents were asked to answer all items in the questionnaire based on five-point Likert-type scales.

According to the scope of the study, the target population is the small-scale apparel industry female employees in the Kandy district. There is no accurate data about the population of small-scale apparel industry female workers in the Kandy district. The individual served as the unit of analysis in this cross-sectional study.

The samples of this study were selected using the convenient sampling technique. The researcher uses the Morgan sample size table to determine the sample size. According to Morgan's table, 217 respondents were selected as the sample. After the withdrawal of the incomplete and non-submitted questionnaires, 206 were left for data analysis purposes. Hence, the response rate of the survey was approximately 95% (206/217*100).

Findings

Descriptive statistics, such as mean and standard deviation are used to describe the variables under study. The mean reveals the central value for each variable which lies between 3.8 and 4 in this study. Small-scale apparel employees rated their overall QWL, Employee Commitment, and Job Performance at higher levels. The value of standard deviation for all variables is between 0.4 and 0.5. A descriptive analysis was performed and all variables were normally distributed here. It was further confirmed by taking the value of skewness of all dependent and independent variables between +2 and -2 and kurtosis shall be near +3.

Table 1: Results of Correlation Analysis

Variables	Pearson's Correlation Coefficient	P- Value
QWL and JP	.465	.000
QWL and EC	.737	.000
EC and JP	.595	.000

Source: Survey data, 2022

As the table above reveals, all the Pearson correlation values consisted of positive signs. The relationship between all variables was statistically significant ($P<0.01$). Therefore, the below hypotheses were accepted.

H1: Quality of work life has a significant positive relationship with Job Performance.

H2: Quality of work life has a significant positive relationship with Employee Commitment.

H3: Employee Commitment has a significant positive relationship with Job Performance.

To test the mediating hypothesis 4, the researcher tested the regression analysis, mediation analysis, and Sobel Test.

Table 2: Testing Mediating Effect of OC on the Relationship between QWL and JP

Tested steps	B	Sig	R Square
Step 1: *path c* Outcome (JP), Predictor (QWL)	.512	.000	.216
Step 2: *path a* Mediator (EC), Predictor (QWL)	.927	.000	.544
Step 3: *path b* Outcome (JP), Mediator (EC)	.520	.000	.354
Step 4: ***Path c'*** Outcome (JP), Mediator (EC) Predictor (QWL) Direct Effect	.483	.000	.355

Source: Survey Data, 2022

According to Table 2, the unstandardized regression coefficient value (B=.512) associated with the relationship between QWL and JP *(path c)* was significant (P<0.01). Thus, the requirement for mediation in step 1 was met. Regression of QWL on EC *(path a)* was performed in order to establish that the predictor is significantly related to the mediator (Step- 2). The regression coefficient (0.927) associated with this relation was also significant at the P<0.01 level, and thus the requirement for mediation in step 2 was met. The requirement of step 3, the relationship between JP and EC *(path b)* was also met, i.e., the coefficient value was .520 at the significance level of P< 0.01. The path c' of this model was measured simultaneously while controlling the mediator (EC) in step 4. According to the above table, there is a statistically significant direct effect between the quality of work life and job performance (p<0.01), p=.000. The direct effect between the quality of work life and job performance is significant.

According to the Sobel test, the p-value is <0.01, the researcher can conclude that the indirect effect (mediate effect) is statistically significant. Employee Commitment is mediate the relationship between Quality of Work Life and Job Performance.

H4: "Organizational commitment has a significant mediating effect on the relationship between quality of work life and job performance".

When the researcher considers about results of mediation, it shows that employee commitment partially mediates the relationship (Partial Mediation) between the quality of work life and job performance of the small-scale apparel sector female employees in the Kandy district. Because direct effect is significant (p<0.01) p=.000 and indirect effect is also significant (p<0.01) p = 0.

Four hypotheses were accepted in the conceptual model illustrated in Figure 1, supporting the conceptual model of this study empirically.

Conclusion

The article makes a major contribution to establishing the relationship between QWL, Employee Commitment, and Job Performance. The results of the mediation analysis show that Employee Commitment partially mediates the relationship between QWL and Job Performance. This implies the improvement in JP due to QWL is partially due to the effect of EC. Small-scale apparel companies should consider the EC aspect in order to maximize the effect of QWL on JP.

The results of the research were considered significant because they intended to assist decision-makers in identifying key workplace issues in order to develop strategies to address and improve the quality of working conditions in organizations. The finding from the study helps to improve the QWL of employees and it also impacts employee efficiency and satisfaction positively. There may be a huge impact on profit, productivity, employee retention, job satisfaction, company reputation, employee turnover, absenteeism, etc. So future researchers can study those things and they can do well-improved research about this problem area by using other variables. As a result, the researcher recommends conducting additional research using the mixed technique and the qualitative approach in fields other than the one covered in this study. This will facilitate the further enhancement of the validity of the research.

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Effects of glass ceiling on women's career advancement in Sri Lankan banking sector: Evidence from commercial banks in Colombo district

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Introduction

The study emphasizes finding out the Effects of the Glass Ceiling on Women's Career Advancement in the Sri Lankan banking industry and provides some recommendations and suggestions to attenuate it. According to International Labor Organization (ILO) "Female labor force participation has stagnated at between 30 to 35 percent in the past two decades, which is much lower than one would expect given the achievements in social indicators" (ILO Country Office for Sri Lanka and the Maldives, 2016). Career advancement is conceptualized to include an objective and more comprehensive measure of subjective career advancement as proposed by Heslin (2003). But there is a barrier to the career advancement of women called 'Glass Ceiling'. In the first quarter of 2020, the labor force participation rate was 72.4 percent and 32.5 percent for males and females respectively (Sri Lanka Labour Force Statistics, 2020). By looking at the female labor force participation rate can conclude that about half of the male rate is equal to the female rate. But these considerable proportions are not represented among their career levels. The glass ceiling has a 27.4 percent influence on women's career advancement among female middle-level employees in Sri Lanka's private sector organizations. Furthermore, it is stated that other factors have a 72.6 percent influence on female professional advancement (Bombuwela & Alwis, 2013).

Table 1: Elaboration of the composition of women at the strategic level in selected banks

Banks	Percentage Of Women in Strategic Level
People's Bank	40%
Bank Of Ceylon	38%
Sampath Bank	16.88%
Commercial Bank	22.5%

Source: Annual Report People's Bank 2020, Annual Report Bank of Ceylon 2020, Annual Report Commercial Bank 2020, Annual Report Sampath Bank 2020

When considering the banking sector there is high participation of women in the banking sector. But the rate of women at the strategic level is about 40%, 38%, 16.88%, and 22.5%, in the People's Bank, Bank of Ceylon, Sampath Bank, and Commercial Bank respectively. As a result, it is revealed that there is something impeding women from reaching the strategic level. Further, in the Sri Lankan context, though little research is done on this area in the banking sector, still remains a gap in the literature related to individual and cultural barriers to women's career advancement (Lakmali, Madawala, Wickrama Arachchi, & Weerarathna, 2019). Thus this study was conducted to fill the aforementioned gap by finding the answer to the research problem of *"What are the Effects of the Glass Ceiling on Women's Career Advancement in The Banking Sector."*

Based on the aforementioned research problem, research questions were constructed and objectives were set. The broad objective of this study is to observe the effect of the glass ceiling on women's carrier advancement of women executives who are working in the non-state banking sector in Sri Lanka. Secondary objectives are;

- To investigate what are the glass ceiling factors affecting women's career advancement in the banking sector.
- To investigate the impact of those identified glass ceiling factors on women's career advancement in the banking sector.

The Glass Ceiling is a metaphor for what women face when attempting to succeed in top positions. It was revealed that there is a discernible influence of the Glass Ceiling on women's career progression and the conventional belief of marrying female females at an early age and forcing them to do domestic chores rather than enabling them to pursue their further education is noteworthy (Behery, Al-Nasser, & Parakandi, 2017). The glass ceiling has a 27.4 percent influence on women's career advancement among female middle-level employees in Sri Lanka's private sector organizations. Furthermore, it is stated that other factors have a 72.6 percent influence on female professional advancement (Bombuwela & Alwis, 2013). According to Bombuwela & De Alwis (2013), the individual component is defined in terms of a person's personality and characteristics that set them apart from others, such as level of confidence, personal attributes, and inability to sell themselves. They imply that most women tend to neglect their responsibilities to their families, such as housework and childcare since they are preoccupied with their careers. The study's findings can potentially be used to promote women's empowerment in other organizations. This study can help firms restructure their overall policies, structure, and work environment (Afza & Newaz, 2008). The cultural component is equally important in the advancement of women's careers. Kamberidou (2020) Gender inequality and inequities are amplified and compounded not only by commercial activities, but also by customs, beliefs, culture, and religion.

Methodology

In this conceptual framework, Individual barriers, Family barriers, Organizational barriers, and Cultural barriers were defined as the independent variables and Women's Career Advancement as the dependent variable;

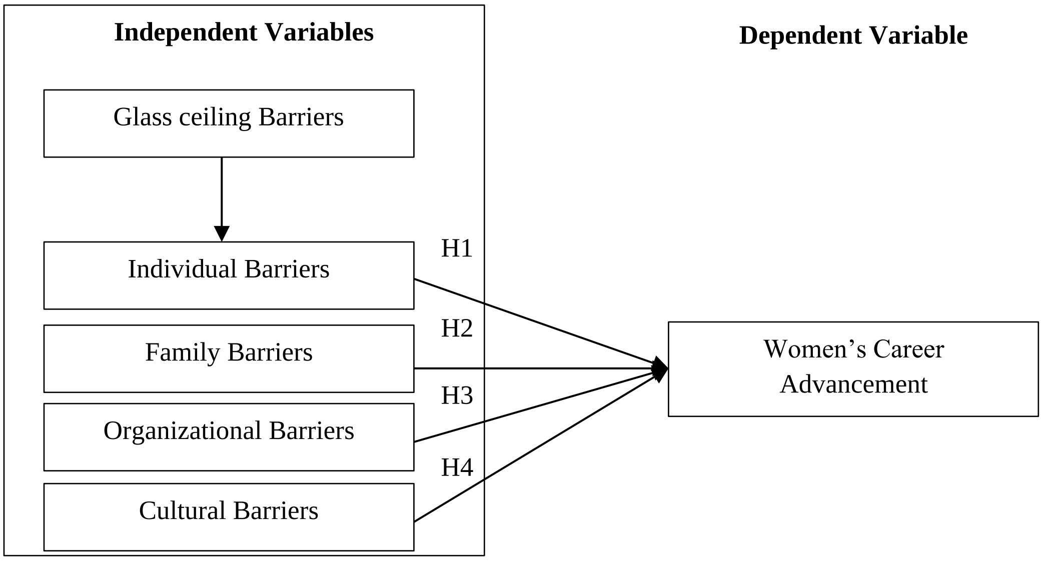

Figure 1: Conceptual Framework

Source: Developed by the researcher based on the literature review, 2021

According to Bombuwela & De Alwis (2013), individual barriers means that the individual component is defined in terms of a person's personality and characteristics that set them apart from others, such as level of confidence, personal attributes, and inability to sell themselves. When faced with family issues such as childcare responsibilities, most women opt to forsake their careers (Shakil, Fakhr, & Ahmed, 2011). Organizations aggressively maintain gender inequalities, gendered power relations, and the male-dominated gender order, according to feminist research, both in paid and unpaid labor (Acker, 2012). Cultural barriers relate to how much beliefs and traditions influence employee growth (Bombuwela & Alwis, 2013).

Based on the literature the researcher developed the hypotheses to examine the effects of Glass Ceiling Barriers on women's career advancement in the Sri Lankan banking sector.

H1: There is a significant impact of Individual Barriers on Women's Career Advancement.

H2: There is a significant impact of Family Barriers on Women's Career Advancement.

H3: There is a significant impact of Organizational Barriers on Women's Career Advancement.

H4: There is a significant impact of Cultural Barriers on Women's Career Advancement

The study predominantly falls into the positivistic research philosophy and follows a deductive approach. The study was cross-sectional and the researcher sourced the analysis using primary data which were collected through a survey using a self-administered questionnaire.

The target population of this study was executive-level women employees who work in the banking industry. The researcher selected four licensed commercial banks (Public and Private) in the Colombo district according to the Fitch Ratings, the banks were chosen for this study are classified as “the large banks.” A sample for this study consisted of 254 people based on the Morgan table and the respondents were chosen using random sampling techniques. Data were analyzed using both descriptive and inferential statistics. The maximum, minimum, means, and standard deviations of descriptive statistics were calculated for the interval-scaled independent variables and dependent variable. To identify the correlation between the variables and test the hypotheses, the researcher utilized correlation analysis and multiple regression analysis.

Findings

Descriptive statistics

Table 2: Descriptive Statistics

Dimension	Mean	SD
Individual Barriers	3.32	1.07
Family Barriers	2.61	0.79
Organizational Barriers	3.69	0.82
Cultural Barriers	3.62	0.83
Women’s Career Advancement	3.64	0.79

Source: survey data, 2021

Table 2 that the Organizational Barriers dimension realized the highest overall mean score of 3.69(SD = 0.82). Family Barriers realized the minimum overall mean score (mean = 2.61, SD = 0.79), followed by the Women’s Career Advancement which calculates the overall mean score of 3.64 (SD = 0.79).

The Relationship between Glass Ceiling Barriers and Women’s Career Advancement

Table 3: Correlation Analysis

Variable	Pearson correlation	Sig (2-tailed)
Individual Barriers	-0.770	0.000
Family Barriers	0.412	0.000
Organizational Barriers	-0.805	0.000
Cultural Barriers	-0.821	0.000

Source: survey data, 2021

According to table 2, Women's career advancement is negatively correlated with individual, organizational, and cultural barriers, with results of -.770, -.805, and -.821 correspondingly. Three independent variables have a strong negative relationship with the dependent variable. Women's career advancement is positively correlated with family barriers. As a result, the independent variables and the dependent variable had statistically significant relationships.

The results of the Multiple Regression Analysis of the independent variable (GC) against the dependent variable (WCD) are shown in Table 4. The multiple regression formula is as follows:

$\boldsymbol{Y= a + bx_1+ bx_2+ bx_3+ bx_4}$

Table 4: The results of Multiple Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.307	.200		1.530	.127
	Cultural Barriers	-.385	.055	-.402	-6.962	.000
	Individual Barriers	-.189	.047	-.218	-3.992	.000
	Family Barriers	.024	.034	.026	.697	.487
	Organization Barriers	-.332	.058	-.333	-5.686	.000

Source: survey data, 2021

According to the multiple regression results in table 4, Cultural Barriers (-0.385), Individual Barriers (B=-0.189), and Organizational Barriers (-0.332) are significant as the p-value is 0.000. However, Family Barriers (0.024) is not significant (p> 0.005)

Table *5:* Hypothesis Testing Summary

Hypothesis	B (Coefficient)	P-Value (Sig.)	Result
H_1 There is a significant impact of Individual Barriers on Women's Career Advancement.	-0.189	0.000	Accepted
H_2 There is a significant impact of Family Barriers on Women's Career Advancement.	0.024	0.487	Rejected
H_3 There is a significant impact of Organizational Barriers on Women's Career Advancement.	-0.332	0.000	Accepted
H_4 There is a significant impact of Cultural Barriers on Women's Career Advancement.	-0.385	0.000	Accepted

Source: survey data 2021

As indicated in table 5, the three hypotheses related to Cultural Barriers, Individual Barriers, and Organizational Barriers were accepted while rejecting the hypothesis related to Family Barriers.

Conclusion

This study identified some of the factors that contribute to the Glass Ceiling effect. According to research findings, the most influential Glass ceiling factors are Cultural Barriers, Organizational Barriers, and Individual Barriers respectively. As a result, female workers must endeavor to overcome specific hurdles such as a lack of self-confidence and being overly emotional while dealing with job-related issues by establishing self-confidence and positive thinking as such building can do perceive. They must transform the view of female workers as a posy, emotional, and manipulating. Overall, this study found that the Glass Ceiling has a 75.6 percent influence on women's career advancement among female executive-level employees working in Sri Lankan banks. As a result, other factors have a 24.4 percent influence on women's career advancement. Then the Glass Ceiling had a significant level of influence on the majority of respondents. According to the study's analyzed data, there is a strong negative association between GC and WCA among Executive level female employees working in chosen banks, and this relationship is significant at the 1% significant level or at the 99 % confidence level. According to the findings of the study, there is a weak positive link between Family Barriers and Women's Career Advancement. Individual, organizational, and cultural barriers all have a major impact on women's career advancement, according to multiple regression analyses. The findings of the overall analysis of the study show that the study's basic objective of "finding out the effect of the Glass Ceiling on Women's Career Advancement of Executive Level Female Employees Working in the Banking Sector in Sri Lanka" was met. The necessity of starting various programs to lessen the issue of the "glass ceiling" in the workplace should not only be prioritized but will also enhance the degree of work engagement of female managers and advance their careers. There must be an encouraging workplace culture to combat the gender stereotypes that lead to unequal treatment.

The questionnaire was distributed to both permanent carder female executives and newly hired executives by the researchers. The researchers encounter a drawback in this form of distribution in that the newly employed executives have no experience with the blossoming of women in the banking industry, which raises concerns about the credibility of their responses. Future researchers could employ other moderating variables to assess the effects of the Glass Ceiling on women's career advancement in the Sri Lankan banking sector. Previous study publications did not cover a wide range of cultural barriers. The researcher believes that future researchers should focus more on cultural obstacles than on other issues. Furthermore, it is critical to consider the perspectives of both male and female respondents, not only in the banking sector but also in other sectors. .

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Factors affecting the career success of female employees in Sri Lanka: With special reference to generation Y employees in the apparel sector

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Introduction

Females have made a remarkable contribution to the economy of Sri Lanka. One of the major foreign exchange earning sectors accounts for a larger share of females. Day by day an increasing number of females enter the labor market, but a growing number of managerial positions remain limited (Eagly, 2003). This shows that females face invisible barriers when trying to move up their career ladder. When it comes to the workforce, not only from the Sri Lankan context but also from the world context the majority of the workforce is consistent with the generation Y aged group employees who have born within the period 1981 to 1996. Even though the labor force participation in this age group people is proportionately larger compared to other generations, like all other generations the labor force participation of female employees is less than that of male employees.

Being an imperative industry in Sri Lanka, the garment industry which operates in a very competitive global market employs mostly females. Approximately 2/3 of the females who are working in the apparel industry relate to the generation Y age category. From its conception, females have dominated the workforce in the apparel industry. But unfortunately, most of them are confined to the lower levels of production (e.g. Machine operation), and men frequently dominate managerial positions. (Madurawala, 2017).

Even though due to better academic qualifications, some of the generation Y females have joined professional careers and management positions in both public and private sector organizations, researchers have found that there do still some factors that create barriers to the career success of female employees (Gonzales, Forcen, & Jimenez-Sanchesz, 2019).

Accordingly, this study is mainly concerned with the factors affecting the career success of generation Y female employees. Extensive academic research has explored the factors affecting the career success of female employees (Pathirana, 2016; Leelaratne, 201, Alwis & Rathnayake, 2020) in Sri Lanka. It is hard to find research regarding the factors affecting the career success of female employees who belong to specific age groups in society. Hence, finding factors affecting generation Y female employees' career success will address an empirical gap. Therefore, the researcher has attempted to fill the knowledge gap by empirically studying the factors affecting the career success of generation Y officers and above-grade female employees in the apparel sector in Sri Lanka. Hence, the significant area of research and problem statement of this study is "What are the reasons for low participation of generation Y female employees in top career positions in the apparel sector in Sri Lanka?" The objectives of this study were, to find the factors that influence the career success of generation Y female employees in the apparel sector in Sri Lanka and to examine the impact of those factors on the career success of generation Y female employees.

This study is important because this will be informative for generation Y female employees who aspire to climb up their career ladder. Not only the generation Y female employees but also the other female employees will be able to take advantage. On the other hand, this will be more informative for organizations also. The findings of this study are important for all female employees to climb up their career ladder and for organizations to develop policies to support female employees.

Accordingly, this study is mainly focused on three factors organizational factors, individual factors, and family factors that affect the career success of female employees.

Methodology

The conceptual framework which represents the relationship between dependent and independent variables is stated below.

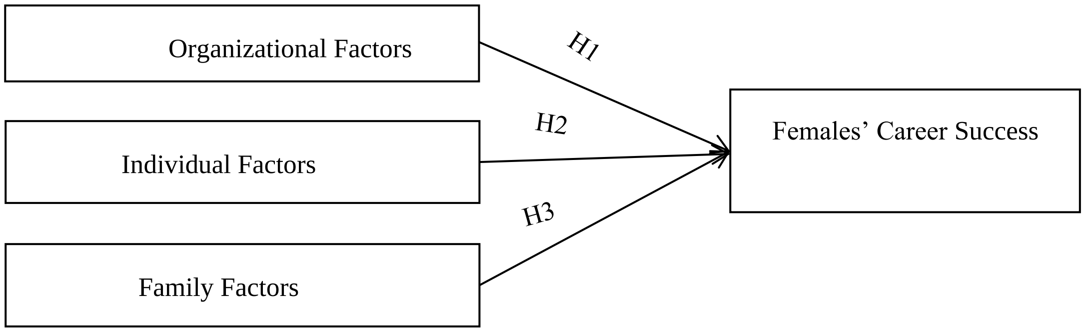

Figure 1: Conceptual Framework

Source: Researcher Constructed (2022)

In achieving the research objectives as well as finding answers to the research questions following hypotheses have been developed for testing.

H1: There is an impact of organizational factors on the career success of generation Y female employees in the apparel sector in Sri Lanka.

H2: There is an impact of Individual factors on the career success of generation Y female employees in the apparel sector in Sri Lanka.

H3: There is an impact of family factors on the career success of generation Y female employees in the apparel sector in Sri Lanka.

This study was quantitative research conducted by collecting and analyzing data in numerical form. The target population for this study consisted of 650 generation Y officers and above-grade female employees in the apparel sector in the Kalutara district. The sample was based on the convenience sampling technique. According to Wisnowski, Sakshaug, & Ruiz, (2020) in recent years, many researchers abandoning expensive probability-based samples for less expensive non-probability methods. The sample was 242. The data were collected through a structured questionnaire. The questionnaire was measured using a five-point Likert scale. The sample was slightly dominated by married females. The majority were belonging to the 31-35 age category. The majority of them were degree holders and held executive-level positions. Approximately 75% were having more than 4 years of experience in the industry. Further, the majority of them have at least one dependent in the family.

Descriptive analysis techniques were used in measuring demographic variables whereas correlation analysis and multiple regression analysis were used in analyzing the relationship and impact of independent variables on the dependent variable.

Findings

The study identified three factors as; organizational factors, individual factors, and family factors affecting the career success of generation Y female employees. According to the result of the reliability analysis, Cronbach's Alpha values for organizational factors, individual factors, family factors, and career success were 0.774, 0.756, 0.736, and 0.879 respectively. Accordingly, the data set was good in internal consistency and the result of the validity analysis shows KMO value for all the independent variables and dependent variable are greater than 0.7 where the sampling adequacy of the data set is at a higher level. According to the findings of descriptive analysis mean answers for the questions that measure family factors and individual factors rely on "agree" as well for the organizational factors rely on "neutral". In order to get clarify this statistically inferential statistics were used.

Table 1: Correlation and Multiple Regression Results

	Correlation Analysis Correlations		Multiple Regression Analysis Coefficients				
	Pearson Correlation	**Significance (P Value)**	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
			B	Std. Error	Beta		
(Constant)			-0.300	0.99		-3.046	0.003
Organizational Factors	0.873**	0.000	0.411	0.051	0.327	7.998	0.000
Individual Factors	0.887**	0.000	0.469	0.039	0.443	12.127	0.000
Family Factors	0.857**	0.000	0.287	0.046	0.252	6.227	0.000
Dependent Var. Career Success							

Source: Researcher Constructed, 2022

Table 1 shows the correlation and multiple regression analysis results. According to the results of correlation analysis, Pearson correlation values of organizational factors, individual factors, and family factors were 0.873, 0.887, and 0.857 respectively. Accordingly, all the independent variables have a strong positive correlation with females' career success. The significance value of all independent variables was 0.000. Therefore, all independent variables were statistically significant.

According to the result of multiple regression analysis the factors, Organizational (B = 0.327), Individual (B = 0.443), and Family (B = 0.252) have a significant impact on generation Y females' career success. According to the above results, the most impacted variable is individual factors as it has the highest B value which is 0.443 among other variables. Further, the R^2 value of the model is 0.894%. It means 89% of the variance in female employees' career success is explained by organizational factors, individual factors, and family factors.

The regression model of the study is depicted as: $Y = -0.300 + 0.327X_1 + 0.443X_2 + 0.252X_3 + \varepsilon$

Y = Generation Y females' career success, X_1 = Organizational factors, X_2 = Individual factors, X_3 = Family Factors.

Table 2: Summary of Hypotheses Testing

Variable	Hypotheses	"P" value	Relationship	Decision
Organizational Factors	H1: There is an impact of organizational factors on the career success of generation Y female employees in the apparel sector in Sri Lanka	0.000	Positive	Accepted
Individual Factors	H2: There is an impact of individual factors on the career success of generation Y female employees in the apparel sector in Sri Lanka	0.000	Positive	Accepted
Family Factors	H3: There is an impact of family factors on the career success of generation Y female employees in the apparel sector in Sri Lanka	0.000	Positive	Accepted

Source: Survey Data (2022)

Table 2 shows the summary of the tested hypotheses. Accordingly, it can be identified as organizational factors, individual factors and family factors have a major impact on the career success of generation Y female employees. This impact is in line with the views expressed by previous researchers (Neil, Hopkins, & Sullivan, 2008; Aycam & Zeynep, 2004; Kee, Othman, Zainudin, & Yusop, 2020)

Conclusion

Working women face barriers in climbing up their ladder. The main objective of this study was to find out the factors affecting the career success of generation Y female employees. According to the results of inferential statistics, organizational, individual, and family factors have a positive impact on the career success of female employees. Accordingly, it could prove that the three hypotheses developed can be accepted. The positive impact of those independent variables on the career success of females has been justified by the studies (Mohring & Judith, 2017; Neil, Hopkins, & Sullivan, 2008; Aycan & Zeynep, 2004; Metz, 2003; Kee, Othman, Zainudin, & Yusop, 2020).

However, this study consists of some limitations. Since the researcher has mainly focused on generation Y females other age categories were not represented. And also, there can be other variables rather than three independent variables analyzed. Future studies should be focused on females working in other industries. Further, the researcher has provided some recommendations that will help in increasing the career success of females like; creating a favorable culture for female leaders, introducing work from home concept, increasing the self-confidence of females, sharing family responsibilities with family members, and so on.

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Analysis of barriers of glass ceiling effect among executive level female employees in banking sector: evidence from commercial banks in North - Western province in Sri Lanka

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Introduction

The working women in Sri Lanka is very low where it is only 30.87 percent, while remaining 70 % were men. (Census and Statistics report, 2021). Over the past few years, there has been decline in the number of female employees in higher positions in banking sector in Sri Lanka. (S U Gunawardena, 2019). Therefore, it implies Glass Ceiling Effect exists in the banking sector. This study would help to lessen the influence of the glass ceiling in Sri Lanka because that problem has not been adequately addressed in the banking industry. The major objective of the research is, to find impact of barriers of Glass Ceiling on GCE among female executive employees in strategically important six commercial banks in North-western Province in Sri Lanka and four specific objectives address each independent variable such as Individual, Organizational, family, and social barriers. Main research question is factors acting as barriers on GCE among female Executive employees in Sri Lankan Banking sector? Researcher examine main research problem based on four sub questions, and those questions have made, considering all four independent variables. Gender gap in management positions in each and every organisation is noticeable. This compelling situation explained in literature as “Glass Ceiling” (GC). “Glass Ceiling” refers to invisible barriers that prevent women from advancing past a certain level. (Brown & Reich, 1997). Set of barriers that prevent women from advancing in to top level positions have created an invisible glass ceiling which is problematic to women to climb up their career ladder. The situation discussed as “ceiling” as there is a restriction of upward advancement “glass” (transparent) means the restrictions are not directly apparent. Below graph brings evidence for the so-called problem of GC in Sri Lankan banking sector.

Table 1. Women participation in Top Management positions in banking sector in Sri Lanka

	Board of Directors				**Corporate Management Team**				**Senior Management Team**			
Strategically Important Banks	Female Amount	%	Male Amount	%	Female Amount	%	Male Amount	%	Female Amount	%	Male Amount	%
Sampath Bank	3	21.4	11	78.6	5	20.8	19	79.2	2	16.8	10	83.3
Commercial Bank	3	23.7	10	77	5	19.2	21	80.8	10	18.5	44	81.5
Bank of Ceylon	1	14.3	6	85.7	2	10	18	90	26	49	27	51
People’s Bank	1	12.5	7	87.5	7	41.2	10	58.9	14	40	21	60
Hatton National Bank	2	16.7	10	83.3	2	10.5	17	89.5	9	13.6	57	86.4
Seylan Bank	3	27.3	8	72.7	2	18.1	9	81.8	6	21.4	22	78.6
TOTAL	**13**	**20**	**52**	**80**	**23**	**18**	**94**	**82**	**67**	**27**	**181**	**73**

Source: Sampath Bank Annual Report 2021, Commercial Bank Annual Report, 2021; HNB Annual Report 2021, Seylan Bank Annual Report 2021, People’s Bank Annual Report, 2020, BOC Annual Report 2021.

When it comes to the past literature, Chamari (2015) found that there is a Significant positive impact of GC barriers and GCE. Sanduni (2015) found significant Positive impact on GCE and underrepresentation of female bankers in higher positions and also found individual, organizational, and cultural barriers positively impact on GCE. Perera (2022) found social barriers have significant positive impact on GCE and Yomadi (2015) found organizational barriers positively impact on GCE. Bombuwa and Alwis (2013) found there is not any impact on family barriers on GCE, and Jayathilake (2012) found

Organizational and individual factors have positive impact, and family and cultural factors do not impact on GCE.

Methodology

The type of the study was analytical and investigation is correlational. study will use quantitative Research approach. The Study tested four hypotheses. There are four independent variables and one dependent variable. The data collected through self-administered questionnaire. The data analysed using SPSS Software. Population comprises Strategically important six commercial banks, but sample was only 232 executive level female employees and Simple random sampling method was used. Conceptual framework had been developed by the researcher, according to social relational approach and economic theory of Glass ceiling and based on the empirical study, and feels was the best way to find answers to the research question.

Independent variables **Dependent Variable**

Glass Ceiling Barriers

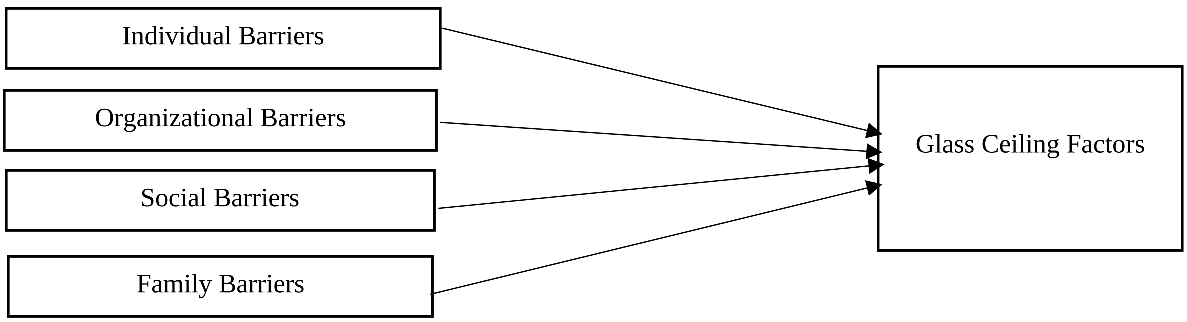

Figure 1: Conceptual Framework

Source: Developed by Researcher

Findings

Mean value of the glass ceiling effect is 3.87, implying female executives in Sri Lankan banking sector experience GCE. Mean values of each independent variables are more than 4 implying majority of female executive personnel in the banking sector believe that these barriers result in GCE. For Reliability and validity of data Cronbach's alpha was 0. 885 with a significance of P<0.005. So, the internal consistency was good and acceptable. The KMO values in this investigation was 0.841 implying there are no significant partial correlations. Bartlett's test reveals the strength of correlations between variables and this study, the Chi-square value is 2326.244, there are 325 possible outcomes, and the significance level is 0. 000. According to the results of Q-Q plot and Histogram confirmed that data set was normally distributed and P -P plot results ensured the linear relationship.

Table 2: Multiple Regression analysis

					Change Statistics					
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**R Square Change**	**F Change**	**df1**	**df2**	**Sig. F Change**	**Durbin-Watson**
1	.745[a]	.556	.545	.446	.556	54.676	4	175	.000	1.398

Source: Survey Data, 2022

Correlation coefficient between the GC barriers and GCE is R = 0.745 implying strong positive correlation between independent and dependent variable. Other than the individual barriers, other three barriers have positive correlation with GCE Variance in GCE explained by the interaction of these variables is R Square 0.556 at the 0.000 significant level. Findings show barriers are significant enough to explain 56% of the variance GCE and other factors have only 44% influence on GCE. Among other barriers social barrier has the greatest influence on GCE. Findings indicate, all independent variables are statistically significant where Family, organisational and social barriers have significant positive effect on the GCE while individual barriers have a significantly negative impact on GCE. following regression equation can be derived from the available data for predicting Glass Ceiling effect.

$$Y_i = 1.020 - .127X_{1i} + .126X_{2i} + .215X_{3i} + .499X_{4i} \ldots\ldots + u_i$$

Conclusion

The primary objective of this study was to assess barriers on glass ceiling on glass ceiling effect by focusing on upper management positions in strategically important six commercial banks in North-western provinces in Sri Lanka. According to the result social barrier had the highest impact on GCE, and family and organizational barriers had positive impact. Previous literatures found individual barriers and GCE had positive impact, but in this research found these two variables having significant negative impact, contradicting past literature. According to findings, research can conclude that even though individual barriers impact the glass ceiling effect they can tolerate those barriers and uplift their career ladder and they think individual barriers are not a barrier to advance their career ladder. Based on the study's findings, following recommendations were made, Company policies should be focused on increasing promotion opportunities for women (Clevenger & Singh 2013), conduct societal awareness programs by explaining the importance of women's career advancement, and provide examples of women who have reached the top of their career ladder in order to minimize or avoid cultural barriers, and organisations should promote and practice equal employment opportunities at work (Bombuwela& De Alwis 2013), Create an environment in which women may balance their many roles (Cross 2010), In workplaces where a woman's qualifications are deemed insufficient or improper, groups with financial resources can fund women employees' studies. Individual barriers and GCE have a negative relationship according to these findings. However earlier literature shows that these two variables have a positive impact. Further study needed to determine exactly what relationship these two factors have, and I suggest future researchers, study individual barriers with a moderator variable like Age, marital status etc. The findings of the overall analysis of the study reveal that the general objective of the study is “to find out the barriers of Glass Ceiling on Glass Ceiling effect of executive level female employees who are working in strategically important six banks in North-western Province in Sri Lanka.” is achieved.

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The impact of human resource planning on organizational performance in apparel industry in central province

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Introduction

Human resource is the most important asset in every organization. According to Bratton and Gold (2003), "Human resource management is a strategic approach to managing employment relations that emphasizes the importance of leveraging people's capabilities to gain a competitive edge. Since planning is a fundamental function of management, it naturally permeates every aspect of management. Planning for human resources involves making sure the company has the right kind of employees, in the right amount, at the right time, and in the correct location. Dale S. Beach (1980), has defined it as "a procedure for determining and guaranteeing that there will be a sufficient number of qualified people available at the appropriate times, performing tasks that fulfill the goals of the firm and give the individual involved satisfaction. the apparel sector must plan the human resources needed for the management level on a yearly basis. Therefore, Human resource planning should be done for the skilled, unskilled, semi-skilled as well as the qualified staff required for the apparel industry. Accordingly, the Human resource planning of each organization in the Sri Lankan apparel industry is considered here. In Here mainly explore what are the impacts of Human resource planning on organizations performance.

This topic was chosen because human resource plays a special role in the apparel industry and to facilitate managers to make decisions about human resource planning based on the current situation of the county and because there was little research done in this regard in the Central Province. On the other hand, objectives of this study are to identify the impact of Human resource planning on organizational performance, to identify how the adequate funding impacts on organizational performance in apparel industry in Sri Lanka, to identify how the employee competence impact on organizational performance in apparel industry in Sri Lanka, to identify how the employee age impact on organizational performance in apparel industry in Sri Lanka, and to identify how the employee culture background impact on organizational performance in apparel industry in Central Province.

According to the Dessler and varkkey (2008), the process of determining which positions the company will need to fill and how to do so is known as human resource planning. Richard, Devinney,Yip, and Johnson (2009) defined, Organizational performance is primarily determined by three factors: production capabilities, financial performance and investment, and shareholder expectations and economic value. According to Salau, Adeniji and Oyewunmi (2014), organizational performance refers to a company's strength and capacity to accomplish its objectives through employee retention, a flexible management approach, internal work motivation, increased commitment, job satisfaction, and career opportunities, all of which have a significant and crucial impact on the success of the organization. Boxall and Purcell (2000) argue that human resources Planning aids businesses in determining a road or course to take in accomplishing their intended goals and objectives, which in turn assist personnel stays on track. This study used Eketu and Edeh's (2017) framework for human resource planning based on the aforementioned factors namely adequate funding, employee competence, employee age and employee culture background. The study hypotheses were developed in accordance with the body of existing literature.

Methodology

According to the Kothari (2004), A research design is the process of planning how data will be collected, analyzed, and combined with relevance to the study's goals. This is qualitative research and it is explanatory in nature and always answer to “what s” and “how s”. Following figure 1illustrate the conceptual framework of this study.

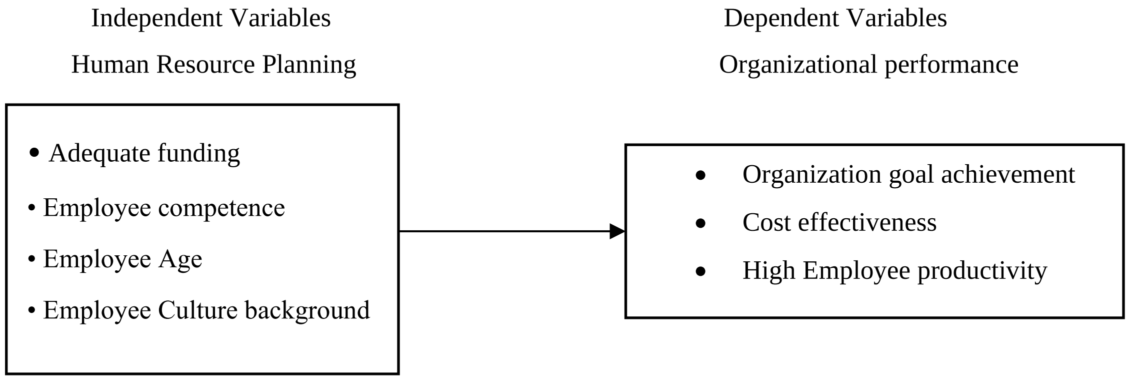

Figure - 01 Conceptual framework

The research design used was descriptive research design. In this research study consists of management level employees in apparel industry in Central province. In accordance with statistics, Managerial level employees are 355 in central province, was the population of this research. The sample size of the study consisted with 186 managerial level employees. (Sekaran,2006) who are working in leading Garment factories in Kandy district. The researcher Convenience sampling was employed in the study. A self-developed close-ended questionnaire was used to collect data from managerial level employees. IBM SPSS Statistics version 26 was used for data display and analysis. It stands out as an approachable tool.

The descriptive method is used to analyze every variable under study. In order to assess demographic characteristics, frequency distribution is used. According to conceptual framework Human resource planning is the independent variables (Adequate funding, Employee competencies, Employee age, employee culture background) and organizational is dependent variable.

Findings

This section represents the results and findings of the overall study. 52.7% of those who responded to the questionnaire were female and the remaining 47.3% were male. Most of these respondents were in the age group of 41-50 years and according to the education level ,54.8% of respondents had a degree. Firstly, a descriptive analysis was performed and all variables were normally distributed in here. It was further confirmed by taking the value of skewness of all dependent and independent variables between +2 and -2.

According to the Pearson correlation coefficient there are significant, strong relationship between adequate funding, employee competence, employee culture background and organizational performance. And there is significant and moderate relationship between employee age and organizational performance. According to the regression analysis model summary, the correlation coefficient and the coefficient of determination are 0.779 and 0.638 respectively. It indicates four human resource planning variables account for 63% of the variance in organizational performance.

Table 01: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.204	.250		-.814	.417
	AF	.235	.075	.192	3.121	.002
	EC	.263	.066	.248	3.974	.000
	EA	.000	.058	.000	.001	.999
	ECB	.536	.062	.495	8.664	.000

Source: Survey data

According to the all regression analysis researcher can build up the regression model of the entire study as,

OP = -0.204+ 0.235 (AF) + 0.263 (EC) + 0.536 (ECB)

According to the above regression analysis adequate funding, employee competence and employee cultural background have a positive relationship with organizational performance. Because their p-values are less than 0.05. Therefore, the below hypotheses were accepted.

H01: Adequate funding has a significantly impact on organizational performance in Apparel industry.

H02: Employee competence has a significantly impact on organizational performance in Apparel industry.

H04: Employee culture background significantly impacts on organizational performance in Apparel industry.

On the other hand, the result of employee age analysis there is no impact on organizational performance. Because its p-value (0.999) is higher than 0.05. Therefore, H03: Employee Age level has a significantly impact on organizational performance in Apparel industry was rejected. Based on the above results, it can be concluded that Human resource planning impact on organizational performance.

Conclusion

The objective of this study was to examine the impact of human resource planning on organizational performance in apparel industry. The results of the study showed that adequate funding, employee competence, and employee culture background have a significant positive impact on organizational performance and researcher suggest that following for increase that impact further and get higher organizational performance. But Employee age, hasn't significant impact on organizational performance in apparel industry. But researcher can further conclude that some suggestions for developing the relationship between employee age and organizational performance. However, when considering the total findings, it is concluded that human resource planning impact on organizational performance in apparel industry.

Compared to research result researcher can also give some recommendation regarding to the research study. It will be helpful for the Apparel companies who are having less organizational performance. In this study, foreign researchers and publications were used as literature more frequently than Sri Lankan researchers and articles. As a result, it has a negative impact on this study. The reason is that this study is related to the Sri Lankan context and therefore there is a possibility that foreign context may not match this context. A new researcher can carry out a different study by considering other variables that have an impact on the apparel industry's human resource planning. And also findings are more helpful for managers who work in apparel industry to take decisions relating to human resource planning.

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Factors affecting to the productivity of work from home employees during Covid-19 pandemic in leading ERP companies in the Colombo district

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Introduction

Following the outbreak of the COVID-19 pandemic, the practice of work-from-home has become increasingly popular. This study is to identify the factors affecting to employee productivity of selected companies during COVID-19 pandemic in Sri Lanka. The only way to avoid the COVID-19 virus was to maintain social isolation, which included temporary company closures, school closures, and island-wide lockdowns. Strict social distancing tactics are effective in slowing the pandemic's spread (World Health Organization, 2020). These selected companies are providing cloud ERP and HRM software to their clients and especially they completely shifted to work-from-home method from the traditional working method during COVID-19 Period. Various studies have been conducted related to work-from-home productivity but none of those researches had not addressed the prevailing WFH (work-from-home) shift in information technology industry in Sri Lankan context. Furthermore, there are a lot of factors that affect the productivity of work-from-home employees, but the researcher has identified five factors which impact on the productivity of work-from-home employees based on the literature review. Those are resource availability for an employee, financial support from the organization, nature of the task, effectiveness of working hours of an employee, and ICT (information and Communication Technology) literacy level of an employee.

Following are the objectives of this research study,

1. To identify the factors affecting productivity of employee.
2. To identify the suitability of work-from-home method and traditional working method for selected companies.
3. To analyze factors that employee and employer should consider before shifting WFH.

Work-from-home is a broad word that encompasses a wide range of work activities, including information and communication technologies and a place other than a traditional office (Putri & Amran, 2021). The successful and prosperous future of an organization is dependent on its skilled, knowledgeable, and well experienced workforce because productivity is a performance measure consisting of both efficiency and effectiveness (Sultana & Farooq, 2021). Employees who do not have enough communication infrastructure may suffer technological difficulties such as connectivity issues with co-workers and superiors. Telework has been found more successful in organizations that provide teleworkers with appropriate technology and tools (Cooper & Kurland, 2002). Further, after the pandemic situation, the work-from-home concept became more important and workers suffered WFH-related expenses. Where employers provide some financial assistance, higher WFH outcomes are expected. (Hawkins, 2000); Also, there are some jobs and tasks where WFH is not practical and feasible. The nature of an employee's job may have an impact on his or her productivity (Cooper & Kurland, 2002); Moreover, many organizations have realized the importance of ICT literacy of employees and its impact positively on overall organizational productivity and employee productivity (Bailey & Kurland, 2002). Lastly, this study highlighted the fact that comfortable working hours directly have a significant impact on WFH employee productivity (Ramos & Prasetyo, 2020).

Methodology

All operational level employees of selected companies are treated as the population in this study. According to the most recent information accessible to the researcher, there are 205 operational level employees in selected organizations. Individual employees of selected companies are identified as the unit of analysis in this research study. The researcher chose a total of 135 samples from the overall population. For this study, probability sampling has been chosen as the sampling method. Specially, this sample size was determined by using the Yamane Formula (Yamane, 1973). Primary data was gathered through an electronically administered questionnaire that was sent via Google form. Likert scale questions are included in the Google questionnaire under different categories that contain both independent and dependent variables. The secondary data sources selected for this study are company records, archives, periodicals, newspapers, company reports, magazines, and company websites. Software known as the Statistical Package for the Social Sciences, (SPSS) version 26, has been used as the tool for analyze the data collected from the surveys.

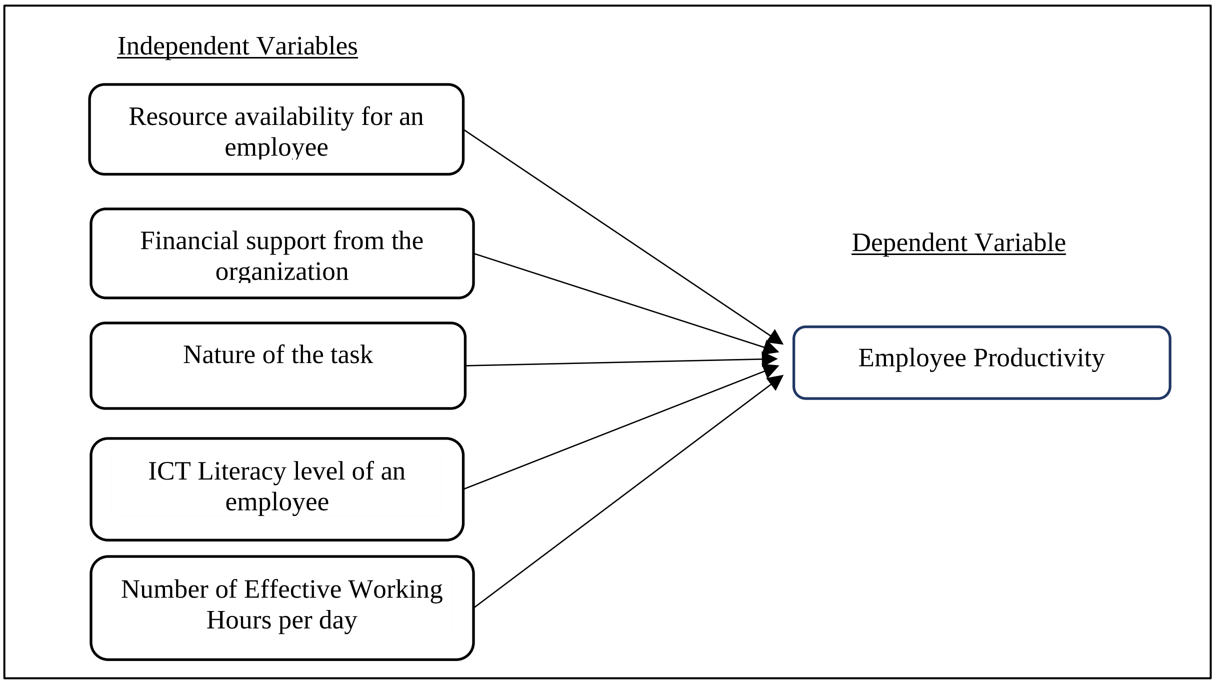

Figure 01: Conceptual Framework

Findings

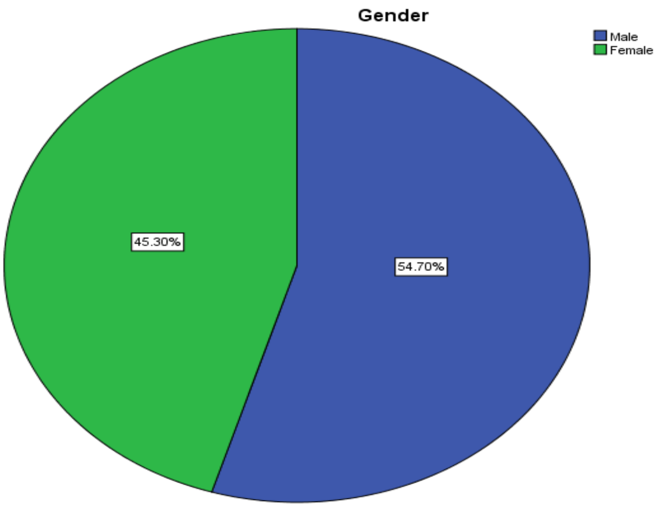

Figure 2: Demographic Characteristic – Gender

In terms of collecting data, 135 of the distributed questionnaires received complete responses, representing a 100% response rate. According to the results, most of the employees are male (54.7%), and the others are female (45.3%). Most of the employees are between the ages of 25-30 years (42.7%) and 20-25 years (31.6%). Above 30 years employees represent 25.6% of the total number of employees. When it comes to the educational level of operational level employees of selected companies, 41.88% of employees have a diploma, 39.32% of employees have a degree, and the balance, 18.80%, is held by the respondents who are advanced level qualified employees. Further, most of the employees who are working at the operational level are unmarried (61.5%) and others are married (38.5%). As a percentage, 35.9% of employees have an experience of 01 – 05 years, 31.6% of employees have an below 01 year experience, 21.4% of employees have an above 10 years' experience, and 11.1% of employees have an experience of 11–20 years. When considering the salary range of operational level employees in selected companies, the majority of the employees earn an income which lies in between Rs.25, 000 – 35, 000. Those respondents hold a proportion of 47.9% of the total respondents. Out of the total respondents 29.1% holds by the employees whose income above the Rs.45, 000. However, only 30 employees' income, which lies between the salary range of Rs.15, 000–25, 000, and as a percentage, 23.1% of the total respondents.

Table 01: Summary of the Descriptive Statistics for the all Variables

	Mean	**Std. Deviation**
Resource Availability	2.75	1.490
Financial Support	2.88	1.255
Nature of Task	3.63	1.291
Effective Working Hours	2.48	1.244
ICT Literacy Level	3.46	1.462
Employee Productivity	3.62	1.390
Valid N (list wise)		

Source: Survey Data.

When discussing the key findings of all variables in this study, using the mean value comparison as follows. The Likert Scale used for this research study ranged from 1 to 5, in which 1 represented strongly disagree regarding the survey questions and 5 represented strongly agree regarding the survey questions. The overall mean value dependent variable of the employee productivity variable was reported as 3.62, which indicates overall employees' responses are at an acceptable level. Furthermore, this value is closer to the 4 score.

Table 02: Coefficients Statistics

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	-.657	.149		-4.422	.000
	Resource Availability	.239	.062	.256	3.851	.000
	Financial Support	.085	.036	.077	2.384	.019
	Nature of Task	.643	.076	.597	8.409	.000
	Effective Working Hours	.306	.074	.274	4.128	.000
	IT Literacy Level	.080	.040	.085	2.034	.044

According to the above Table 02, coefficients results represents that there is a positive relationship between independent variables with the dependent variable because B value sign indicated the positive relationship. Further, independent variable of Nature of Task has the highest B value reported as the 0.634. As well as the independent variable of ICT Literacy level has the lowest B value as depicted the 0.80. As the significance value of T statistics of all independent variables show values where it is less than p value of 0.05 therefore, researcher can accept all the hypothesis. Also Beta values indicated the impact of independent variables.

Results of testing the hypothesis:

H1 – There is significant impact of resource availability on productivity of WFH employees.

According to the Table 32, the significant value is 0.000 for the Resource Availability and this value is less than p value of 0.05. Further Beta value explains that 1% change of resource availability will influence to the change of WFH employee's productivity by 23.9% and therefore H1 was accepted.

H2 - There is a significant impact of financial support from the organization on productivity of WFH employees

According to the Table 32, the significant value is 0.019 for the Financial Support and this value is less than p value of 0.05. Further Beta value explains that 1% change of financial support will influence to the change of WFH employee's productivity by 8.5% and therefore H2 was accepted.

H3 - There is a significant impact of nature of the task on productivity of WFH employees

According to the Table 32, the significant value is 0.000 for the Nature of Task and this value is less than p value of 0.05. Further Beta value explains that 1% change of nature of task will influence to the change of WFH employee's productivity by 64.3% and so, H3 was accepted.

H4- There is significant impact of effective working hours on productivity of WFH employees

According to the Table 32, the significant value is 0.000 for the Effective Working Hours and this value is less than p value of 0.05. Further Beta value explains that 1% change of effective working hours will influence to the change of WFH employee's productivity by 30.6% and therefore H3 was accepted.

H5- There is a significant impact of employee ICT literacy level on productivity of WFH employees

According to the Table 32, the significant value is 0.044 for the ICT Literacy Level and this value is less than p value of 0.05. Further Beta value explains that 1% change of ICT literacy level will influence to the change of WFH employee's productivity by 23.9% and therefore H5 was accepted.

Conclusion

The purpose of conducting this research was to identify the factors that influence the productivity of work-from-home employees, to reveal the appropriate method or methods for improving WFH employee productivity, and to identify the things that employees and employers should do to prepare for the shift to the WFH method. The nature of the task had the greatest impact on the productivity of work-from-home employees among those five factors. Therefore, the researcher highlighted the importance of creating an implementation plan. In addition to that, facilitate employee to keep a separate workspace within the home, request that employees establish ground rules and guidelines with family members, create a reliable system for scheduling breaks, and provide essential resources to employees who work-from-home, etc. are also mentioned under the suggestions and recommendations. Finally, researchers found that the work-from-home method is the most suitable method to continue their operation compared to traditional working methods due to the increase in productivity of employees.

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Factors affecting the effectiveness of performance appraisal system: With special reference to non-managerial employees in apparel industry in Sri Lanka

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Introduction

The universal perception of performance appraisal is the acquisition, analysis and reporting of unique features of a company. According to Jacobs et al. (1980) performance appraisal can be described as a systematic attempt to distinguish the more efficient workers from the less efficient workers. In short performance appraisal is a measurement of how well someone performs job relevant tasks (Parrill, 1999). The best employee performance targets include employee development, organization development, assessment of employee performance, personal development and organizational goals. The job performance appraisal system is the measurement of the performance of employees on pre-determined standards. Performance evaluation system helps the company's professional development and it helps to achieve company's goals. An effective performance appraisal system provides positive and negative feedback to employers about employee performance. When designing and developing an effective performance appraisal system, companies should consider many factors. Those factors that affect can be differing according to the situation that the company operates. So, the research problem can be expressed as what are the factors that influence to the effectiveness of the job performance appraisal system. The objectives of this study is to examine the effect of organization support on effectiveness of the performance appraisal system of non-managerial employees, to recognize the attitudes of non- managerial employees, influence the effectiveness of PA system, to determine the impact of non-managerial employee's performance appraisal criteria on the effectiveness of PA system. Macky and Johnson (2000) pressed that the importance of performance management system is on continuously improving organizational performance, and it is achieved by individual employee performance. According to the personnel management handbook (1998) "the whole hearted support and enthusiasm of top management is also important, recognition from top management is essential for the success of any performance appraisal program." And also, understanding employee attitudes about the performance appraisal system in organization is important as they can determine its effectiveness. (McDawall & Fletcher, 2004).In order to successful performance appraisal, criteria should be developed in respect of traits (qualities), behaviors (activities) and results (outcomes) as well because there are both pros and cons to focus exclusively on one group of criteria and then use of the three groups enhances adequacy of evaluation (Beach, 1980 and Tripathi,1991).

Apparel Industry has been selected to analyze the effectiveness of the performance appraisal system. Apparel firms play a major role in Sri Lankan economy which comes under production sector. In this study researcher investigated the factors affecting the effectiveness of job appraisal system of non-managerial employees. For the research purpose, the selected surrounding area is Apparel Industry in Sri Lanka.

Out of the entire Apparel Industry in Sri Lanka, researcher has selected two companies and two hundred respondents as sample.

Methodology

Under this study the researcher aimed to solve the questions of how does affect organization support for the effectiveness of performance appraisal system of non-managerial employees in apparel industry, how does influence non-managerial employee's attitude for the effectiveness of the performance appraisal system in apparel industry and what does impact of non-managerial employee's performance appraisal criteria for the effectiveness of the performance appraisal system in apparel industry. Since the study was conducted based on these research questions, the researcher has followed deductive approach and review the literature and hypotheses are developed accordingly. To conduct the research, researcher has used data of two apparel firms which are operating in Sri Lanka and were gathered 200 sample data sets. The sample of employees have selected via simple random sampling technique. The data is gathered through self-administered questionnaire and the research is based on cross sectional studies. In this study, the researcher mainly depended on source of primary data. In addition, researcher obtained secondary data from previous published journal articles, books and electronic data sources. The researcher has used the SPSS statistical tools such as correlation and regression, reliability test, validity test, normality test and multicollinearity test for testing the goodness of the data and questionnaire which are supported to take final findings. According to the figure 1, the effectiveness of a PA system depends on organization support, employee attitudes and quality and suitability of performance appraisal criteria.

The researcher developed the conceptual framework designed for this study as follows,

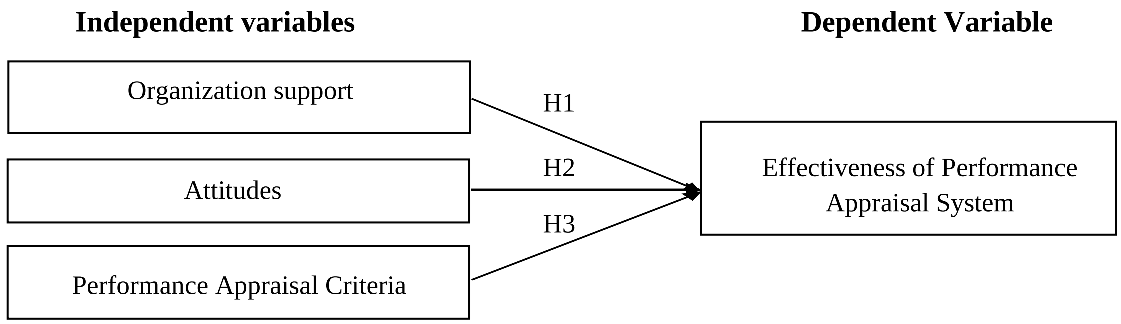

Figure 1: Conceptual Framework

Findings

The researcher has chosen three independent variables (organization support, attitudes and performance appraisal criteria) and one dependent variable (Effectiveness of performance appraisal system). The actual sample of this study was 200 non-managerial employees. Performance appraisal criteria recorded the mean value which is 4.20.Mean value of effectiveness of performance appraisal system was 4.14. Attitudes and organizational support recorded the mean value as 4.05 and 3.92 which are at acceptable level. It implies that the respondents are almost agreed with performance appraisal factors and performance appraisal system. The value of standard deviation implies that there is no higher deviation from the mean value for each construct. As per the values of skewness, data have normally distributed. As per the correlation coefficient values, there is a strong positive linear relationship between the variables.

According to model summary coefficient of determination (R Square) denotes that 41.8% of effectiveness of performance appraisal system is explained by the organization support, 54.6% of the effectiveness of performance appraisal system is explained by attitudes and 67.2% of the effectiveness of performance appraisal system is explained by the performance appraisal criteria. According to the result of the model summary the regression (R) implies that there is a strong positive linear relationship between organization support on effectiveness of performance appraisal system, between attitudes on effectiveness of performance appraisal system and between performance appraisal criteria on effectiveness of performance appraisal system. According to the R square value of the multiple regression model verifies that 71.3% of the effectiveness of performance appraisal system has collectively represented by all the dimensions of performance appraisal.

Table 1: Summary of Hypothesis

Hypothesis	Supported/Rejected
H1 There is a significant effect of organization support for the effectiveness on the performance appraisal system of non-managerial employee's.	Supported
H2 There is a significant influence of non-managerial employee's attitude to the effectiveness of the performance appraisal system.	Supported
H3 There is a significant impact of non-managerial employee's performance appraisal criteria on the effectiveness of the performance appraisal system.	Supported

Conclusion

This study was built to find out the significant factors that influence to the effectiveness of the performance appraisal system. Researcher has identified three factors such as organization support, attitude of non-managerial employees and performance appraisal criteria of non-managerial employee's. The findings support the future development of the effectiveness of the performance appraisal system. Well implemented performance appraisal system is important to employees' carrier development, to meet the company's objectives and to contribute to the company's bottom line. The purpose of this study is to identify the significant factors that influence to the effectiveness of the performance evaluation method and make awareness of carry on proper performance evaluation which makes effective the existing performance appraisal system. Researcher has selected descriptive method which addresses the factors that affect to the effectiveness of the performance appraisal system of non-managerial level employees of apparel industry in Sri Lanka.

Data was gathered using a questionnaire and sample was selected via simple random sampling method. The target sample was 200 non-managerial level employees. Management can make proper decisions to conduct effective performance appraisal based on the findings of this study and can identify weak areas of existing system. Non-managerial employees are important because they are the people who play the vital role in the company and they have the key responsibility and the targets to fulfill which directly link with the company overall profit. Other benefits that could be derived from having a performance appraisal program include enhanced communications, an opportunity to effectively address performance problems and improved employee morale. Therefore, identify the factors affecting the effectiveness of job appraisal system of non-managerial employees is very important for decision makers and the findings of his study would be a better guideline for those who are managers, students, policy makers and other relevant organizations.

There were several limitations could be identified by the researcher while doing this research study. Research scope is narrowed and it is limited to selected organizations, there are lot of variables and indicators to identify the effectiveness of job appraisal system, researcher selected three variables, sometimes the information they will provide may be differ from actual current situation, responses can be changed according to the situation and mental conditions of the respondents at the time of collecting data and respondents may fear to give real facts and for the ease of handling the research is limited to non-managerial employees in selected organizations can be identified as limitations.

The company should pay more attention on performance appraisal discussion and management should highly focus on performance appraisal feedback discussion, the company can use various methods of evaluation that will be able to measure performance accurately and sufficiently, the performance appraisal system should communicate to all employees it will increase transparency of the system can be mentioned as the recommendations of this study. Researcher has identified some factors as the future directions. The present study was studied limiting to the two organizations, so the study can be extended to cover more organizations. The present study was selected non-managerial employees only. The study can be extended to cover more employee categories and also can be gather large amount of rich data set for a strong conclusion. Here H1, H2, H3 are accepted but also can identify some other factors which are affecting to the effectiveness of performance appraisal system. According to the findings of this research, the analysis of each independent and dependent were reveal that how the selected factors are affecting on effectiveness of the performance appraisal system.

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Impact of talent management practices on employee retention of generation "Y" in apparel industry in Sri Lanka; with mediating effect of organizational commitment

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Introduction

In the contemporary world, from the organizational viewpoint, talent retention is critically important for all organizations since turnover is expensive and top performers drive business performance. In a competitive marketplace, the retention of young and talented employees has more challenging for today's organizations. Thus, it has become prominent to practice talent management practices as a strategy to retain the best generation Y talents within the organization. In the new era of globalization, Generation Y is the most demanded employee by employers in any organization. When considering the retention of generation Y, they are in vulnerable, uncertain, complex, and ambiguous (VUCA) environments are immense challenges that organizations are also confronting (Aruna & Anitha, 2015). But the problem is amongst two of every three employees of generation Y intend to move on to another job (Deloitte, 2016). So, it is more difficult to ignore the issue of high employee turnover among generation Y. The Millennials born between 1980 and 2000, aged 17 to 37, represent about 38% of Sri Lanka's population and constitute the majority of the working-age population. This segment is significant for all economic sectors (Silva, 2017). In Sri Lanka, in recent years, it has been recognized that labor turnover in the apparel industry is increasing rapidly. According to (Rajapakshe, 2018), revealed that total average turnover is 60 percent per annum in the industry. As per (Kent, 2020), management in the apparel industry recruits more young employees as they are more efficient, energetic, and interactive. They also mention that they are more tech-savvy, IT literate, innovative, and creative enough to bring something new to the organization. Thereby, talent management has become a key concern in the apparel industry to avoid the above issues. Some authors found that job satisfaction has less correlation with turnover intention than organizational commitment. Therefore, highly committed employees might boost employee retention. The major objective of this study is to examine the mediating effect of organizational commitment in between TM practices on employee retention of generation Y in the apparel industry in Sri Lanka. Therefore, identifying the TM practices that increase the generation Y employee retention intention is worthwhile. It will be examined through literature analysis before being explored concerning Sri Lanka's apparel industry. The scope of the study is confined to the apparel industry of Sri Lanka. The study is limited to the impact of TM practices on employee retention of generation Y in the apparel industry in Sri Lanka, with mediating effect of organizational commitment. Thereby, there is no research conducted concerning the apparel industry in Sri Lanka. There is a gap in the literature that examine the impact of TM practices on employee retention of Generation Y in the apparel industry in Sri Lanka, with mediating effect of organizational commitment. To fill this empirical and knowledge gap, the current study intends to explore the impact of TM practices on employee retention of generation Y in the apparel industry in Sri Lanka, with mediating effect of organizational commitment.

Methodology

Reviewing the prevailing literature, theoretical framework of the study is depicted in Figure 01.

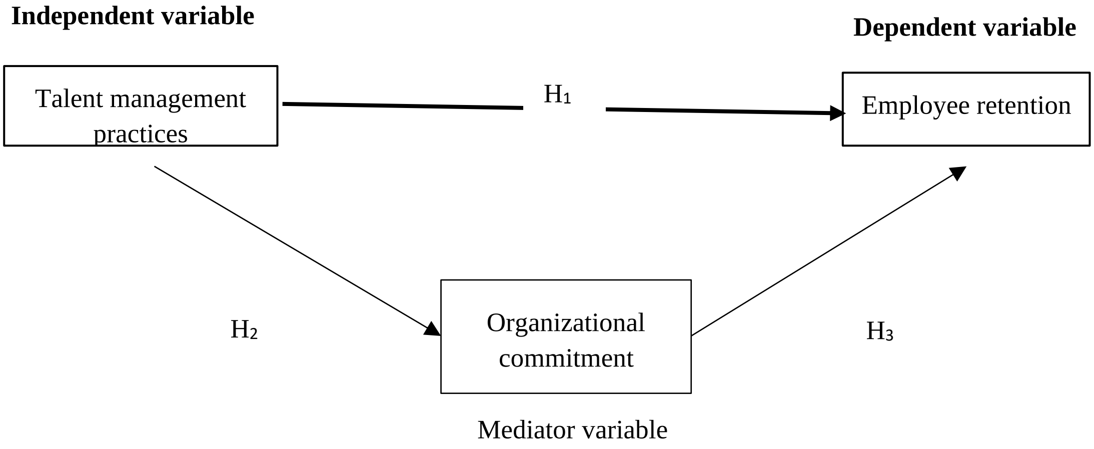

Figure 01: Theoretical Framework

Under this study, the philosophy of positivism was selected. The researcher used a causal research design because the deductive approach was suitable as it starts with an in-depth review of the literature to identify gaps in the literature, and hypotheses will be formulated and evaluated. This will be a quantitative study where attention will be paid to collecting numerical data. In this research, the sample was 314 generation Y employees working in the apparel industry in Sri Lanka. Also, the stratified sampling technique is used for selecting the sample. A questionnaire was used to collect data, which comprises seven-point Likert scale questions, and a cross-sectional study will be more adaptable for this study. The questionnaire consists of one independent, mediator, and dependent variable. The Independent variable of TM practices is comprised of three dimensions: mentoring, strategic leadership, and social media to measure the dependent variable of employee retention, which consists of intention to stay. Thus, the relationship would be mediated by organizational commitment, which is comprised of affective, normative, and continuous commitment. Moreover, secondary sources such as journal articles, research papers, and reviews were used. Therefore, SPSS Statistics was used in analyzing the data collected. Descriptive Statistics, Reliability Analysis, Correlation Analysis, Regression Analysis, Mediator Analysis, and Sobel Test can be used for achieving research objectives.

Findings

Based on the findings, the gender analysis denoted that the male population of the industry is 49% while the female population is 51%. It revealed that the majority of gender composition is female. Going from marital status, most respondents are not married. The age analysis demonstrated that most of the employees were born in 1991-1995, and out of 314 respondents, the majority were young because they were aged below 35. One reason could be that many youngsters in the industry are energetic, technology-oriented, and creative. Under the educational level analysis, the generation Y employees in the apparel industry possess at least an Advance Level. Most of generation Y (25%) were part qualified in a degree and most of were possess other professional qualifications in relevant fields, accounting for 8%. It signified that there have been leaving more academically knowledgeable and experienced people in the industry. When analyzing the number of companies worked, most employees (38%) have worked with three companies so far. Also, there is a low percentage owned by employees who have worked with more than three companies.

Table 01: Reliability Analysis

Construct	No. of Questions	Cronbach's Alpha	Decision Rule	Comment about Reliability
Talent Management Practices	15	0.814	0.814 > 0.7	Reliable
Employee Retention	9	0.719	0.719 > 0.7	Reliable
Organizational Commitment	9	0.717	0.717 > 0.7	Reliable

Source: Researcher constructed (2022)

The Cronbach's alpha value for TM Practices (0.814), Employee Retention (0.719) and Organizational commitment (0.717) are greater than the acceptance level (0.7). Therefore, it could be mentioned that the data are reliable and suitable to continue with hypothesis testing and descriptive analysis.

Table 02: Hypothesis Testing

Factor	**Sig:**	**Regression Coefficient**	**Decision for Hypothesis**
Employee Retention * Talent Management Practices	0.000	B = 0.548	H_1: Accepted
Talent Management Practices * Organizational Commitment	0.000	B = 0.557	H_1: Accepted
Organizational Commitment * Employee Retention	0.000	B = 0.747	H_1: Accepted

Source: Researcher constructed (2022)

H_1: There is a significant positive impact of TM practices on employee retention of generation Y in the apparel industry

The B value was 0.548, which demonstrates that there is a positive impact of TM practices on employee retention, and the P value was less than 0.05(0.000 < 0.05). Thus, the null hypothesis can be rejected, confirming that there is a significant positive impact of TM practices on employee retention of generation Y in the apparel industry.

H_2: There is a significant positive impact of TM practices on the organizational commitment of generation Y in the apparel industry

The B value was 0.557, which indicates that there is a positive impact of TM practices on organizational commitment, and the P value was less than 0.05(0.000 < 0.05). Thus, the null hypothesis can be rejected, confirming there is a significant positive impact of TM practices on the organizational commitment of generation Y in the apparel industry.

H_3: There is a significant positive impact of Organizational Commitment on employee retention of generation Y in the apparel industry

The B value was 0.747, which indicates that there is a positive impact of organizational commitment on employee retention, and the P value was less than 0.05(0.000 < 0.05). Thus, the null hypothesis can be rejected, confirming there is a significant positive impact of organizational commitment on employee retention of generation Y in the apparel industry.

H_4: Organizational commitment mediates the relationship between TM practices and employee retention of generation Y in the apparel industry

P value of less than 0.05 indicates that the mediation is significant. Therefore, the null hypothesis is rejected. It is indicated that there is a partial mediation exists between TM practices and employee retention, with a total effect 0.5481 (54.81%) and P= 0.000 < 0.05.

Conclusion

This study focuses on identifying how organizational commitment mediates the relationship between TM practices and employee retention in the apparel industry in Sri Lanka. This was analyzed in depth through the data collected. Through correlation and regression analysis, the significance of IV and MV on DV was identified. Also, the Sobel test was used to determine the significance of the mediation. Hence, all the hypotheses (H1, H2, H3, and H4) set in the research were accepted in this study, denoting that IV and MV play a vital role in employee retention and partially mediate the relationship between TM practices and employee retention by organizational commitment. Based on reviewing data, recommendations were made for implementing succession planning, conducting one-to-one mentoring sessions, establishing reverse mentoring, strengthening social media usage, and creating a mechanism to get information from factory staff to reduce turnover. This study's major limitation was that organizational commitment is more likely to be a psychological parameter that is difficult to measure 100%. In the future, researchers can evaluate the impact of TM practices on employee satisfaction, in-service training, employee engagement, etc.

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The level of knowledge and practices of female hygiene among the state universities' undergraduates in Sri Lanka

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Introduction

Female hygiene plays a significant role in society because the role of women is crucial not only when considering reproduction, but also when considering the value added to the society both in monetary and non-monetary terms. Female hygiene can be categorized as personal hygiene for women, vaginal hygiene, and menstrual hygiene. Even though the number of published research on female hygiene is low, many scholars conducted studies on this topic. But a considerable number of scholars conducted their studies focusing on adolescents. This study focused on identifying the level of knowledge and practice of female hygiene among female undergraduates at the University of Sri Jayewardenepura (USJ).

Hygiene practices are not only related to menstruation; they are also related to vagina, nutrition, and a variety of other factors. Again, all of these are linked to female reproduction. As a result, understanding female hygiene practices is always essential. Undergraduates are older than adolescents. They are between the ages of 20 and 25. On the surface, it is difficult to see that they are engaging in genuine hygiene practices, and they are aware of all of them. Sometimes the reason for not practicing these in university is a lack of facilities rather than a lack of knowledge. They affect not only their own future but also the future of society if they do not know and apply those. because they will be the ones to lead the upcoming generation. As a result, it had a direct impact on reproductive health as well as their well-being.

Regardless of how developed the world is, many countries continue to face serious challenges when it comes to famine hygiene. There are still taboos, myths, stigma, and shame associated with menstruation, as well as harmful gender norms that demonstrate how people are underdeveloped. Most female hygiene practices are related to menstruation because it is a significant difference between men and women. However, it is not limited to menstruation. Infections in the reproductive system are caused by poor menstrual hygiene. According to a WHO study, cervix cancer is the second most common type of cancer among Sri Lankan women, and the cause is clothing used to replace menstrual pads. (WHO, 2020) Existing research focuses solely on menstruation, which is insufficient. Female hygiene has also received insufficient attention in the medical literature. Because most studies on female hygiene have focused on adolescents, it is critical to conduct research on other age groups as well. (Kumar, Prasuna, & Seth, 2017). Below are the research objectives.

- To identify how far the female undergraduates are aware and practice of female hygiene.
- To identify the barriers when practicing female hygiene practices within the university.
- To get the suggestions to enhance awareness and applicability of genuine female hygiene practices within the university.

This study has both practical and theoretical implications. As a result, the findings of this study will provide new knowledge about genuine female hygiene practices that are beneficial to all girls and women, not just undergraduates. This analysis will teach undergraduates about proper hygiene practices and the benefits of using them. Also, the issues that can arise if they are not practiced. This study will identify the limitations and challenges that female undergraduate face when practicing hygiene practices at the university and elsewhere. This will also influence the development of proper female hygiene policies in which any female can practice genuine hygiene practices and distribute proper female hygiene knowledge. This study helps to fill the research gap by providing new knowledge about female hygiene to the society.

Literature Review

Female Hygiene and Menstrual Hygiene

Female hygiene is an essential component of every woman's life. Females engage in specific hygiene practices during menstruation. They are extremely important for reproductive health. Poor practices have a negative impact on the vulnerability of reproductive infections. (El-Mowafy, Moussa, & ElEzaby, 2014) Menstrual hygiene is defined as the practice of keeping oneself clean while menstruating. (Kumar, Prasuna, & Seth, 2017)

Level of Knowledge and Level of Practice

Female hygiene practices differ across countries, regions, and cultures, and these differences are linked to differences in cultural beliefs and religious practices. (Chen, Bruning, Rubino, & Eder, 2017) Certain myths influence the level of female hygiene practices. There are still taboos, myths, stigma, and shame associated with menstruation, as well as harmful gender norms that demonstrate how people are underdeveloped. (Plan International, N. D) Female hygiene is both poorly understood and understudied. The papers identified and reviewed do not currently allow us to understand how existing Female Hygiene Management methods affect women's health and the improvement of their lives. (Sumpter & Torondel, 2013) The lack of adequate sanitary facilities can have a significant impact on girls' attendance rates and lead to school dropouts. (Ministry of Education Services, 2014) Also, menstrual management poses significant challenges for women in low-income households. (Sumpter & Torondel, 2013)

University Students and Female Hygiene

Most studies have been conducted on adolescents. However, a small number of studies on female hygiene knowledge and practice among undergraduates can be acknowledged. According to one study conducted in Ghana, information on personal hygiene and proper use of sanitary facilities on university should be included in student handbooks. (Prah, Abdulai, Lasim, & AmpofoAsiama, 2018)

Methodology

The qualitative research approach was adopted. Twelve Female Undergraduates of USJ were interviewed under convenience sampling two from each faculty from the six faculties and the data were analyzed under thematic analysis. Inductive reasoning is used in research because it begins with observations and theories are introduced at the end of the research process because of the investigation. Because there have been few studies in this field in the Sri Lankan context, and no studies on undergraduate hygiene have been conducted, this research falls under the category of exploration.

Key Findings and Discussion

Female hygiene takes a special place among various types of hygiene practices. Poor practices exacerbate the vulnerability of reproductive infections. Female hygiene is both poorly understood and understudied. Most studies on female hygiene have focused on adolescent girls, with the other age groups being excluded. Inadequate facilities, shame surrounding, low awareness, insufficient research, myths, and a low-income setting are the factors highlighted by previous research support. The absence of adequate sanitary facilities can have a considerable impact on everyone. Therefore, placing washrooms near public canteens where everyone can see is not comfortable at all. The scarcity of published medical literature on hygiene practices is a barrier to further investigation. As mentioned by the respondents, except the medical undergraduates, others never heard of the studies on female hygiene. Most of the interviewees believe in myths and most of these are rumors coming from the past. With comparing to the prices of the sanitary items, some of the respondents suggested providing sanitary napkins free. The study's findings clearly emphasized the importance of university authorities in providing an environment with adequate facilities for genuine female hygiene practices. Furthermore, rather than listening to rumors, undergraduates should be more aware of female hygiene practices. By analyzing the results and comments of the respondents, suggestions are made to improve female hygiene awareness and the application of good hygiene practices on university premises.

Conclusion

In a culturally diverse country like Sri Lanka, mentioning female hygiene has become a taboo subject. However, when it comes to maintaining a healthy long life, it is necessary to be more open to right awareness. According to earlier scholar thoughts, there is an insufficient nature in female hygiene as well as in all reproductive health age women. Most of the research has focused on menstruation. According to the researcher, every woman of reproductive age should be included. While almost everyone defined hygiene as cleaning, some respondents defined female hygiene as menstruation-related habits. When the researcher assessed the level of knowledge based on Dr. Lalit Kanodia's article, every responder did not know about at least one practice. By referring to prior studies, the researcher was able to conclude six criteria, including inadequate facilities, shame surrounding, low awareness, insufficient resources, myths, and low-income settings. Finally, the findings revealed that poor facilities are the most affecting issue for undergraduates when adopting hygienic habits, and that they should be prioritized for female undergraduates. An extensive study was performed to define the notion of female hygiene based on the current investigation. Despite its obvious shortcomings, it is hoped that future researchers would look favorably on this effort. Further development provided here will aid in the advancement of awareness in the critical field of female hygiene knowledge and practice, as well as how it is useful in maintaining a healthy existence. The current study attempted to identify female hygiene awareness and practice, barriers to practicing female hygiene practices within the university, and suggestions to improve awareness and applicability of genuine female hygiene practices within the university based on Dr. Lalit Kanodia's female hygiene tips every woman should know. There could be additional hygienic techniques they use and more factors influencing female hygiene. During the interviews, however, they just have the notions. In the future, if this type of study can be undertaken with the participation of more undergraduates, it will be more effective in understanding the big picture. Furthermore, while not limited to women, enlisting the participation of men will serve to raise awareness among all.

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The impact of green HRM practices on organization sustainability of apparel companies in Matale district

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Introduction

The organization has recently moved its business practices toward environmentally friendly. However, organizations adopt environmental practices, as it has become imperative to identify green environmental practices that stimulate sustainability. Green Human Resources Management (GHRM) in the Environmental Management of organizations is increasingly becoming a significant issue for academics and practitioners worldwide and its impact on sustainable performance. Moreover, GHRM is a new concept emerging in today's world. However, the apparel industry plays a vital role in Sri Lanka's economy and captures most of the total labor market in Sri Lanka. It has become Sri Lankan's most significant export industry since 1986 and the highest net foreign exchange earner since 1992. Today carbon dioxide percentage is very high in the textile industry as it releases 1.2 billion tons of carbon dioxide (Ritchie & Roser, 2020). That is a good factor in selecting this sector for this research to solve these pollutions, indeed the change in human resources in the industry. This research tries to find how the green concept impacts the environment through human resource management become green. When considering the importance of green practices, green HRM practices are also become popularized in several industries. As a result, every employee started to focus on the environment and do all business by protecting the environment, which will impact the organization's performance and sustainability. Accordingly, employee green inputs and employee green performance improves the organization's sustainability.

Several countries that have achieved high growth in the apparel industry have adopted the green concept to enhance corporate performance and elevate the apparel sector worldwide (UNCTAD, 2020). Sri Lanka, as an island nation, is highly vulnerable to the impacts of climatic changes. And the apparel industry in Sri Lanka has faced several sustainability issues recently. All the high-ranked apparel providers in the world use the green concept. But the factories in rural areas like Matale are still not using those green practices. Due to that, those organizations' sustainability, performance, and profit are lesser than others. So, this research tries to answer the impact of green HRM practices on apparel companies' sustainability in the Matale District. Although extensive academic research has explored the Green Human Resource Management Practices and Relationship of Green HRM (Arulrajah et al., 2015; Mwita & Buberwa, 2016; Bangwal, 2015; Rouleau, 2012; Clarke, 2020; Bombiak, 2018; Saini & Shukla, 2016; Van Veslor and Quinn, 2012; Riketta and Dick, 2005; Mesmer-Magnus, 2012) dearth of research has investigated Organization sustainability (Colbert and Kurucz,2007; Boudreau and Ramstad, 2005). Thus, the present research is conducted to fill the knowledge gap and add new knowledge to the body of knowledge in green HRM-related studies. More specifically, the primary purpose of the present study is to identify the effect of green recruitment, green training, and green reward on the organizational sustainability of middle-level employees at apparel companies in the Matale District.

Methodology

A deductive research approach was selected for the present study and used the survey strategy to collect the data using a self-administered questionnaire distributed using google forms. The questionnaire was developed by adopting the items from the previous authors in the related context. The research focused on middle-level managers in three leading apparel companies in Matale District. The study consists of 152 middle-level employees out of 250 of the population as per Morgan Criteria (Krejci & Morgan,1970). The simple random sampling method has been used as the sampling technique. Data will be analyzed using descriptive and inferential statistics using SPSS 23 software package, and multiple regression was used to assess the impact of the variables.

According to the study, the dependent variable is organization sustainability. Organizational sustainability can use as the measurement tool for achieving sustainability goals. Green HRM practices are considered the independent variable. This study has chosen green recruitment, green training, and green reward as the dimensions to measure the independent variable taken from the environmental management theory through Green Human Resource Management. After considering the relationship between research variables, the following conceptual framework was developed.

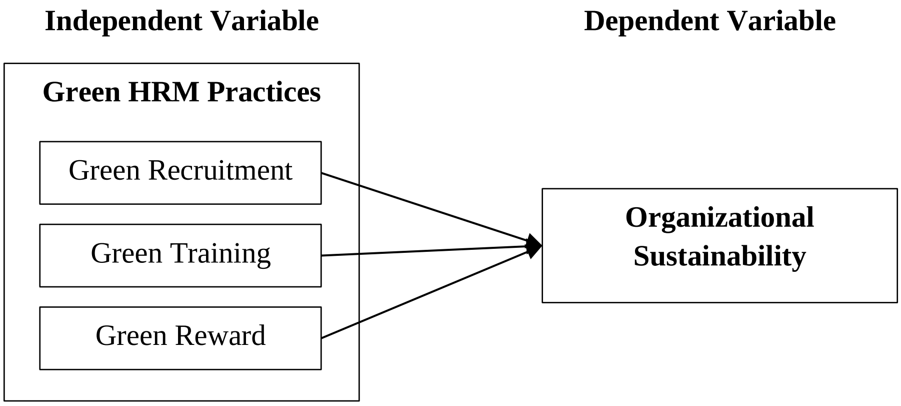

Figure 1: Conceptual Framework

Source: Developed by Author based on the empirical findings

Accordingly, three hypotheses have been developed for achieving the objectives. The first hypothesis is that green recruitment significantly impacts organizational sustainability, and the second hypothesis is that green training significantly impacts organizational sustainability. The third hypothesis is developed as green rewards significantly impact organizational sustainability in apparel industries in Matale District.

Findings.

As per the findings, the sample was slightly dominated by male respondents (39 %), and most of the respondents fell in the 40-49 age group. Approximately 50 % of the respondents have a diploma, with 35.7 % having a degree and 57.1% being staff-level employees in these three factories. Cronbach's Alpha value has been used to measure the reliability of the questionnaire. Accordingly, all the values are between 0.7 to 0.9 (Green Recruitment (.827), Green Training (.754), Green Reward (.743), Sustainability (.773)), which emphasize an internal consistency of the constructs. VIF values of independent variables Green Recruitment 1.376. Green Training 2.073, Green Reward 1.978, meaning that the VIF values less than 5 indicate the non-existence of multicollinearity.

According to Univariate Analysis explains the mean and standard deviation of variables of the study. Variables can be identified as positive responses from the participants where the mean value is closer to the upper level of the standards. Green Recruitment (4.83), Green Training (4.77), Green Reward (4.84), and Organizational sustainability (4.66). According to Bivariate Analysis researcher used correlation analysis in this study to analyze the correlation between independent variables. An analysis of variance (ANOVA) helps to examine the significant mean differences among more than two groups on an interval or ratio-scaled variable. Accordingly, statistically considerable values are less than 0.05. Based on that, the researcher can be concluded that green recruitment, green training, and green reward significantly affect organizational sustainability. Standardized coefficients of Beta values are used to compare the relative importance of each independent variable. This information gets better when the Standardized coefficient of Beta values is considered where the Green Recruitment, Green Training, and Green Reward are 0.421, 0.625, and 0.639, respectively, which explains that these three independent variables have a significant effect on Organizational sustainability.

According to Table 1, the researcher can say that the fitted model is significant under SPSS output.

Organizational sustainability (Y) = 1.605 + 0.084(GR) +0.205(GT) +0.344(R).

Table 1: Coefficients

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Pearson Correlation**	**Sig.**	**Hypothesis**
		B	**Std. Error**	**Beta**				
1	(Constant)	1.605	0.323		4.964		0.000	
	Green Recruitment	0.084	0.067	0.088	1.250	0.421**	0.000	H1: Accepted
	Green Training	0.205	0.055	0.322	3.724	0.625**	0.000	H2: Accepted
	Green Reward	0.345	0.077	0.376	4.460	0.639**	0.000	H3: Accepted

Source: (Survey Data, 2022)

Conclusion.

Apparel companies practice green HRM at significantly lower levels in the Matale district. The data analysis can understand the green HRM practices in this organization's impact on organization's sustainability. The study's main limitation was that it focused on a cross-sectional data collection method; however, a longitudinal data collection method in future research can also be helpful. The sample size of this research study was medium, as it focused only on Matale District. Therefore, future research can test this research model in other factories in different districts to generalize the findings. As per the study's findings, it is recommended to use green-related job descriptions and the E-recruiting system. As per the second hypothesis, Green Training has a positive & significant impact on sustainability. Thus, apparel companies can use online conduct of induction programs. Training employees to have a positive attitude on how environmental pollution harms people worldwide. When considering the green reward, it is recommended to give allowance for good ecological protection. Giving managers loan discounts to buy fuel-efficient cars and motorbikes is also recommended. So, following these recommendations, apparel companies can develop a good brand image with their customers and achieve sustainability goals. As per future research direction, it can use other dimensions that can affect GHRM practices, and also future studies can use the effect of moderating variables towards sustainability.

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Impact of Work Family Conflicts on Organizational Commitment among Female Bank employees in Nuwara- Eliya District

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Introduction

This research was conducted to find the impact of Work-Family Conflicts (WFC) on Organizational Commitment (OC) among female bank employees in Nuwara-Eliya district. WFC is higher among females than among males, and women face more problems in the banking sector (Bhatia, & Kulshrestha, 2018). According to them, 50% of female employees are concerned about work even when they are not on the bank's premises. There is a general complaint from banking customers that the level of commitment of female bank employees is inadequate. OC is an important predictor of employee effectiveness in carrying out the mission and vision of organizational leadership (Singh & Gupta, 2015). So the question arises as to whether the WFC has an impact on the low level of commitment of female employees. In comparison to men, women in Sri Lanka devote far too much time to their families. So, more attention must be paid to this issue. Given this research gap, the research problem was formulated as "what is the impact of WFCs on OC among female bank employees."

Managing multiple roles necessitates role demands from individuals and the inability to meet such demands will aggravate stressors. According to the Role-conflict theory, Greenhaus and Beutell (1985) presented three types of work-family conflicts (time-based conflicts (TBC), strain-based conflicts (SBC), and behavior-based conflicts (BBC), and Cooke and Rousseau (1984) identify work overload(WO) and inter-role-conflicts (IRC) as symptoms of strain according to the General role theory. Mayer, Salovey, and Caruso (2000) claim that stressors among employees will reduce OC. So, employees who are struggling to cope with these role stressors will perform with a low level of OC. Based on this, subsequent research objectives were developed:

- To investigate the influence of TBC on OC of female bank employees.
- To investigate the influence of SBC on OC of female bank employees.
- To investigate the influence of BBC on OC of female bank employees.
- To investigate the influence of WO on OC of female bank employees.
- To investigate the influence of IRC on OC of female bank employees.

The context of the study is limited to one particular bank (XYZ) in the Nuwara-Eliya district. Particularly this bank is selected to represent the public sector.

Methodology

The research framework was developed using five independent variables and a dependent variable. This is presented in figure 1 below.

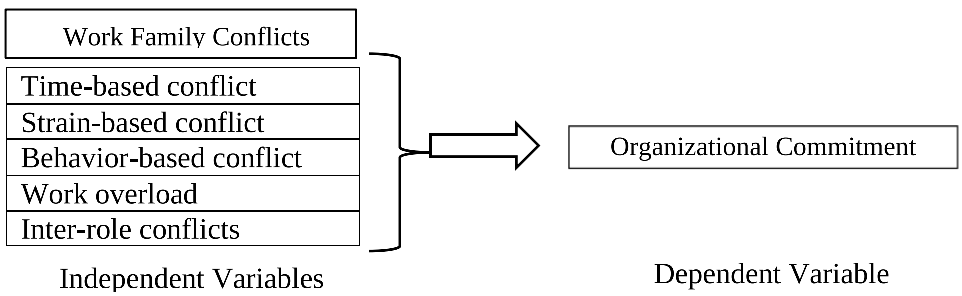

Figure 1. Conceptual Framework

The population of this study consists of all female employees of XYZ bank in the Nuwara-Eliya district. There are currently 12 branches with 109 female employees. This includes tellers, officers, and branch managers. Each female employee is treated as a separate unit of analysis.

Sample is derived from the Krejcie & Morgan (1970) table. Accordingly, 86 employees were identified as the sample out of 109 female employees. Probability sampling method is used as the sampling technique. Under this method stratified random sampling and simple proportionate method are used to get equal representation from every branch. Questionnaires were circulated through the electronic platforms among the employees of 12 branches and finally 83 (response rate of 96.51%) usable responses were obtained and all of them were carried forward for analysis.

The summary of the responder's profile used for the analysis is shown in Table 1. 39% of the employees belong to the age group of 36-45, and they dominated the sample. Most of the employees are married (86%) and also have a higher educational qualification than the GEC advanced level (60%). Majority of employees have worked more than 10 years (52%), and only 48% of employees have had an experience of less than 9 years.

Table 1: Demographic Profile Summary

Demographic profile segments	Category	n	%
Gender	Male	0	0%
	Female	83	100%
Age	25-35 years	24	28.9%
	36-45 years	32	38.6%
	Above 46	27	32.5%
Marital Status	Single	12	14.5%
	Married	71	85.5%
Education	GCE Advanced level	33	39.8%
	Diploma	5	6.%
	Degree	37	44.6%
	Masters	8	9.6%
Work duration	2-4 Years	12	14.5%
	5-6 Years	28	33.7%
	Above 10 years	43	51.8%

Source: Survey data, 2022

Questionnaire survey was determined to be the best data collection method because bank employees are thought to have a strong educational background and less time to dedicate to filling out a questionnaire. WFC scale was measured using Carlson, Kacmar, & William's, (2000) measurement. This measures the first three independent variables of the study (time-based, strain-based, and behavior-based conflicts). There were six questions for each. Further, the work-overload measure (6 items) of Peter, Kirschbaum, Jens & Hellhammer's (1998) and inter-role-conflict measure of Kopelman, Greenhaus, & Connolly's, (1983) which consist of 6 items, were used to measure the work overload and inter-role-conflict. OC is measured using Allen & Meyer's (1990) measurement. However, only 6 items were randomly chosen to maintain equality among questions. All the items in these scales were measured using 5 point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). Some measures were reversed scored.

The internal consistency of all variables (Time-based conflicts 0.784, strain-based conflicts 0.718, behavior-based conflicts 0.709, work-overload 0.686, inter-role conflicts 0.707, and OC 0.732) were up to a satisfactory level of Cronbach alpha value. The overall variable score is measured using the average of the six items presented in each variable that is responded by each responder.

Findings

According to the descriptive statistics of variables, all variables range between 1.67-2.50. The minimum is recorded as 1.50 from OC and maximum of 4.67 from Time and behavior-based conflicts. Mean scores of the variables are ranges between 2.5562 (± .52269) and 3.6365 (.57213) from time-based and OC respectively.

Hypotheses were tested using the multiple regression method. R and R square value is indicated as 0.847 and 0.717 respectively. That indicates that 71.7% of organizational commitment is explained by the WFC factors discussed in this study. The model has deviated 0.018 (1%) from the population. Since the generalizability of the study is high. F (5, 77) = 39.036, $p < .05$ and the regression model is a good fit of the data. Accordingly, results obtained from the coefficient table, and regression equation are summarized as follows:

Table 2: Multiple regression results

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	6.872	.347		19.826	.000
	TBC	-.290	.062	-.318	-4.681	.000
	SBC	-.229	.075	-.225	-3.036	.003
	BBC	-.347	.083	-.348	-4.165	.000
	WO	-.174	.086	-.140	-2.035	.045
	IRC	-.204	.072	-.186	-2.812	.006

a. Dependent Variable: OC
Source: (Based on SPSS output,2022)

$$OC = 6.802 + (-0.290)\ TBC + (-0.229)\ SBC + (-0.347)\ BBC + (-0.174)\ WO + (-\ 0.204)\ IRC+E$$

Based on above table 2, hypotheses were tested under a 95% confidence level.

H1: TBC has a negative influence on OC of Female employees.

The P-value of TBC (0.000) is lower than the 0.05. Therefore, there is statistical evidence to accept the alternative hypothesis.

H2: SBC has a negatively influences on OC of female employees

The P-value of SBC (0.003) is less than the alpha value. Therefore, there is statistical evidence to accept the alternative hypothesis.

H3: BBC has a negative influence on OC of female employees

The P-value of BBC (0.000) is lower than 0.05. Therefore, there is statistical evidence to accept the alternative hypothesis.

H4: WO has a negative influence on the OC of female bank employees

The P-value of WO is 0.045, which is lower than the alpha value. Therefore, there is statistical evidence to accept the alternative hypothesis.

H5: IRC has a negative influence on OC of female bank employees

The P value of IRC is less than 0.05. So the researcher can accept H5.

All hypotheses were accepted and the coefficients indicate a weak to moderate negative relationship. However, 6.802 of OC was explained by other factors rather than WFC. These findings are similar to the previous studies of Rehman, & Waheed, (2012)

Conclusions

This study was carried out to identify the impact of WFC's on OC among female bank employees. Accordingly, the results of the study state that there is a negative impact from all five factors WFC on the OC, and BBC is the most influential factor. Furthermore, it was discovered that the majority of respondents are married and over the age of 36. Therefore, high levels of WFC were recorded from them. This study provides theoretical implications by taking WO and IR into account through the role theory to explain WFC and by analyzing only female employees. Furthermore, contrary to existing literature, the results identified BBC as the highest negative influencer of OC. Identifying the importance of OC in enhancing organizational growth provides practical implications.

The top management of XYZ bank needs to re-establish their current HR policies by maintaining a proper ratio of male-female ratio and providing additional benefits to female employees such as increasing the feeding hours of new mothers and allowing them to work at nearby branches. It’s also necessary to coordinate training and leadership programs in order to reduce WFC and, in particular, BBC. However, the research had some limitations such as only considering only XYZ bank to generalize it into the Nuwara-Eliya district and a specific bank in the banking industry. Furthermore, future research should consider employees at various managerial levels and broaden the context to include other districts and banks. To narrow down the independent variable, OC should be considered dimensionally. Other methodologies, such as face-to-face interviews and observations, must be included to increase the research's reliability.

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Impact of individual values of employees on work-family balance in apparel industry (with special reference to Kandy district)

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Introduction

The apparel industry in Sri Lanka has struggled with difficult situations for retain & succeed. Respect to the apparel industry, the scenario indicates that, the importance of family in culture values & norms. The result is that employees, as human beings, do whatever they make a priority to protect & run for the good of their family. According to Dharmasiri & Gnanayudam (2008), this issue is mainly due to the inability of the employees to balance a full time job and their household responsibilities at home. Further, it is stated that the commitment demonstrated by the employees in the apparel industry is an unsatisfactory level. The incorporation of individual values into work-family balance research is important because life roles values are central to organizing meaning and action for working people (Ahmad, 2008). The absence of work-family balance has been linked to many negative consequences that could be detrimental to employee performance (Delunas, Hobson, & Kesic, 2001). Personal problems may be so consuming that it is often difficult to keep them separate from work time. Employees spend most of their time at work, so how is it possible to pull out of a personal issue that may be stressful and sometimes even hard? The reality is that employees don't want to bring personal problems to the office. Furthermore, work and family relationship can be very dynamic as well as independent. It may be a challenge for all employees. According to the above evidences, it is important to find what factors of individual value cause for the work-family balance and the relationship between individual values and work-family balance. Therefore, this study was designed to determine in investigation the impact of individual values of employees on work-family balance in the apparel industry in Kandy district.

Past studies have identified several factors affect to the work-family balance. Work-family unbalance issue has grown with the increase in dual career couples and single-parent households and the concomitant decrease in traditional single income families (Cohen, 2009). Sagiv and Schwartz (2000) defined human values as desirable, trans-situational goals, varying in importance, that serve as guiding principles in people's lives. The crucial aspect that distinguishes these values from one another is the type of motivational goal they have expressed. Furthermore, they have categorized these ten types of values under main four categories. They are, Self-enhancement, Openness to Change, Self-Transcendence and Conservation.

Islam (2012) defined quality of work life more broadly as an individual's valuation of the outcome of the work relationship. They observed employees can have positive quality work life more broadly as an individual's valuation of the outcome of the work relationship. They observe that if the employee has a positive attitude towards his job, if he has positive feelings towards his work life. In addition, if he is motivated in his personal life and if he has a balance between the two in terms of his personal values. According to the existing literature showed there is positive relationship between work-family balance and individual values. That's meaning when increasing individual values automatically increases work-family balance.

Research objectives of the study are as follows.

- To investigate whether self enhancement impacts on work-family balance of operational level employees at apparel industry.
- To investigate whether openness to change impacts on work-family balance of operational level employees at apparel industry.

- To investigate whether self-transcendence impacts on work-family balance of operational level employees at apparel industry
- To investigate whether conservation impacts on work-family balance of operational level employees at apparel industry.

Methodology

The researcher selected 14507 operational level employees in the apparel industry at Kandy district as the population and sample size was 374 who are working in 02 leading garment manufacturing organizations. Furthermore, the current study was carried out as a cross-sectional study, which is the investigation of a specific occurrence at a certain period. Aside from that, it had an explanatory in nature. A convenience sampling technique used in this study to obtain survey responses from respondents. Data was analyzed as statistically by correlation analysis and regression analysis with the use of SPSS 26.0 version.

The researcher selected more validated and reliable structured questionnaire developed by Professor Opatha (2010) for measured (Dependent variable) work-family balance level with reliability 0.704 (Chronbach Alpha Value) & validity was 0.68 (KMO & Barlett's Measure). Sagiv and Schwartz (2000) for measured (Independent variables) individual values (Self enhancement, openness to change, self-transcendence, conservation) with validity respectively 0.76, 0.73, 0.66, 0.69) & reliability respectively 0.75, 0.77, 0.78, 0.84. It has been included with three parts as part I, II and part III. Part I included demographic details. Part II included individual values related 20 items. Part III included work-family balance related 9 items under five point likert scale. That scale rating as 1 ('Strongly disagree' to 5 ('Strongly agree').

The conceptual framework of this study mainly highlights the relationship of independent variables and the dependent variable. However, this conceptual framework is built based on the literature review and the research problem.

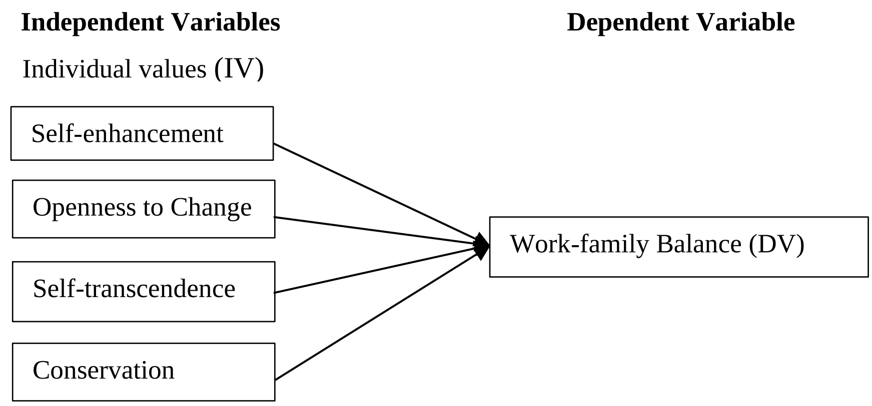

Figure 1: Conceptual framework of the study

Source: Developed by the researcher, 2022

Findings

Table 1: Results of Correlation Analysis

Variables	Pearson's Correlation Coefficient	P-Value
Self-Enhancement	0.251	0.000
Openness to Change	0.168	0.001
Self-Transcendence	0.139	0.007
Conservation	0.327	0.000
Work-Family Balance	1	

Source: (Based on SPSS Output, 2022)

As the table above reveals, all the Pearson correlation values consisted of a positive sign. It means that all variables have a positive relationship with work-family balance. But when considering P values of the self-enhancement, openness to change, self-transcendence, and conservation, all P values are less than 0.05. Hence, the researcher identified that there is a significant and positive relationship between work-family balance and all individual value variables (self-enhancement, openness to change, self-transcendence, and conservation).

Table 2: Results of Multiple Regression Analysis

Model		Unstandardized Coeffiecients		Standardized Coefffiecients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.121	.075		28.304	.000
	Self-enhancement	-.015	.051	-.026	-.292	.770
	Openness to Change	-.186	.097	.314	1.929	.055
	Self-transcendence	-.234	.099	-.386	-2.372	.018
	Conservation	.234	.051	.396	4.627	.000

Dependent Variable: Work Family Balance
Source: (Based on SPSS Output, 2022)

Following regression model was developed based on the variables of the study.

WFB = 2.121+ (-.234) (ST) + .234 (C)

According to the above multiple regression analysis , the researcher evaluated hypotheses to see if there was an influence between the dependent variable and independent variables.

H_{1A}: Self-enhancement impacts on work-family balance of operational level employees at apparel industry in Kandy district.

According to the table 2, the P-value of self-enhancement (0.770) greater than 0.05 under 95% confidence level. Hence, there is statistical evidence to reject the hypothesis of self enhancement impacts on work-family balance of operational level employees at apparel industry in Kandy district.

H_{1B}: Openness to change impacts on work-family balance of operational level employees at apparel industry in Kandy district.

According to the table 2, the P-value of openness to change (0.055) greater than 0.05 under 95% confidence level. Hence, there is statistical evidence to reject the hypothesis of openness to change impacts on work-family balance of operational level employees at apparel industry in Kandy district.

H_{1C}: Self-transcendence impacts on work-family balance of operational level employees at apparel industry in Kandy district.

According to the table 2, the P-value of self-transcendence (0.018) less than 0.05 under 95% confidence level. Hence, there is statistical evidence to accept the hypothesis of self-transcendence impacts on work-family balance of operational level employees at apparel industry in Kandy district.

H_{1D}: Conservation impacts on work-family balance of operational level employees at apparel industry in Kandy district.

According to the table 2, the P-value of conservation (0.000) less than 0.05 under 95% confidence level. Hence, there is statistical evidence to accept the hypothesis of conservation impacts on work-family balance of operational level employees at apparel industry in Kandy district.

Conclusion

Based on the existing literature, the researcher selected self-enhancement, openness to change, self-transcendence, and conservation as variables impact on work-family balance in the apparel industry in Kandy district. According to the findings of the researcher, only conservation values positively impact on work-family balance and self-transcendence values negatively impact on work-family balance. As well as other two variables that do not impact on work-family balance. However, in that situation, management should improve the safety side of the operational level employees and other conservation matters (improve working environment safety, reduce risk task without any training program, introduce insurance policies for employees, and introduce funds to protect employee future). Through promotion, considerable remuneration level and other motivational factors, management should try to keep these employees in the organization. However, better management should consider the work-family balance of operational level employees in the apparel industry in Kandy district. As an employee, they can fulfill both their full contribution for organization's success and family's success. So this organization's top management should consider employee conservation for their work-family balance.

According to the literature, there were more factors affecting the work-family balance. But the researcher selected only four variables related to the individual values. The researcher used survey method as only method of data collection. It also affects to the goodness of the data. In this study, the researcher used only quantitative techniques for data collection. Because of that, the researcher has doubts about the accuracy of data collection. Some respondents did not want to read the entire questionnaire, so they answered without reading it. Hence, the researcher suggested to future researchers use qualitative technique for the collecting data, such as interview method.

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The impact of industrial training on the personal and professional development of management undergraduates in state universities in Sri Lanka

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Introduction

The ultimate purpose of this study was to identify and investigate the impact of industrial training on the personal and professional development of management undergraduates in state universities in Sri Lanka. Industrial training is a great opportunity for students to develop their future career pathways and to learn new skills. It is a professional learning experience that offers a meaningful, practical work, related to a student's field of study or career of interest. The job market is competitive and rapidly changing day by day. That is the reason behind the growth of applied learning and industrial training opportunities becoming a key part of the university degree program for all students (Marsono, A.D.(2017). Most of the students are involved in industrial training programs for different reasons, like their desire to get work experience while obtaining academic credits. The future world of employment will selectively attract prospective workers who are truly professional in their fields, as global competition will open up opportunities for foreign workers to enter the world of work. (Saat, K.L., & Ahmad, P. (2009).

However, sometimes students face various challenges during the industrial training program. The problem may arises as whether the personal development is effective in such situations. Therefore it is necessary to find out whether the industrial training is an effective way to develop the personal and professional skills of the student. And how host organization side factors help students to improve their development, how university supports that and how to affect students' personal factors to improve their development, and how professional qualifications help to succeed in their development.

Most of the literature revealed that every student, at some stage of his /her academic life, faced with the task of transforming the theoretical knowledge gained in the classroom into the practical skills required by the profession. (Jaschinski. S.G., & De Villiers, Y (2008). Personal and professional development is a lifelong process. It is a way to assess their skills and qualities, to consider their aims in life and set goals in order to realize and maximize their potential for learning or understanding of issues relevant to a particular area of study. McMahon. K., & Quinn. A. (1995) noted that industrial trainings are supervised work experiences whereby students leave their institution and get engaged in work related programs, during which period they are closely supervised by experienced job incumbents. This literature shows mixed results of effectiveness of undergraduates personal development related to different dimensions of the industrial training program. Students who have completed industrial training programs reported that they have gained significant learning outcomes, polished their communication skills and exhibited significant personal growth. (Klink. G.K., & Streumer.(2002).

According to this background, the purpose of this research is developed as to answer the question: "Is there an impact of industrial training on the management undergraduate's personal and professional development in state universities in Sri Lanka". To achieve that, four objectives were formulated.

- To identify how university support in industrial training affects the personal and professional development of management undergraduates.
- To identify how host organization factors in industrial training affect the personal and professional development of management undergraduates.

- To identify how student personal factors in industrial training affect the personal and professional development of management undergraduates**.**
- To identify how moderating effect of students' professional qualifications and skills in between students' personal factors and personal and professional development of management undergraduates**.**

Methodology

The target population of this study consisted of management undergraduates of state universities in Sri Lanka. The total number of management undergraduates was identified as the population. To select the sample from the population, the convenience sampling method was applied under the non-probability sampling technique. According to Morgan's table, 3350 of total management undergraduates has covered by 350 sample of final year management undergraduates. The study focused only on the selected five government universities which have the largest amount of management undergraduates. The selected universities are University of Sri Jayewardenepura, University of Wayamba, University of Colombo, University of Kelaniya and University of Rajarata. The final realizes sample included 350 usable questionnaires with a 100% response rate. All 350 questionnaires were analyzed. According to operationalization, student's personal factors indicators included were commitment, performance, ability to work with people, self-confidence and attitude. University side factors were supervisor's support, awareness programs and internship opportunities. Organization side factors indicators were host company supervisor's role, stress, organization culture and environment. Professional skills and qualification indicators were time management, communication skills, other professional qualifications and problem solving skills. Personal and professional development indicators were moral and professional ethics development, career development, ability of team work, obedience to the law and loyalty and adaptability.

The quantitative research method was used in collecting the data through statistical procedures. A field survey used questionnaires to determine the relationship between independent and dependent variables. The primary data collected from the respondents through a survey questionnaire. The questions in both questionnaires were measured through the five-point Likert scale which varies from strongly disagree to strongly agree. With the help of existing studies and theories in the literature, the following model was conceptualized to carry out the research.

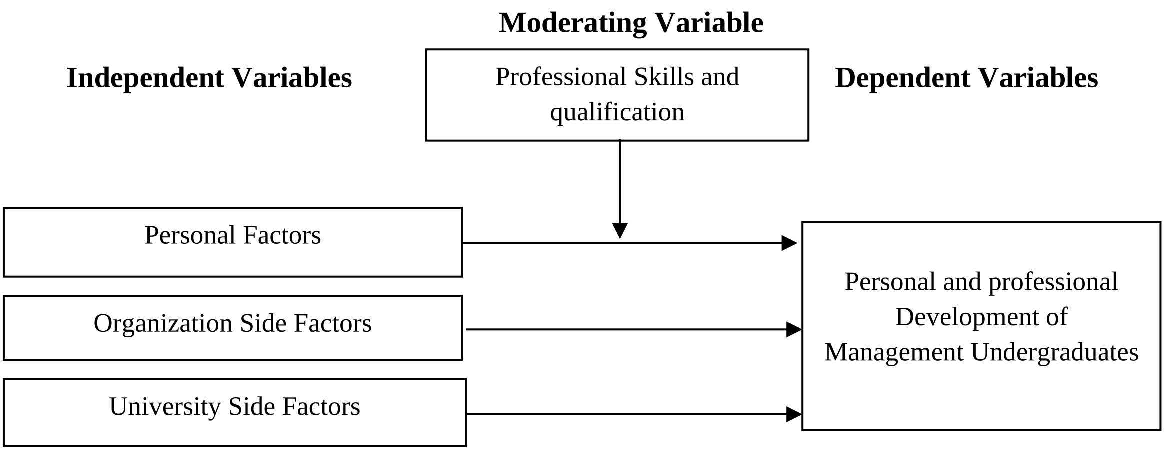

Figure 9: Conceptualization of the research model

Source: compiled author, 2022

Findings

The descriptive analysis describes the characteristics and pattern of the sample data set with the values of frequency distribution, mean, median, mode, and standard deviation. The higher values of the standard deviation of the dependent variables and independent variable showed that they are highly dispersed from the mean value. As the first step in data analysis, the normality of the data set is tested to decide which statistics to be used for further analysis. To test the normality of the sample data, skewness and kurtosis values were used. Also Kolmogorov-Smirnova and Shapiro-Wilk tests were performed for further clarifications. Results indicated that the variables were normally distributed. Therefore, further data were analyzed with parametric statistical tests of multiple regression analysis.

Table 13: Summary of output

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig. (P)	Model	Summary	Multicolli--nearity
	B	Std. Error	Beta			R	R^2	VIF
University side Factors	0.173	0.081	0.113	2.123	0.034	0.313	0.230	1.115
Organization side Factors	0.501	0.108	0.025	0.470	0.038	0.786	0681	1.109
Personal Factors	0.551	0.042	0.578	13.25	0.000	0.578	0.332	1.012
Professional skills and qualification (moderator analysis)	0.457	0.295	.577	1.549	0.001	0.637	0.406	

Source: compiled author, 2022

Table 1 demonstrates the Model summary of entire research in checked all 4 hypothesis. R and R^2 values shows the impact of independent variables and dependent variable. University side factors, organizational side factors, personal factors and professional skills and qualification have positive impact and it is a sufficient level for considering as a well- fitted model. As well as multicollinearity assumption is not violated because the VIF (variance inflation factor) values are less than 10. It predicted that independent variables in a logistic regression model are highly correlated.

Correlation analysis is used to measure the strength of the relationship between two variables. A Significant correlation was found between personal factors (0.043) and undergraduate personal and professional development. Based on the Pearson correlation results the organization side factors, student's personal factors, university side factors were positively correlated with each other. According to the table, moderator variable P value (0.001) was less than 0.005, it indicates that the moderator variable statistically significant. That means there is a partial moderator impact on personal factors and personal and professional development of management undergraduates. Other independent variables P values are also less than 0.005. That means other 3 independent variables are also statistically significant.

Conclusion

This study provides an overview of the impact of industrial training on the personal and professional development of management undergraduates in state universities in Sri Lanka. According to the study findings the industrial training is a valuable opportunity for students to develop their future career pathways. There are 4 factors which provide huge contribution to personal and professional development. Those are host organizational factors, university side factors and student's personal factors and undergraduate professional skills and qualifications. There is a significant impact from university side factors on undergraduate's personal and professional development. Expertise university supervisor support, university awareness programs contribute to minimize academic stress of the students. There is a significant impact from organizational side factors on undergraduate's personal and professional development by providing internal promotions, minimizing work life stress. There is a significant impact from personal factors on undergraduate's personal and professional development. Another most powerful variable is the moderator variable. The Moderator variable is statistically significant. This research has revealed that there is a positive impact on professional qualification and skills to moderate the relationship between personal factors and undergraduate's personal and professional development.

Research has revealed that student's personal factors like commitment, ability to adapt any working environment, ability to work with people helps them to improve their personal and professional development. From industrial training undergraduate can improve their communication skills, Ability to work in a tran, critical thinking, problem solving and moral & professional ethics development. Additionally, from the findings, this study gives implications and recommendations to students, universities and organizations to make decisions relating to the undergraduates' personal and professional development and industrial training.

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Management Information Systems

Categorisation of Enterprise Resource Planning (ERP) stakeholders in the Asia Pacific (APAC) retail industry projects: A systematic review

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Introduction

ERP is an integrated business software approach to running business operations smoothly. However, Walker et al (2008) , and Aloini et al (2007) reviled that the complexity & challenges of project implementations. Many parties are involved in ERP projects. Implementation challenges were experienced in business software systems such as ERP in the retail business and dealerships industry in Asia Pacific economies. In this study, the systematic review process uncovered that various stakeholders contributed at various project stages throughout the project lifecycle and beyond. That itself is a vulnerability. Risk impact from respective stakeholders and groups should be evaluated at the beginning of the project. Various studies resulted in grouping stakeholders (Mitchell ,1997; Sreeram and Parimi ,2015). However, the criteria used to build those groups are virtually a little. These are the key motivators to study in this research. The author's practical experience helped throughout the journey. Especially to test the result. From the project team's behaviour point of view, this will useful for ERP project implementers and various teams. This qualitative and systematic review intends to categorise the parties to the implementation.

The definition proposed by Freeman is widely accepted, "Any group or individual who can influence or is influenced by the accomplishment of the organization's goals" (Freeman, 1984). However, Mitchel et al (1987) pointed out that many narrow definitions in stakeholder literature attempt to specify the pragmatic reality that managers cannot attend to all actual or potential claims. According to them, a theory of stakeholder salience is also required, which can explain to whom and what managers pay attention.

Several reasons for project failure have been identified in previous studies. Project failures were influenced by several important crucial elements, including client environment configuration and stakeholder influences. According to Sreeram and Parimi (2015), software deployment might have a negative influence on stakeholders' interests, causing them to respond negatively. Mitchell et al. (1997) emphasised that, according to his stakeholder theory, business institutions must maintain positive relationships with stakeholders and get full support for their activities.

Methodology

This review was conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA-2020) model (Liberati et al., 2009). Based on the objectives of this study, first, research questions were formulated. Next, a search strategy was defined to identify the conducted studies which can be used to answer research questions. The inclusion and exclusion criteria were also defined at this stage. The study selection criteria are defined to identify the studies aiming to answer the formulated and synthesis as the third stage. In the fourth stage, data extraction and synthesis were defined, which describes the usage of the collected studies analysis for providing answers to the research questions. Any other prospective factors were checked at Model l testing stage.

This systematic Review aims to answer the following research questions.

RQ1: What are the existing reviews conducted on ERP project stakeholders?
RQ2: What is the correct classification of Stakeholders on ERP projects stakeholder management?
RQ3: What are the criteria used to define current stakeholder categories?

RQ4: What are the types of stakeholders and categories missing from previous reviews with the aspect of HOLISTIC stakeholders' management?

RQ5: What are the accurate stakeholder calcification and criteria lists in APAC ERP Projects?

The search strategy involves the outline of the most relevant sources and search terms. In this review, several top research repositories have been used as main sources to identify pieces of literature and develop concepts. They were IEEEXplore Digital Library, Google Scholar, Research Gate, and Science Direct.

All stages of this study were conducted by the PRISMA- 2020 criteria (Liberati et al., 2009). From the top academic databases, a total of 502 research papers which were published after the year 2000 were inspected to ascertain the include 10 publications using the PRISMA dataflow diagram (Liberati et al., 2009). The conceptual model has been developed. The data survey tool was developed to gather data.

During the pilot data survey, it was observed most of the technical matters were unable to respond to by ERP core team members of Fiji Companies who have ERP systems up and running. It was analysed as 88% of the pilot survey data sample could not consider for data gathering and data set for analysis due to either only demographic data being provided or 90% of questions were not answered. Then, the *Focus Groups Interview* process was selected. The interview protocol helped to gather data. *Qualitative data analysis* was employed. After code filtering, themes were built. With the help of these themes, eight (8) categories of stakeholders were concluded. Four (4) criteria were derived, and the researcher used five (5) empirical projects to test the theories.

Findings

A total of 10 studies were included in the systematic review. The flowchart is presented in figure 1. A total of eight (8) stakeholder types were identified. A detailed description of the interpretation and the execution of each stakeholder category is provided. The most-reported category is "Internal & external" stakeholders, which was assessed within a total of four independent studies. Stakeholder types were subdivided to be assessed according to stakeholder theory, definitions and standards guidelines. And, if the study is consistently described.

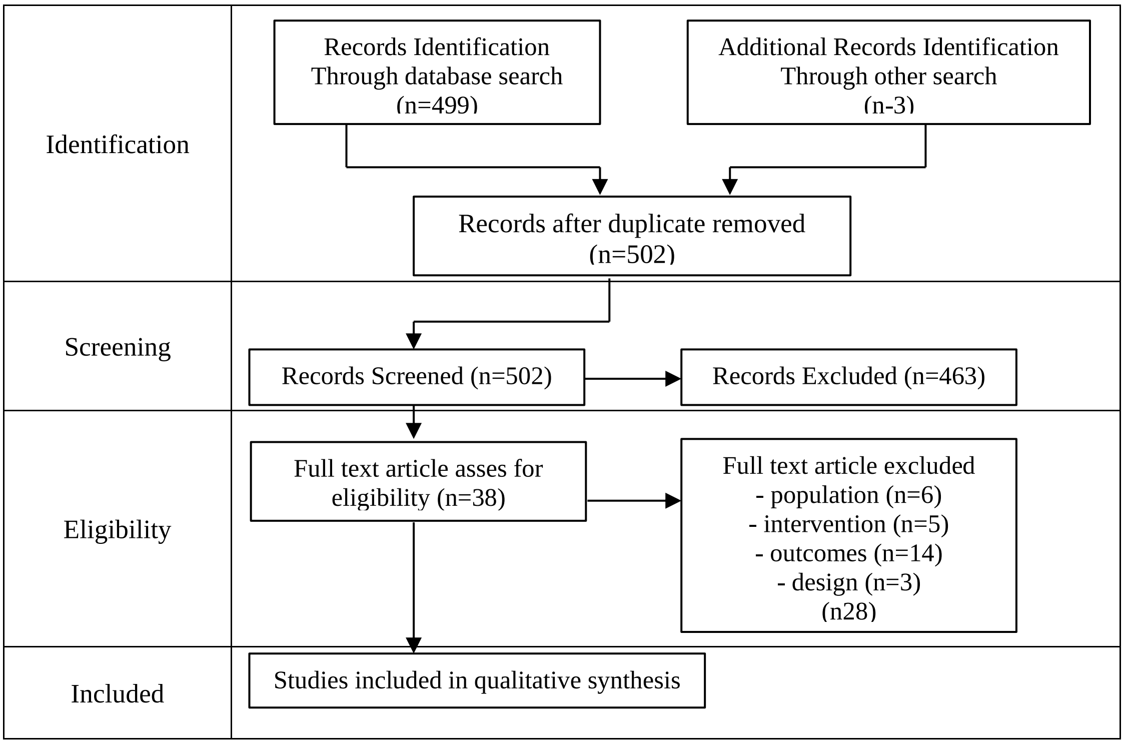

Figure 1. PRISMA 2020 Flow Diagram: Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) flow diagram.

We summarised the below table and presents a complete set of categories & subcategories of ERP project stakeholders with respective criteria. This tool allows us to create a more exact list of stakeholder categories when it comes to ERP project conflict management, which we wouldn't be able to achieve without it.

Table 1: Stakeholder Categories, Stakeholders

#	Stakeholder Category	Stakeholder
1.0	Client (C)	
1.1		Business Analyst (BA)
1.2		Business Managers
1.3		Business Process Owners (BPO)
1.4		Change Manager
1.5		End-users
1.6		Functional Consultants
1.7		Functional Managers
1.8		Finance Team *
1.9		IT Team
1.10		Legal Counsel
1.11		Operational Managers
1.12		Project Champions
1.13		Project Manager (PM)
1.14		Project Sponsor
1.15		Procurement Team
1.16		TOP Management
2.0	Implementer (I)	
2.1		Account Manager
2.2		Application Support Engineer
2.3		Business Analyst (BA)
2.4		Functional Consultants
2.5		Legal Counsel
2.6		Project Management Office (PMO)
2.7		Project Manager (PM)
2.8		Release Manager
2.9		Sales & Marketing Team
2.10		Software Engineers
2.11		System Engineers
3.0	Primary Vendor (PV)	
3.1		License Manager
3.2		Release Manager
3.3		Product Manager
4.0	Project Governance (PG)	
4.1		Project Steering Committee
5.0	3rd Party Vendors (3V)	
5.1		Software Engineers
5.2		Functional Consultant
6.0	System Integrators (SI)	
6.1		Software Integrators
7.0	Governance / Compliances (GC)	
7.1		Government Agencies (TAX regulations, Customs & Duties)
8.0	Other / Miscellaneous (O)	
8.1.	Management / Advisory	
8.1.1		Management Consultant
8.2	Resolutions	
8.2.1		Mediators
8.2.2		Courts
8.3	System Audit	
8.3.1		IS Auditor

Further, i) Contribution to the projects ii) Geographical boundaries/demography iii) Ownership/responsibilities/accountabilities iv) Power & Influences were derived as the criteria to categorise stakeholders of ERP Projects.

Conclusion

This study attempted to fill the gap that exists in ERP Project Management. The literature demonstrated a lack of theoretical pieces of evidence for the identification of various categories of stakeholders and grouping in ERP projects. To my knowledge, this is the first systematic review in APAC to provide a comprehensive overview of the classification of parties in an ERP projects.

The results of this research support the proposed relationship in the conceptual model. During this systematic review, the researcher found inconsistencies in the stakeholder list and categories. There was little evidence on the definition of criteria when categorising ERP stakeholders.

For example, Mints (2019), Walker et al (2008), and Mitchell (1997) used the criteria "Power, Legitimacy, Urgency" to categorise stakeholders. However, testing and definitions were referred to in different environment setups but not on ERP projects. Mitchell (1997) pointed out that power in an ERP implementation environment is referred to as the capacity and influence of one stakeholder to get something done from another stakeholder(s). Stakeholders are having their legal bindings, obligation, norms, values, and benefits (Legitimacy) as the relationship among them.

Power gains authority through legitimacy, and it gains exercise through urgency (Mitchell, 1997). Contribution coming from legitimacy to stakeholder salience depends upon interaction with power and urgency. Legitimacy gains rights through power and voice through urgency. Urgency is a society-constructed perceptual phenomenon and is perceived by the stakeholders.

Finney (2011), Rajan (2015), Sheu (2003), and Sreeram (2020) used "Geography of Business Operations" to be tested in an ERP environment. There is little evidence on combinations of the 4 criteria (Contribution to the project, Geographical Boundaries/demography, Ownership/responsibilities/accountabilities, Power & Influences) used to categorise ERP project stakeholders. Some of these categories are further derived into sub-categories.

Using the empirical evidence, these stakeholder categories were tested with a focus on conflict management and proposed how to mitigate related risks out of conflicts. The results of the real-world project environment will be used to understand; how these stakeholder groups influence project conflicts. The Project Step was mapped according to ERP Project Stakeholders & Stakeholders Groups, Engagements (Responsibilities, Stakeholder Interaction) and it can be used as a guide to testing the classification of ERP project stakeholders empirically in the actual ERP implementation set-up.

A gap in the categories of ERP stakeholders has been identified in the literature. The researcher was able to analyse the existing classification and describe the respective criteria list.

Further investigation has been done to understand how to do subgrouping. In this stage, it should be highly beneficial for the author to use identified protocols for the classification of stakeholders in proceeding with the research. Accordingly, this analysis provides a useful in-depth classification of ERP project stakeholders, especially concerning conflict management and risk aversion environments.

Limitations

None of the reviewed studies could be rated as having a systematic review process or following PRISMA-2009 or 2020 statements or guidelines. This expressed the need for a new study and design. Further, only studies in English were included, also resulting in a potential bias. A more open search may have identified more studies, giving a wider range of results. The present terms were, however, considered relevant according to the objectives. This research and its result are based on the APAC region. The test environment is also related to APAC. How one APAC region varies from another region is not considered in this research.

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Marketing Management

Online shopping orientations toward online purchase intention among social media users in Sri Lanka: with special reference to the Colombo District

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Introduction

The advancement of the World Wide Web has resulted in the creation of a new form of online shopping. Thus, consumers' involvement in online shopping has become a significant trend. In such a situation, it is important to understand consumers' online shopping orientations when purchasing products online. So, this thesis examined the impact of online shopping orientations (impulse purchase orientation, quality orientation, brand orientation, shopping enjoyment orientation and convenience orientation) towards the online purchase intention of social media users in Sri Lanka with special reference to the Colombo district.

Web 2.0 technology makes it simple for firms and customers to create and display content, share information, and recommend products to other users (Hutagalung et at.,2017). The subsequent development of social media has transformed the way people interact and share information with each other. Today, people spend so much time on social media, especially, after the COVID-19 pandemic. Sri Lankan consumers have been increasingly using the internet as a shopping approach in performing their purchasing activities. According to Agnihotri et al. (2016) ; Hudson et al. (2016) ; Zhan et al. (2016), businesses could make use of social media as a tool for creating and sustaining relationships with customers, improving brand equity and increase firm's performance. Therefore, online marketers can take this opportunity to use the internet as a medium to attract and maintain current and potential consumers. In this regard, there is a need to track and understand consumer perception of online shopping and their online shopping behavior. Through this study, businesses can find out the shopping orientations of social media users that are important for them to consider before selling their goods online.

For the convenience of understanding the research problem, researcher has explained the gap under two topics like empirical gap and context gap. Empirical Gap: In Sri Lanka, online shopping is still emerging whereas in other foreign countries online shopping has already become quite prominent. According to the internet word stats (2021), 37.1% Internet penetration rate was recorded in Sri Lanka. According to the above internet related details there is a greater opportunity for online shoppers to increase their products buying and selling process by using Internet. Context gap: Number of studies have conducted online shopping in developed countries, but there is still limited number of research investigate this are in developing economies. Hence, the researcher conducted this study to fill the existing gap in identifying the shopping orientation toward online purchase intention among social media users in Sri Lanka.

The rest of the sections are as follows: research methodology, followed by a summary of findings, finally, discussions, conclusions, implications, limitations, and suggestions for future studies.

Methodology

Underpinning the Theory of Planned Behavior, researchers proposed a framework that illustrates the relationship between online shopping orientation and online shopping intention. Online shopping orientation was measured through five perspectives; impulse purchases orientation, quality orientation, brand orientation, shopping enjoyment orientation and convenience orientation. Accordingly, Figure 1 shows the conceptual framework of the study which the researcher derives from the study conducted by (Shoko et al., 2020).

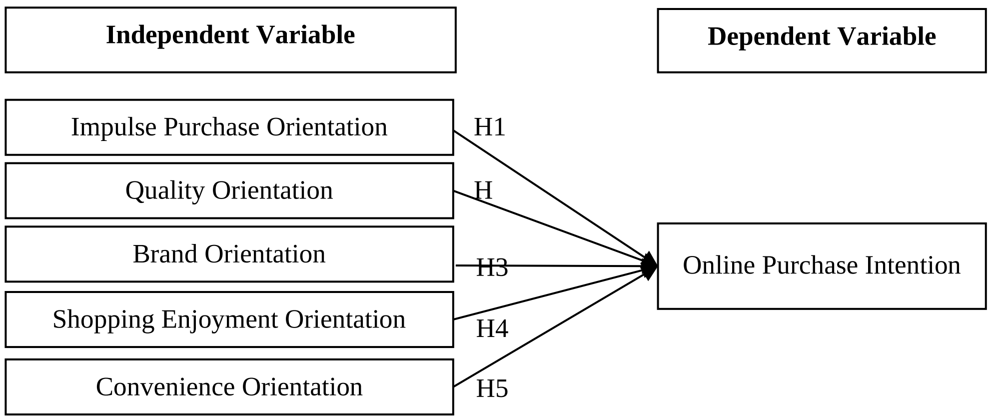

Figure 1: Conceptual Framework

(Source: Shoko, et al., 2020)

To achieve the research objective, researcher developed five hypotheses follows as;

H1: There is a positive impact of impulse purchase orientation on online purchase intention
H2: There is a positive impact of quality orientation on online purchase intention
H3: There is a positive impact of brand orientation on online purchase intention
H4: There is a positive impact of shopping enjoyment orientation on online purchase intention
H5: There is a positive impact of convenience orientation on online purchase intention

In this study, the population was all social media users who belong to 20-34 age categories in Colombo district, Sri Lanka. Therefore, the unit of analysis was individual social media users. The sample was chosen through the nonprobability convenience sampling technique. Through this sampling method, the researcher selected 384 social media users who belong to the 20-34 age category in the Colombo district as a sample of this research study. This study followed a deductive approach.

As per the study design, results showed that the male population in Colombo District is dominated among the 25-29 age group. Interestingly, it is found that 46.1% of young people actively engaged with online shopping. Further, this study suggested, that most of the single respondents had more ability to engage with social media compared to unmarried individuals, and it was 52.9%. Most of the respondents had up to G.C.E. A/L educational qualifications and a lower number of respondents had degree levels. Further, out of the total respondent's majority use Facebook (97.7%), and the lowest number of individuals use Twitter (2.5%).

A structured questionnaire was used to collect data. The questionnaire comprises two sections; section I contains five demographic questions to identify the sample attributes. In section 2, Impulse purchase orientation, quality orientation, and brand orientation were measured (Gehert et al., 2007), and shopping enjoyment orientation, convenience orientation, and online purchase intention were measured (Shoko et al., 2020). The questionnaire is distributed among the sample as a Google Form, in both languages; Sinhala and English. The five-point Likert scale was used to measure the independent and dependent variables of the study. The respondents can express their perceptions between strongly disagree to strongly agree through five-point Likert scales.

Cronbach's alpha coefficient is the most accepted index in testing and evaluating the reliability of data for internal consistency. Cronbach's alpha coefficient ranges vary from 0 to 1 and values close to 1.00 indicate high consistency, and value close to 0. In this context, (Sekaran, 2003), indicate that the data can be reliable when Cronbach's alpha coefficient is more than or equal to 0.7. Therefore, Cronbach's alpha coefficient has been used for reliability analysis. The requirement of measuring validity, Kaiser-

Mayer-Olkin (KMO) and Bartlett's Test of Sphericity were conducted in order to assess the sample adequacy. In order to be a valid instrument, the results should be 0.5 or above 0.5 value, implying the sample size is large enough to conduct the factor analysis.

Findings

The validity results proved that the items used to measure the variable in the model are satisfactory (Impulse Purchase Orientation, Quality Orientation, Brand Orientation, Shopping Enjoyment Orientation, Convenience Orientation, and Online Purchase). Further, the reliability of the variables also proved satisfactory level.

When considering descriptive analysis results, Impulse Purchase Orientation, Quality Orientation, Brand Orientation, Shopping Enjoyment Orientation, Convenience Orientation, and Online Purchase Intention were high among the respondents. Furthermore, based on the correlation analysis result, Online Shopping Orientations such as Impulse Purchase Orientation (.744), Quality Orientation (.736), Shopping Enjoyment Orientation (.716), and Convenience Orientation (.696) had a strong positive relationship with Online Purchase Intention among social media users in Colombo. Further, Brand Orientation had a medium positive relationship with Online Purchase Intention (.384).

The primary statistical tool, multiple regression analysis, was used to find the research questions answers. According to regression analysis results (Table 1), Impulse Purchase Orientation, the value of the Standard coefficient was .267. It indicates that Impulse Purchase Orientation positively impacted Online Purchase Intention among selected respondents. Likewise, quality Orientation positively impacts on Online Purchase Intention among social media users in Colombo (0.191, $p<0.005$). Through multiple regression analysis results, the Brand Orientation B value was .103 and Std. Coefficients value was .107. It also indicated there is a positive impact among independent and dependent variables. According to the analysis results of multiple regression, Std. Coefficients value of shopping enjoyment orientation was .141. As well as sig. value below 0.05 level. It was indicated that shopping enjoyment orientation positively impacted Online Purchase Intention among selected respondents. According to analysis results of multiple regression, there is a positive impact of Convenience Orientation on Online Purchase Intention among social media users in Colombo (0.2, $p<0.05$). According to the multiple regression analysis result all the five hypotheses were statistically significant ($p<0.05$) and accepted.

Table 1: Coefficients of Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error			
(Constant)	.604	.135		4.465	.000
IPO	.255	.056	.267	4.539	.000
QO	.178	.057	.191	3.133	.002
BO	.103	.051	.107	2.042	.042
SEO	.138	.056	.141	2.458	.014
CO	.188	.047	.200	3.988	.000

Source: Survey Data, 2022

Conclusion

The present study was designed and conducted to investigate the impact of online shopping orientations on online purchase intentions of social media users in Sri Lanka, with special reference to the Colombo district. Accordingly, these research findings proved that impulse purchase orientation, quality orientation, brand orientation, shopping enjoyment orientation and convenience orientation positively impact Online Purchase Intention among social media users in Colombo. Therefore, it can be concluded that most social media users had online purchase intentions (Shoko et al., 2020; Gehert et al., 2007).

In terms of managerial implication, the research findings provide insights and feedback for online marketers to formulate and implement multiple business strategies to accelerate the customer online purchase intention. To increase the customer impulse purchase, which is the most impact factor, online marketers can provide electronic updates on product development or offer special discounts for a limited time to potential online customers. There are many ways to structure the sales, offers and, the websites that will entice customers to make impulse purchases. To target quality-orientated customers, online retailers can provide a holistic view of product quality and search information through their websites. Customer satisfaction is dependent on the product or service quality. Online retailers may offer loyalty programmers or club memberships and obtain customer feedback on product development, CSR activities via social media platforms can exhibit strong brand orientation. A variety of quick delivery methods at a comfortable cost will also increase online purchasing intention among the target audience.

Lastly, based on the study's limitations, it is suggested to utilize the probabilistic sampling techniques with a larger sample size as it is more reliable in generalizing the findings to the population.

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Role of the salesperson behaviour and customer satisfaction

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Introduction

In fashion and clothing retailing shops, salespersons are the employees who directly meet the customers and influence the minds of customers. Salesperson interaction between customers and salespersons is essential for customer satisfaction and increased sales. Hence, salespersons in every fashion and clothing retailing shop must consider customer satisfaction factors for their business success. Anselmsson (2006) has identified sales people as one of most important factors which affects to customer satisfaction via perceived service quality.

The salesperson's behaviour includes various positive and adverse customer outcomes. It can lead to customer satisfaction, loyalty, trust, positive word of mouth, company image and customer unhappiness. Previous studies separately focused on the quantitative approach to salesperson behaviour and customer satisfaction. The relationship between salespeople's attitudes, skills, and characteristics and customer satisfaction remains an area of interest (Evanschitzky et al., 2012) have mentioned that salesforce control systems affect the salesperson's cognition, motivation and behaviour. Shankar (2016) says that salesperson’s behaviour is a very significant factor that create an impact to the purchasing decision of the buyers. It demonstrates that the behaviour of salespersons leads to customer satisfaction. However, despite its importance, there have been few experimental studies in this field. According to Roman (2003), in addition to studies on salespersons’ behavior, the impact of their behavior on customer satisfaction based on retail companies is an issue that has rarely been studied. Further, which role satisfied the customers more significantly based on the salesperson's perspectives is still unclear.

On the other hand, this implies that the context of fashion and clothing retailing has paid less attention to salespersons. Meantime, there is many research conducted in the retail context about customer satisfaction. However, qualitative studies focusing on the different role of salesperson behaviours and their effect on customer satisfaction is scarce. Hence, this study contributes to filling the existing gap in the literature through a qualitative aspect.

Though there are many fashion and clothing retailing shops in Sri Lanka here, the research study is to be conducted within a single organizational setting due to limited access, time and cost constraints. Therefore, employees of all levels would be able to collect the data, while there may be limitations to approaching customers of the organization since they would have been busy. Hence the sample of sales persons would be selected based on convenience, access and time constraints. Further, the data are gathered on a cross-sectional basis due to the constraints due to the lack of availability of time to conduct the research. The purpose of this research is to examine how salespeople's behaviours affect customer satisfaction while identifying different aspects of behaviour of salespersons in ABC Shopping Centre (Pvt) Ltd. This will cover the objectives of identifying different behavioural roles played by salespersons to understand the influence made by the behaviour of salespersons on customer satisfaction.

Methodology

With the correct understanding of the research problem and objectives and knowing the literature, the research design has been prepared to gather and analyze data to adhere to them. An explorative study is undertaken to find answers to the research questions and achieve the research objectives.Further, this is a single case study focusing on single, specific phenomena since the research project investigates only the context of ABC shopping center.

Hence this strategy is more appropriate to answer research questions and meet the research objectives as it enables us to be more focused and to closely examine the different aspects of the behaviour of salespersons, their behaviour and their influence on customers. It was performed the fieldwork in the context of ABC shopping centre and gathered the data from the participants (staff) via interviews conducted over three days.

Investigation of all the individuals in the population, in here forty-seven (47) sales staff and, is not possible since the impracticability of effective collecting and analyzing data for every individual and also it is constrained by the time, cost and resources. Further investigating on a few individuals instead a large number of individuals causes reduced errors and facilitate more focus on each individual. Thus, investigating a sample is appropriate instead of the population.

Semi-structured interviews and non-participant observations are used to collect primary data since it is more appropriate for this research as it seeks qualitative aspects and requires identifying different aspects of the behaviour of salespersons and examining how the behaviour of salespersons influences customer satisfaction.

Since the gathered data are qualitative, thematic analysis and coding are used in data analysis. In advance, the gathered data from the interviews via recording will be transcribed into Sinhala and then into English to prepare transcripts. After that, the data will be coded repeatedly a few times to identify aspects of the data related to the research questions till the most significant and relevant themes emerge.

Findings

The data gathered during the fieldwork, conducted in ABC Shopping Centre, was analyzed Using thematic analysis to achieve the study's objectives. The findings are discussed by relating existing literature to findings. Table 1 illustrates the respondent profile of the selected salesperson of the company.

Table 1: Demographic information of sales staff

Participant pseudon	Gender	Age	Marital status	Hometown	Level of education	Position	Years of experience
SP1	Male	43	Married	Yakkala	A/level	Branch Manager	27 Years
SP2	Male	31	Married	Nittambuwa	O/Level	Supervisor	12 Years
SP3	Male	23	Single	Negombo	O/Level	Senior Sales Assistant	7 Years
SP4	Female	35	Single	Gampaha	O/Level	Junior Sales Assistant	5 Years
SP5	Male	24	Single	Thihariya	O/Level	Section Leader	5 Years & 3 months
SP6	Female	19	Single	Moragoda	O/Level	Sales Assistant	2 Years & 6 months
SP7	Female	20	Single	Miriswatta	O/Level	Business Trainee	2 Months
SP8	Male	18	Single	Asgiriya	O/Level	Business Trainee	2 Weeks

SP: Sales Person

Source: Author compilation,2022

After the analysis of gathered data, it was identified five key roles of salespersons behaviour in ABC Shopping Centre. They are responsiveness, reliability, listening, empathy and professionalism as recorded in the Table 2.

Table 2: Overview of the key indicators of salesperson behaviour

Role of the Salesperson Behavior	Indicators	Exemplar Quotes
Responsiveness	Alertness	‘*Always its need to be on alert. If a customer is around us, it is needed to be alert on the customer and have to focus on them. should reply them as they ask a question and we should act quickly. We should response quickly.’’ (SP6)*
	Resourcefulness	*‘As I am a recently joined, there are more things yet to know by me. If I get stuck in such things in front of the customer, I quickly contact sister/ brother next to me. With their help, I try my best to quickly fulfil the customer requirement.’’(SP2)*
Reliability	Consistency	*“It is obvious that we should be reliable for our workings. Otherwise, I cannot work here for seven years. Our customers rely on what we say and how we behave. Therefore, as sales persons we should behave in a way that they can believe us.” (SP3)*
Active-Listing	Convenient	*“As salespersons we should listen to our customers. There are different types of customers. So, they contact and talk with us in different ways. However, we need to properly listen to our customers. Only if we listen to them properly, we can help them.” (SP4)* *“………. However, we need to properly listen to our customers. Listening is so much important factor. Only if we listen to them properly, we can help them. If not, customers will be dissatisfied regarding our service’’(SP4)*
	Patient	*“A customer has seen an advertisement in the television about free vouchers provided for school children in our shop. Hence, she asked about it when she entered in to the shop. But I was unaware more information regarding it as I’m a new comer to the company. But anyway, I attentively listened to her and directed her to the relevant person who handle regarding above offer.” (SP8)*
Empathy	Understanding	*‘’As salespersons we should have an ability to decide how we manage a particular customer. We should correctly understand the customer and his/her needs. Customers are different. If we have a good understanding, we can easily satisfy that customer. We should behave according to the customer.’’ (SP7)*
	Supportiveness	*‘’We need to support our customers. As I think, it is our main task. They ask for a help from us because they need it. So, we have to give our maximum service to satisfy them’’ (SP3)*
	Individual Attention	*“Sales persons should give their support for customers when they come here or when customers going to buy something. We should play our role with our best capacity. It is our responsibility. When customers are asking for a size, colour, new designed clothes, We must immediately help them.”(SP2)*
Professionalism	Disciplinary	**“***I came here over 5 years in the field and most of the usual customers known me very well.* *But still, I have no any customer complaints regarding my unprofessional or unnecessary behaviours. We do maintain our professionalism when reacting with our customers’’ (SP5)*
	Rules & regulations	*“ “There are rules and regulations on how we keep our appearance. All boys need to wear black office trouser, White shirt and shoes. We should have short hair and combed to one side. It cannot be colored. Boys cannot wear earrings, heavy chains or bracelets. Girls should wear the given uniform. They should properly combed hair and cannot have loose hair. They can apply a light make up. Anyone cannot have tattoos.” (SP8)*

Source: Author compilation,2022

These aspects are identified using the statements of salespersons of ABC Shopping Centre. Under responsiveness, it identified that salespersons should respond quickly and adequately to customers. The second factor is reliability. It is vital to ensure customer satisfaction. Otherwise, customers might get dissatisfied. The third aspect is listening to behaviour. To reinforce this behaviour, salespersons must listen to different needs and communicate information. The fourth aspect of salespersons' behaviour is empathic behaviour. To ensure empathic behaviour, salespersons should understand the customer and their needs properly and need to be helpful. The fifth aspect of behaviour is professional behaviour. Meantime, the study findings suggest that the behaviour of salespersons influences customer satisfaction and dissatisfaction.

Conclusion

This study's findings evidence that the behaviour of the salespersons employed in fashion and clothing retailing shops influences customer satisfaction. Organizations need satisfied customers to achieve the success of their business. Therefore, this study proved that the behaviour of salespersons leads to customer satisfaction. Among the different key facets, it realized that Active-Listening is the most significant factor in satisfying the customers based on the salesperson's perspective. Therefore, the company should give more opportunities for the salespersons to train their patients, listing skills to satisfy the customers. It impacts the customer in other ways as well.

For example, it causes the relationship with the customer, trust, loyalty, positive word of mouth, company image etc. However, some participants claim that the behaviour of salespersons in most fashion and clothing retailing shops is unsatisfactory. This might lead firms in an undesirable direction. Hence, we suggest that it is better to investigate further how the behaviour of salespersons impacts customers in different ways and how those can be used to benefit the firm while providing benefit to the customer. Meantime, conventional shops have been replaced by alternatives such as online markets. Building relationships with customers will create a competitive advantage for firms in such a situation. Hence, we suggest that it is better to research further how the salespersons and their behaviour can be used to build customer relationships.

During this study, we faced several limitations. First, we faced difficulty while we were finding literature. According to our experience, there is less availability of exact literature regarding the behaviour of salespeople on customer satisfaction in the fashion and clothing retailing context. Therefore, we had to spend more time finding literature related to the study. On the other hand, sometimes peers disturb salespeople who are in the sales process to get the assistance of the interviewee.

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The impact of social media marketing on customer engagement in the cosmetic industry of the North Central province

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Introduction

"A marketing activity refers to a social process by which individuals or organizations obtain what they want or want by creating, marketing, and freely exchanging valuable goods and services" (Kotler & Keller, 2008). Nowadays, marketing through social media is becoming commercialized very fast. The resulting social media marketing is also influenced by consumer engagement. Therefore, social planning, social influence, social community, social attitudes and social results will influence customer engagement. Jara et al.(2014)

Today, technology is expanding rapidly around the world, influencing commercialization as well but that situation is not seen in Sri Lanka compared to other countries. (Therese Wood, 2021). Social media marketing plays an increasingly important role in marketing strategies but the researcher has identified that the Sri Lankan society does not pay much attention to it as a problem. The main reasons for this are the fear of mass media marketing and ignorance and the reasons for the least use of social media marketing are Time intensive (Barefoot & Szabo, 2010) and Trademark and Copyright Issues (Steinman and Hawkins, 2010).

The impact of social media marketing and customer engagement through it affects the economy in various ways and therefore, the importance of social media marketing to customer engagement in the cosmetic industry of the North Central Province is examined through the literature. The main purpose of this research is to investigate the effect of social media marketing on customer engagement in the cosmetic industry of the North Central Province.

According to the American Marketing Association, marketing is defined as the organizational activities and procedures for developing, articulating, distributing, and exchanging value-added offerings for customers, partners, and society as a whole. After studying the literature, it was recognized that social media marketing has an effect on customer engagement and research has been done based on it in other provinces, but not in the North Central Province (CINEC Academic Journal). Therefore, this metric was used by the researcher to find out whether social media marketing affects customer engagement and to fill the gap if there is any.

The researcher is clear that social media marketing affects customer engagement and correctly identifies gaps in the literature. This is important for potential investors looking to enter the cosmetic sector, existing investors, university students and academics studying new technologies. It is also very important for marketing managers looking for marketing strategies.

Methodology

The researcher used the quantitative method to conduct this research. This method allows to find and influence the relationship between the variables used. The researcher has used the Deductive Approach for this research and the total population for this research is 1004. Out of that total population, 280 people were found as a sample by the Krejcie and Morgan table and the questionnaires were distributed to the divisional secretaries under the stratified sampling method.

The researcher used 30 divisional secretarial divisions to collect data from North Central Province. The total population of those 30 divisional secretarial divisions is 1004 and a sample of 280 was obtained under the stratified sampling method. For example, 26 responses from Anuradhapura area and 11 responses from Kekirawa area were received from the 30 respective divisional secretariat divisions. This is a quantitative research focusing on numerical figures. The survey strategy was used because it facilitated the collection of a large amount of data in a very short period of time and in a cost-effective manner. A questionnaire was used to collect primary data and the questionnaire was answered by an identified third party. Primary data is more accurate and reliable

Descriptive analysis, correlation analysis and regression analysis were used in SPSS software to analyze the obtained data. A questionnaire based survey was conducted and quantitative data was collected using a five point Likert scale.

Findings

The researcher used age, district, divisional secretariat, social media used and lastly the cosmetic product used as demographic variables in his research. The first demographic factor is age, and 12.9% (36) of the 280 people in the sample are in the age range of 15-20, 119 people are 20-25, 49 people are 25-30 and 33 people are over 35 years old. The second demographic component is District and out of the total sample of 280, 219 people (7802%) belong to Anuradhapura and 61 people (21.8%) to Polonnaruwa.

The third demographic component is the Divisional Secretariat Constituencies, the largest sample is from Anuradhapura (9.3%) and the least is from Palagal (1.1%). The fourth demographic factor is most used social media. The most used is Facebook (25%) and the least is Telegram (3.6%).

Finally, the component is the most used type of cosmetic product. Sun care cosmetics are used the most (22.5%) and body care and perfumes are the least. (11.8%)

Table 1. Cronbach's alpha Values

Variables	Cronbach's Alpha	Decision rule	Comment and reliability
Social planning	0.8	0.8>0.7	Reliable
Social Influence	0.8	0.8>0.7	Reliable
Social community	0.6	0.6<0.7	Reliable
Social Attitude	0.8	0.8>0.7	Reliable
Customer engagement	0.7	0.7=0.7	Reliable

As explained in the Table 1, if the values of Cronbach's alpha are greater than 0.7 and close to 0.7, the research has inter-reliability among the selected variables. Based on the above results, it is possible to ensure that all the items in the measurement are consistent with the responses received and that the responses are consistent.

Table 2. Skewness and Kurtosis values

Variables	Skewness		Kurtosis	
	Statistic	Std.error	Statistic	Std.error
Social planning	1.536	0.146	0.363	0.290
Social influence	1.565	0.146	0.454	0.290
Social community	-2.438	0.146	3.971	0.290
Social attitudes	0.478	0.146	-1.533	0.290
Social results	1.822	0.146	1.328	0.290
Customer engagement	0.787	0.146	-1.391	0.290

Table 2 shows the central tendency and dispersion of the test variables conducted for this test. Skewness and Kurtosis values are also summarized in the table above.

Table 14. Hypothesis Testing

Factors	sig	Regression analysis-R2	Decision for the hypothesis
Social planning	0.001	0.039	H1: Accepted
Social Influence	0.000	0.171	H2:Accepted
Social community	0.040	0.015	H3:Accepted
Social Attitude	0.183	0.006	H4:Accepted
Social results	0.000	0.280	H5:Accepted

H1: There is a positive & significant effect on social planning and Customer engagement

According to the above regression analysis, R2 = 0.039.That is 3.9% percent of variance in customer engagement explained by social planning. In addition, there is a positive relationship between social planning and customer engagement and is highly significant. The alternative hypothesis is accepted because the significant value (0.001) is less than 0.01. There is a positive correlation coefficient between social planning and customer engagement (+0.197) & result highly significant (Sig 0.001<0.05)

H2: There is a positive & significant effect on social Influence and Customer engagement

According to the above regression analysis, R2 = 0.171.That is 17.1% percent of variance in customer engagement explained by social influence. In addition, there is a positive relationship between social influence and customer engagement and is highly significant. The alternative hypothesis is accepted because the significant value (0.000) is less than 0.01. There is a positive correlation coefficient between social influence and customer engagement (+0.413) & result highly significant (Sig 0.000<0.01)

H3: There is a positive & significant effect on Social community and Customer engagement

According to the above regression analysis, R2 = 0.015.That is 1.5% percent of variance in customer engagement explained by social community. In addition, there is a significant relationship between social community and customer engagement. The alternative hypothesis is accepted because the significant value (0.04) is less than 0.05. There is a positive correlation coefficient between social community and customer engagement (+0.123) & result highly significant (Sig 0.040<0.05)

H4: There is a positive & significant Social results and Customer engagement

According to the above regression analysis, R2 = 0.283.That is 28.3% percent of variance in customer engagement explained by social results. In addition, there is a highly significant relationship between social results and customer engagement. The alternative hypothesis is accepted because the significant value (0.000) is less than 0.01. There is a positive correlation coefficient between social results and customer engagement (+0.532) & result highly significant (Sig 0.000<0.01)

H5: There is a positive & significant Social Attitudes and Customer engagement

According to the above regression analysis, R2 = 0.006.That is 0.6% percent of variance in customer engagement explained by social attitudes. In addition, there is a positive and significant relationship between social attitudes and customer engagement. The alternative hypothesis is accepted because the significant value (0.183) is less than 0.5. There is a positive correlation coefficient between social Attitude and customer engagement (+0.080) & result highly significant (Sig 0.183<0.5)

Conclusion

The independent variables of the research are school social planning, social influence, social community, social attitude and social results. Dependent variable customer engagement. In order to achieve the primary objective of the research, the data collected through the questionnaire has been analyzed by the fourth chapter. Regression and correlation analysis identified the importance of the variables affecting the consumer's influence in the cosmetic industry. By identifying the importance, all the alternative hypothesis of all the research were accepted. It was also found that there is a good correlation between all the independent and dependent variables.

Based on the data analyzed by the researcher, the provision of technical knowledge and theoretical knowledge about Internet social media and other marketing strategies by the government and private sectors as recommendations to increase consumer participation in the cosmetic industry in the North Central Province. According to the Department of Census and Statistics - 2020 report, Computer Literacy and Digital Literacy in North Central Province is 22.5%. The information is presented as updated from time to time. The researcher is expected to use the knowledge gained through his research for the development of social media marketing in rural areas. Based on the analyzed data and other findings, it can be concluded that the researcher has achieved all the objectives of the research.

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The study on the impact of retail store facilities on customer purchase intention: with special reference to Galle urban area

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Introduction

The retailers concern about consumer's preference areas related to their purchase decision (Singh, 2014). In here the retailers are trying to attract new customers by initiating new strategies and the facilities of retail stores takes prime place among those attraction methods. Store facilities includes the physical characteristics of a retail store used to create an image to attract customers. In most exchange environment, the influence of retail stores facilities act as major marketing strategy (Milliman, 2000). The pleasant and gradual store facilities cause to build the positive image of customers towards the retail by increasing their comfort, satisfaction and store loyalty (Gunarathne, 2014). This study focus to measure the impact of retail store facilities effect on customer purchase intention. The impressive facilities of retail chain outlets creates an enjoyable experience among the consumers, which directly affect consumer's purchase intention (Maheswari, 2021).

Marketers should have a strong understanding of consumer behavior and how it influences market developments, because consumers are the most valuable stakeholder in any firm, and retaining and acquiring customers is critical to the organization's survival and future success. This study was to see how Store Facilities Effects purchasing intent. According to (Mubarak K.M, 2020) analyze small groceries, shopping malls, one retail outlet or Specific areas from their own country. Many researchers have researched how the retail store Atmosphere affects the customer purchase intention. Effect of retail store Atmosphere on consumer repurchase intention (Arviana, 2014). Influence of retail atmospherics on consumer perception on specialized department stores (Qureshi,F.,Humayun,S.,Hummayun,S.F., 2015).

Also researchers have not focused on how retail store facilities effect on customer purchase intention. Because of these empirical gaps selected the topic as impact of retail store facilities on customer purchase intention in Galle urban area through the supermarkets and not use grocery or shopping malls. Since, a true picture can't be obtained through groceries where there is lack of store facilities compared to the supermarkets. Also there is no any shopping malls in the Galle urban area.

The findings of this study will benefit businesses in a variety of ways. These will help the retail industry improve their customer relationships, reach their target market more readily by determining the most effective facilities to face environmental challengers and build ways to promote retail appeal. In terms of knowledge contribution, this will provide greater insight to future academics, university students, and educators in order to improve their understanding of the retail environment.

Accordingly, the objectives of the study are as follows,

- To find out whether the retail store facilities effect customer attraction
- To examine the relationship between retail store facilities and customer purchase intention.

Methodology

In order to find the relationship between the retail store facilities (independent variable) and the customer purchase intention (dependent variable)

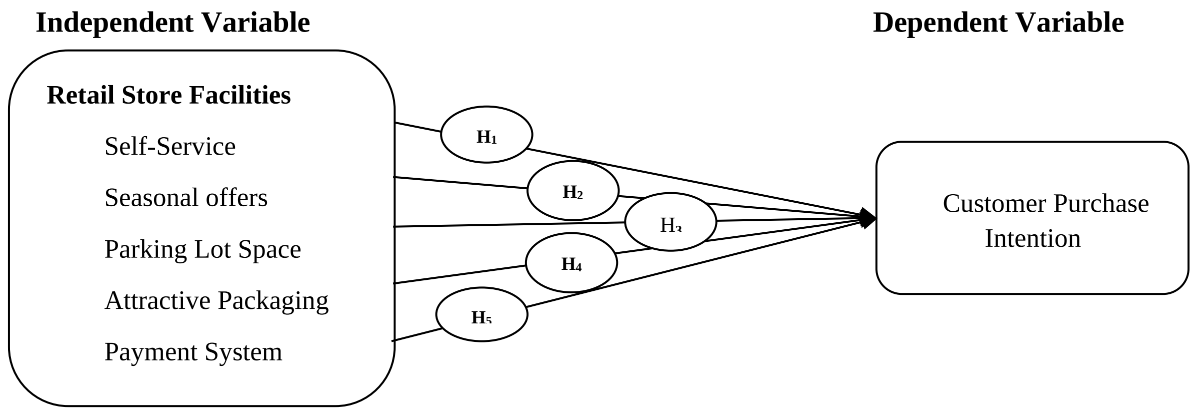

Figure 1. Conceptual Framework

The research methodology basically consists of population, sample, and sample process and data collection. The target audience for this study is all supermarket customers in the Galle urban area, as determined by daily reporting from each of the three supermarkets. In the main three supermarkets in Galle city, there are 2800 consumers approximately. The researcher has used Quantitative research approach and non- probability sampling technique for this study. The reason to choose this technique is, the study focusses all the supermarket customers in Galle urban area and it is difficult to give equal probability to each customer to being selected the sample of the study

This research is using totally primary data for achieving the main objective of the research. A self-administered questionnaire was chosen to collect data because it is more convenient and more rapid mean to collect information from large group of individuals within a shorter period, which presented to 338 supermarket customers, who are living in the Galle district as the sample based on the Morgan table. The study used five-point Likert's scale which allows the respondents to order their answers. Respondents might be offered a choice of five pre-coded responses with the neutral point being neither agree nor disagree.

Cronbach's alpha reliability test use to check the internal consistency of the model which have used to measure the variables of the study. If the corresponding alpha value of a given set of questions is greater than 0.7 or closer to accepted minimum level 0.70 the researcher can conclude that the set of questions used to measure a particular variable is reliable (Raghupathi,W.,Raghupathi,V., 2021).

Table 1. Test of Reliability

Cronbach's Alpha	N of Items
0.790	20

Source: Generated by the Researcher using IBM SPSS 23.0,2022

Alpha values of all the construct are greater than 0.7. In order to those values, internal consistency among the indicators which have used by the researcher in the questionnaire at a good level. Therefore, those items were combined to measure the particular variables.

Table 2 provides a demographic profile of the respondents who participated in the study. The sample was slightly dominated by female respondents (61%) and the majority of the respondents fell in the 30-39 age group. As well as 25% of respondents are working at private sector. Approximately 85% of the respondents earn more than ten thousand rupees monthly income. Thirty-six percent of the respondents have chosen Keells Super to fulfill their purchasing needs

Table 2. Demographic profile of the respondents

	n	%
Gender		
Female	205	60.7
Male	133	39.3
Age		
18-29 Years	93	27.5
30-39 Years	123	36.4
40-49 Years	82	24.3
50-59 Years	29	8.6
60 and above	11	3.3
Occupation		
Government Sector	71	21
Other	83	24.6
Private Sector	86	25.4
Student	29	8.6
Unemployment	69	20.4
Income		
10001-20000	46	13.6
20001-30000	38	11.2
30001-40000	92	27.2
Above 40000	119	35.2
Less than 10000	43	12.7
Preferred Supermarkets		
Arpico Super Center	102	30.2
Cargills	115	34
Keells Super	121	35.8

Source: Generated by the Researcher using IBM SPSS 23.0,2022

Findings

According to the Descriptive statistical results, which indicate mean values of facility of self-service (FSS), facility of seasonal offers (FSO), facility of parking lot space (FPLS), facility of attractive packaging (FAP), facility of payment system (FPS) and customer purchase intention (CPI) respondents have almost agreed with the variables. Among these five dimensions in independent variable, FAP shows the highest mean value (4.38) and FSS shows the lowest mean value (3.95). Standard deviation emphasizes that how data are scattered around the mean and how far one value range away from the mean. When considering the standard deviation of the variables, FAP shows the lowest value (0.427). It says that most of the numbers which have given by respondents are close to the average which has calculated. Since FSS shows the highest standard deviation value (0.661), which implies that the numbers are somewhat spread than the variables.

According to the Table 3, retail store facilities, such as Self-service, parking lot space, Attractive Packaging, and Payment system also have a significant and positive relationship with customer purchase intention ($p< 0.05$). Since Seasonal offers considered as a statistically insignificant variable as it value was 0.457 and it was higher than 5% significant level.

Table 3: Hypothesis testing and Summery

Variable	Hypothesis	Standardized Coefficient Beta	Pearson Correlation	Significance	Decisions
Self -service	**H1**: There is a positive significant relationship between self-service and customer purchase intention.	0.386	0.504	0.000	Accepted
Seasonal offers	**H2**: There is a positive significant relationship between availability of seasonal offers and customer purchase intention.	0.035	0.246	0.457	Rejected
Parking lot space	**H3**: There is a positive significant relationship between availability of parking lot space and customer purchase intention.	0.126	0.297	0.010	Accepted
Attractive Packaging	**H4**: There is a positive significant relationship between availability of Attractive packaging and customer purchase intention.	0.129	0.238	0.007	Accepted
Payment System	**H5**: There is a positive significant relationship between availability of payment system and customer purchase intention.	0.198	0.436	0.000	Accepted

Source: Generated by the Researcher using IBM SPSS 23.0,2022

Conclusion

Among two objectives of the study the first one was to find out how the retail store facilities effect on customer attraction. In summary, all three retail stores have used the following facilities to attract the customers. Best parking space facility, seasonal offers, Cargills (Star points) and Keels (Nexus Points) provide the star points facility, which tends to attract more customers. And all three retail stores provide Attractive Packaging System for their customers with a cloth bag, which will give the customer the ideas that they do eco-friendly packaging. And according to the above mentioned facts, and the findings from the study, these factors effect on customer attraction (Naduvilveetil, 2020), (Leo, P.Y.,Philippe,J.,, 2002).

Multiple regression analysis was conducted in order to identify the overall impact of retail store facilities on customer purchase intention. Another objective of the study to identify the relationship between retail store facilities on customer purchase intention. According to the results of correlation coefficient analysis, there is a strong positive linear relationship between store facilities and purchase intention.

According to the findings of the present study, it proves that these retail store facility dimensions' impact on purchase intention although it not exactly turn into actual behavior. Through satisfaction and comfortable of customers lead to increase store loyalty and increased purchase intention toward supermarkets.

These results show that the three objectives have achieved by the researcher while proving the five hypotheses of the study are supported in order to fulfill the gaps in the literature. This study could contribute to the knowledge base of consumer studies by explaining the purchase intention of supermarket consumers with store facilities. But there remain opportunities for further studies. Researcher suggests qualitative study especially in-depth interviews in relation to store facilities dimensions. This research focuses on the customer purchase intention on Galle urban area and sample is 338. Future research can be done in various districts with higher samples.

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Impact of service quality on customer satisfaction in hotel industry of Sri Lanka

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Introduction

Consumers face quality problem every day and the lack of efficiency and effectiveness leads to resentment that the customer is not able to reach the desired destination. Although different types of researchers have conducted different types of studies on the topic of customer satisfaction over the past few decades, we still do not identify a proper justification for the above effect of service quality on customer satisfaction Existing customers can be retained by providing quality service rather than acquiring new own (Sabir, Ghafoor, Akhtar, Hafeez, & Rehaman, 2014). Also, if a company doesn't care about customer satisfaction, they won't expect them to care about the product (Top & Ali, 2021). Thus, especially in the Sri Lankan context, there is an urgent need for research in the service quality sector to improve customer quality. The primary objective of this study is to find out whether there is an impact service quality on customer satisfaction. As secondary objectives, it investigated whether the reliability, responsiveness, assurance, empathy and tangibility of service quality have an effect on customer satisfaction. Due to the service provided by the employees and their lack of proper training, the hotel industry is facing a lack of expected performance as well as customer satisfaction (Kumarapeli, Samarasinghe, & Kuruppu, 2016,December). Oliver, Churchill, Surprenant, & Teel (2005) focused on implementing precedents of customer satisfaction. By the mid- 1980s, business and academic research had implemented design strategies design strategies to optimize customer satisfaction. Then, Parasuraman, Zeithaml, & Berry (2005) made the first attempt to operationalize the theoretical context of customer satisfaction and service quality. All this evidence clearly underscores the need and importance of addressing this issue of the impact of hotel service quality on customer satisfaction in the Sri Lankan context. It is very difficult to describe or investigate the impact of service quality on customer satisfaction relevant to every industry in the whole world or in Sri Lanka as a whole. Therefore, this research study is expected to focus only on one of the most important and well-functioning industries in the Sri Lanka market, which is known as the hotel industry, a specialized industry that makes a significant contribution to GDP. Therefore, this takes a special place in comparison to other industries (Shah & Jan, 2019). Through this research, the effects of the independent variable called service quality on the dependent variable called customer satisfaction are investigated. Different commentator have expressed different opinions regarding these two factor variables. Some commentators have confirmed the facts, but this study has analyzed that there are some flaws in the fact. This research knowledge will enable the existing hotel industry to compete and create a diversified competitive entity while affectively maintaining the quality of services.

Methodology

This study addresses a primary question and five additional questions. The primary question is whether service quality has an impact on customer satisfaction. Others are whether reliability, responsiveness, assurance, empathy and tangibility of service quality have an impact on customer's satisfaction. The author has taken the total population of this study as all the customers of the hotel industry in Sri Lanka.

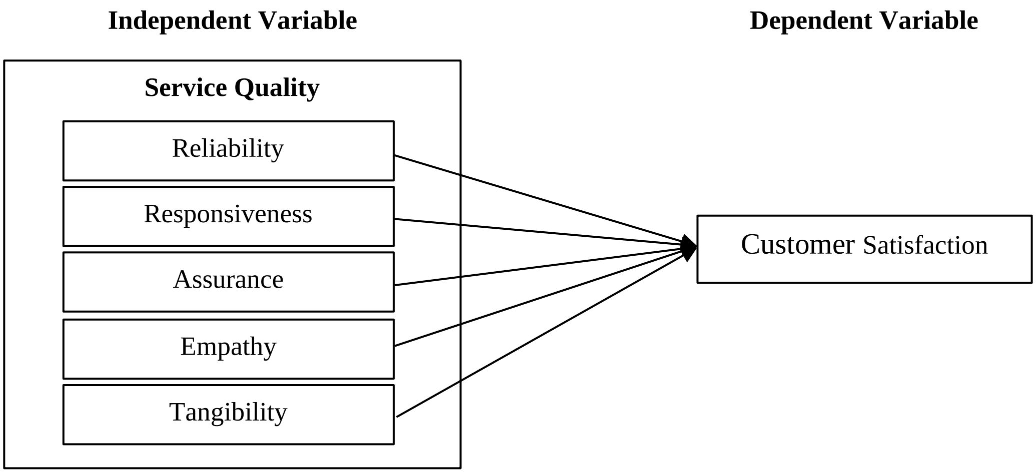

Figure1. Conceptual Framework

Sampling

The author has taken the total population of this study as all the customers of the hotel industry in Sri Lanka. But, hence the actual number of that total hotel customers is unknown and has been not recorded accurately here the population of this research study has been to taken as unknown. Since each element of the population has a chance (greater than zero) of selection, the research has used probability sampling method to determine the sample size and under that the unrestricted or simple sampling technique has been used as the sampling technique. Sample size was determined as 384 according to a formula (Cochran formula) which is one of very popular technique to determine the sample size when the population is unknown. The unit of analysis was the individual was the individual consumers of hotel industry and there was a 100% response rate. In view of the existing covid situation, responses were obtained using new technology.

Data Collection & Measurements

A google forms was allocated among 384 respondents in order to gather primary data. After testing that collected data for normality, validity, reliability and accuracy, the research subjected the data to relevant statistical purported objective and findings tests and procedures. Consists of multiple regression analysis and correlational analysis through SPSS Statistical Software package (version 26) in order to analyze and meet the expected objectives and findings. Seven Point Likert Scale was used to measure data for analysis. In addition, descriptive statistics such as mean, median, and standard deviation were also used.

Findings

Out of the total sample 384 (Probability Sampling), more than half (59.9%) were male respondents. Age group of 31-40.140(36.5%) respondents was dealing with other hotels. More than half respondents 250(65.1%) were not married and 134(34.9) respondents were married. 152 respondents (39.6%) had their income level between 40000- 80000.

Table 1: Coefficient & Multiple Regression Statistics

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**Sig.**
		B	**Std. Error**	**Beta**	
1	(Constant)	0.721	0.148		0.000
	RL	0.101	0.049	0.107	0.042
	RS	0.087	0.062	0.093	0.159
	AS	0.132	0.062	0.143	0.035
	TN	0.126	0.055	0.133	0.022
	EM	0.453	0.050	0.468	0.000
Model	R	R Square	Adjusted R Square	F Statistics	Sig. F
1	0.896[a]	0.802	0.800	306.875	0.000

a. Predictors: (Constant), EM, RL, TN, RS, AS

According to the result, value of multiple coefficients of correlation (Multiple R) has recorded as 0.896 and emphasizes that there is a strong and positive corre4lation between service quality and customer satisfaction. R square value has recorded as 0.802 ($R^{2)}$ and indicates that form one additional unit of change in service quality, customer satisfaction will be changed by 0.802 (80.2%) where p value of Anova table (0.000) is less than Alpha value (0.05) and indicated that the relationship between service quality and customer satisfaction is statistically significant. In other words, there is a significant impact from service quality on customer satisfaction.

Conclusions

This study was conducted by the research with the main objective of identifying the impact of service quality on customer satisfaction and it can be concluded that service quality has a significant positive impact on customer satisfaction and further could identify some major determinants of service quality as well. Thus researcher can achieve the main objective of the study. ,effective and continuous introduction of proper and correct training methods and programs should be implemented to improve the quality of their service to others in order to fully satisfy and retain customers. Also, managers must maintain thorough and continuous communication with customers to identify customer's changing needs, preferences and expectations, and service quality is really important and the basis for customers to satisfy their needs. The research has made a significant theoretical contribution by introducing a new conceptual model to existing knowledge and theories on the subject and will be a future researchers seeking to explore it. Regarding the strategic contribution of this research study, this study can be taken as a very important study in the business world because it determines the impact of service quality in any business transaction on customer satisfaction. This study was undertaken by the researcher under only one sector of the economy which was the hotel service industry which is a major contributor to the gross domestic product of Sri Lanka. Limitations include the use of a common formula in determining the number, being limited to the Sri Lankan population and the inability of respondents to respond honestly and impartially.

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Impact of social media marketing on consumer buying behavior among generation Z

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Introduction

This study was focused on the impact of social media marketing on consumer buying behavior among generation Z who use cosmetic products in Sri Lanka. When it concerns about social media marketing, in today's fastly moving business environment it is one of the very trending segments in connection with marketing activities. As the result of innovative technologies and day by day developing communication technologies, consumer's buying behavior also has highly related with that innovative changes. During the most rapid period of technological transformation, in which social media plays a substantial role in every aspect of business, generation Z is changing the marketing world and shaping its future in a way in which no generation has before (Artemova, 2018). When looking at a Sri Lankan business context, every business implements various marketing strategies. Many companies in Sri Lanka are well familiar with traditional marketing methods like TV, newspaper advertisements, posters, etc. Many Sri Lankan businesses fail when coming to social media marketing. In Sri Lanka, social media marketing use by entrepreneurs is still in a very nascent stage. Due to the explosion of media and mobile retailers need to be far more innovative to engage and retain their target audience. So it is very important to have a clear understanding of the most suitable social media platform to do their marketing activities. If there is not a clear understanding about the impact of social media marketing on consumer buying behavior, marketers will fail to select the most suitable platform and factors that influence to do their marketing campaigns. A social media marketing strategy refers to an organization's integrated activities that turn social media communication and interactions into useful strategic means to achieve desired marketing results (Li, Larimo, & Leonidou, 2020). Using social media in marketing does more than improve site traffics and help businesses reach more customers; it provides a valuable venue for better understanding and learning from your target audiences (Wordstream, 2020). With simple clicks using their chosen social media channel. Because of the easiness, most people use social media to purchase their products and marketers use social media marketing to sell their products.

Consumer behavior entails the study of people's needs, motivations, and thought processes used in choosing one product over another and the patterns of purchasing different goods and services (Orji, Sabo, Abubakar, & Usman, 2017). Consumer behavior contributes greatly to decision making process by marketers in marketing planning as well as authorizing them to create long-lasting relationships with customers. The study of consumer behavior helps firms and organizations improve their marketing strategies by understanding issues and continuing to describe how the psychology of how consumers think, feel, reason, and select between different alternatives (Ohio University, 2020). So it is important to know how customers are affected by internet use and to recognize how their online preferences affect their buying behavior for different products (Fennis & Stroebe, 2010).

The main purpose of this research is to answer the research question: "Do the social media marketing significantly impact on consumer buying behavior?" More specially, this research has four objectives:

- To examine the impact of online advertising on consumer buying behavior.
- To examine the impact of posts on consumer buying behavior.
- To examine the impact of quality content on consumer buying behavior.
- To examine the impact of customer reviews and ratings on consumer buying behavior.

This paper has four parts. Firstly, it reviews the extant literature relating to social media marketing and consumer buying behavior. Secondly, the research methodology is presented and data analysis techniques are discussed. Next, the findings are discussed and summarized. Finally, the paper concludes with a discussion of recommendations as well.

Methodology

Deductive approach is used to this research. With the help of existing studies and theories in the literature, the following model was conceptualized to carry out the research.

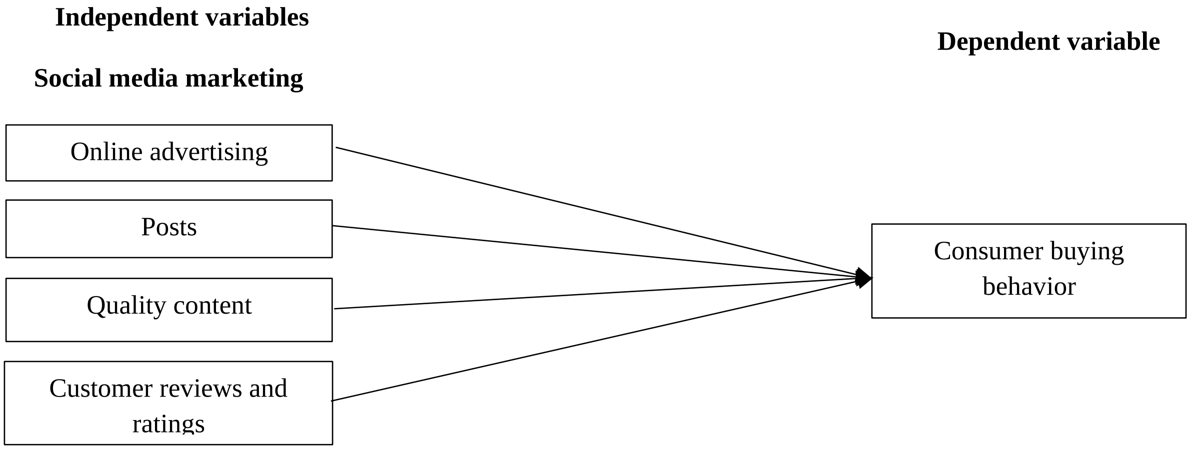

Figure 1: Conceptual Framework

Sampling

The total population of this research study was taken as all the consumers of generation Z who use cosmetic products in Sri Lanka. There were no specific records about the actual number of consumers of generation Z who use cosmetic products in Sri Lanka. So population is unknown. Since every element in the population has a chance of being selected, the probability sampling method has been utilized to determine the sample size and under that, a simple random sampling technique was used as the sampling technique. The sample size was determined as 384 according to a formula which is one of the very popular techniques to determine the sample size when the population is unknown. The unit of analysis was the consumers of generation Z who use cosmetic products. There was a 100% response rate.

Respondents' demographic profile

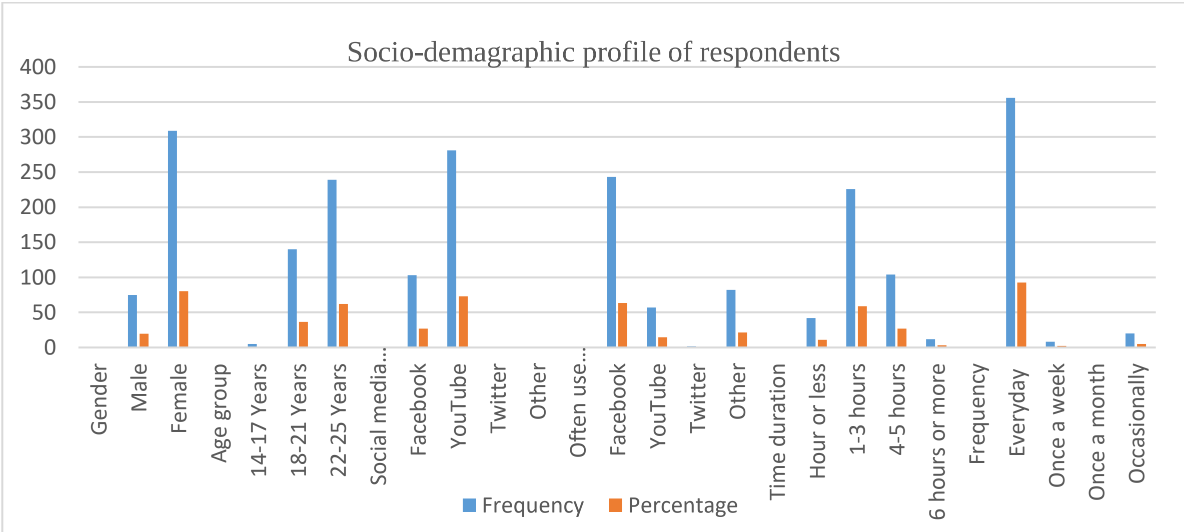

Figure 2: Socio-demographic profile of respondents

Source: Survey Data

Figure 2 provides a socio-demographic profile of the respondents. Out of the total sample of 384, more than half (80.5%) were female respondents. Majority of respondents related to the age group of 22-25

(62.2%). More than half (73.2%) respondents use Facebook as their daily use social media platform. More than half (63.3%) of the respondents use Facebook as their social media platform to engage with online shopping. More than half (58.9%) of the respondents spend 1-3 hours per day engaging with social media. Through the respondents, 356 respondents daily use social media. It takes 92.7%.

Data Collection

The questionnaire survey method was used to collect data from the respondents and the researcher used electronic methods to distribute this questionnaire to them. After testing the validity and reliability of collected data, the researcher subjected that gathered data to relevant statistical tests and procedures consisting of multiple regression analysis and correlational analysis through the SPSS statistical software package (version 26) to analyze and meet the expected objectives and findings.

Measurements

Consumer buying behavior is the dependent variable and Social media marketing is the independent variable. To measure social media marketing, the researcher used four variables; online advertising, posts, quality content, and customer reviews and ratings. All variables are measured by using seven-point Likert scale, ranging from 1 (Strongly disagree) to 7 (Strongly agree). Questionnaire items were assessed for internal consistency using Cronbach's Alpha. As the results indicated, Cronbach's Alpha value is greater than 0.70. So it represents a higher level of reliability. And validity was measured by KMO and Bartlett's test. As the results indicated, KMO values are greater than 0.6. So the adequacy of the sample is satisfactory.

Findings

The descriptive analysis describes the characteristics and pattern of the sample data set with the values of frequency distribution, mean, median, mode, and standard deviation. The higher values of the standard deviation of the dependent variable and independent variable showed that they are highly dispersed from the mean value. Correlation analysis is used to measure the strength of the relationship between two variables. A Significant correlation was found between social media marketing and consumer buying behavior. All the variables showed a positive relationship with consumer buying behavior.

Table 1. Correlation Statistics

	Variables	1.	2.	3.	4.	5.
1.	Online advertising	1				
2.	Posts	.695	1			
3.	Quality content	.826	.707	1		
4.	Customer reviews and ratings	.700	.674	.836	1	
5.	Consumer buying behavior	.875	.689	.884	.790	1

Source: Survey Data

Table 2. Multiple Regression Statistics

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.925[a]	.855	.853	.477	.855	558.824	4	379	.000

a. Predictors: (Constant), Customer reviews & ratings, Posts, Online advertising, Quality content

Source: Survey Data

According to the regression analysis, R^2=0.855. That means social media marketing explained 85.5% percent of the variance in consumer buying behavior. The value of multiple coefficients of correlation (R) has been reordered as 0.925 and emphasizes that there is a strong and positive correlation between social media marketing and consumer buying behavior. The p-value of the ANOVA table (0.000) is less than the Alpha value (0.05) and it indicates that there is a significant impact of social media marketing on consumer buying behavior.

Table 3. ANOVA Table

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	507.842	4	126.961	558.824	.000[b]
	Residual	86.106	379	.227		
	Total	593.948	383			

Source: Survey Data

Conclusion

The major objective of the research study was to find the impact of social media marketing on consumer buying behavior among generation Z. It was hypothesized that social media marketing and consumer buying behavior will have a significant impact on consumer buying behavior. According to the findings, the researcher could identify that there is a significant impact of social media marketing on consumer buying behavior and could achieve the major purpose of doing this research study. And also researcher could identify that there is a significant impact of social media marketing on online advertising, posts, quality content, and customer reviews and ratings. And could achieve the sub objectives of the study as well. By doing so, the researcher could also find answers to the research questions. So according to the findings researcher could conclude that there is a significant impact of social media marketing on consumer buying behavior.

There are some recommendations made by the researcher. Marketers and businessmen can implement ongoing development and improvement programs to identify the new aspects of consumers' social media behavior. They can involve with consumer surveys to identify the perceptions of consumers towards product features and quality and expectations towards the benefits and accordingly develop the most attractive and effective posts and other online advertising campaigns. Marketers and businessmen need to actively involve with social media marketing with up-to-date information to make the buying behavior of consumers more satisfied and motivated.

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Impact of social media influencers on consumer purchase intention of fashion retail industry in Sri Lanka

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Introduction

Today, the world has become a global village. Therefore, there is more inter-connectivity with the world Krause et al. 2014). The organization moved to boost sales by using social media marketing. Over the last decade, researchers have realized that people tend to follow social media (Barysevich, 2021). Social media also rapidly developed during this period as the number of social media users in Sri Lanka increased by 1.5 million (+23%) between 2020 and 2021 (Digital Sri Lanka, 2021). Consumers get affected through television, magazines, and celebrities (Silverman, 2001). Influencer marketing is becoming increasingly popular around the world, prompting marketers to consider it an essential component of their marketing strategy. Fashion is receiving more attention these days because it has become a constant presence in a person's daily life. Fashion influencers range from fashion bloggers to celebrities on social media. The online world is both a place to sell and a platform for reaching a specific audience. Social media influencers are also known as micro-celebrities (Khamis et al., 2016), because they also have many followers. Chun et al., (2018) has explained that social influencers are the most potent force in the fashion marketplace. Therefore, marketers involve influence as a marketing tactic to change customer decisions.

The present study addresses the empirical gaps in many ways. Most researchers focus on celebrity endorsement on purchase intention (Priyankara et al., 2017), and little research focused on the relationship between Social Media influencers (SMI) and Purchase intention in the Asian context. Most of the research that was done on this concept related to other industries such as the cosmetic industry & beauty care industry (Isyanto, et al.,2020; Almeida & De, 2019) and recommended further investigation needs for this concept with context to examine in different demographics and for different industries (Tsarashafa & Qastharin, 2021). Sometimes social media influencers are selected based on the number of followers. Some influencers have more followers, but their insights do not match with the target group as well as the fashion industry. Thus, further investigation is essential to identify the impact of social media influencers on consumer purchase intention.

The main purpose of the present study is to determine the personal factors of social media influencers that contribute to influencing consumer purchase intention of fashion retail industry in Sri Lanka. Source credibility and source attractiveness models is used to determine the conceptual model in this study. The variables constructed used trustworthiness, expertise, similarity, familiarity, and likability on consumer purchase intention for analyzing the model.

Methodology

A deductive research approach is selected for the present study and used the survey strategy to collect the data using a self-administered questionnaire distributed using electronic platforms in social media. The questions are measured through the five-point Likert scale, which varies from strongly disagree to agree strongly. Target Population was social media users more than 18 years old in Sri Lanka. And as the sample frame is not available for this study, the sample size was calculated using Yamane (1967) formula. And accordingly, the sample size was determined as 384 social media users were selected in Sri Lanka using convenience sampling technique. The effective response rate is 79%. Data were analyzed using multiple regression to assess the impact of the dependent variable.

This research model is prepared to have an insight into the impact of social media influencers on consumer purchase intention of the fashion retail market. After considering the relationship between research variables, the following conceptual framework was developed. Accordingly five hypothesis has developed.

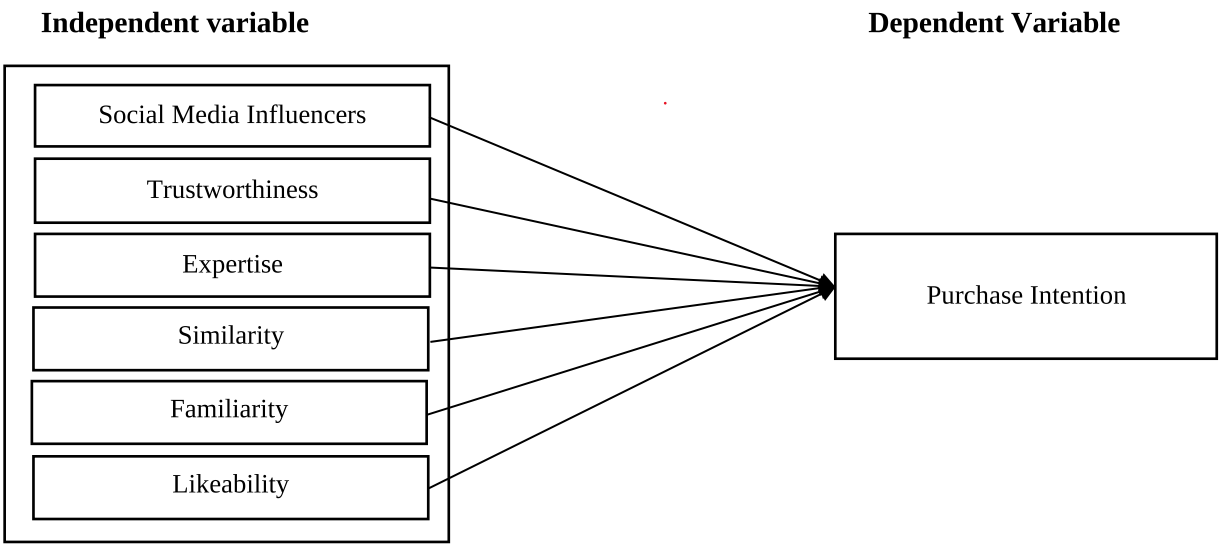

Figure 10. Conceptual Framework

Source: Chun et al., (2018)

Findings

Table 1: Summary of Hypothesis Testing

Hypothesis	Impact	Status	Justification	Empirical support for the findings
H1 There is a significant impact of trustworthiness on purchase intention.	Positive Significant	Accepted	P- Value = 0.030 B Coefficient = 0.008 Pearson Correlation= .475**	(Gayathre & Anwar,2021; Hsiao et al. (2010)
H2 There is a significant impact of **expertise** on purchase intention.	Positive Significant	Accepted	P-Value =0.000 B Coefficient = 0.467 Pearson Correlation= .986**	(Chun, 2018; Lis & Bettina., 2013)
H3 There is a significant impact of similarity on purchase intention.	Positive Significant	Accepted	P- Value = 0.006 B Coefficient = 0.032 Pearson Correlation= .955**	(Forbes, 2016; Kapitan & Silvera, 2015)
H4 There is a significant impact of familiarity on purchase intention.	Positive Significant	Accepted	P- Value = 0.000 B Coefficient = 0.163 Pearson Correlation= .981**	(Zvinyte, 2017)
H5 There is a significant impact of likability on purchase intention.	Positive Significant	Accepted	P-Value= 0.000 B Coefficient = 0.356 Pearson Correlation= .961**	(Uzunoglu & Kip, 2014; Lim, et al.,2017)

Source: Survey Data (2022)

As per the respondent's profile majority of the respondents are in the age range of 18-28 years (62.5%) and the majority of the respondents represent in Western and North western province as per the figure 2. The highly used social media platform is You tube followed by Facebook and Instagram. The

Cronbach Alpha is used to assess the reliability of the research instrument since the researcher chose a quantitative research approach for the investigation. Accordingly, all 5 variables have a value more than 0.7 (Trustworthiness 0.760, Expertise 0.792, Similarity 0.868, Familiarity 0.770, Likeability 0.805). Therefore, the items used are reliable in the present study. To test the validity of the measures, KMO and Bartlett's tests were conducted. The sample is deemed to adequacy if the value of overall KMO is greater than 0.5 (0.806>0.5), in Bartlett's test Taking a 95% level of Significance p-value (Sig.) of .000 < 0.05 is considered the valid range.

According to the regression results R Square value is 0.997. It surpasses 0.5. According to these results in the model of social media influencers, there is a 99.7% effect of Trustworthiness, Expertise, Similarity, Familiarity, and Likeability on purchase intention. The multiple regression analysis was conducted to test the hypothesis and the results were depicted in Table 1.

When identifying the most influential factor of the social media influencers towards purchase intention, familiarity stated the highest mean value of 3.6711 with relation to the dependent variable.

Conclusion

The main purpose of this study was to examine impact of social media influencers on consumer purchase intention with special reference to fashion retail industry in Sri Lanka. Researchers mentioned that recommendations and reviews from social media influencers are perceived to change the decisions of the customers (Raita, & Gavrielatou, 2021). Accordingly, Rebelo, (2017), there is a significant impact of personal factors of social media influencers on consumer purchase intention. In conclusion, it was evidenced that trustworthiness, expertise, similarity, familiarity, and likeability on purchase intention has positive impact and several studies have validate the findings of the present study. This concept is new for Sri Lankan. It is emerging market, and this concept has huge contribute to Sri Lanka economy. More occupation begins relevant to the concept. Marketers can take suitable investment decision by investigation of this study. The findings of the study suggest that previous experience or an influencer's recommendation might impact a customer's purchase intention in the fashion retail business. In future studies, researchers can concentrate on this issue. It is possible to comprehend how this feature will impact the purchase intention with the independent factors with more research on the strength of the relationship between prior purchasing fashions advised by SMIs.

Previous researchers have investigated impact of Instagram influencers on consumer purchase intention of fashion retail industry in Sri Lanka. Finding of this study shows that YouTube as well as Facebook has an opportunity to practice this concept because number of YouTube and Facebook users are higher than Instagram. Findings of this study showcased that Facebook and YouTube also have an opportunity to practice these concepts. Therefore, further investigation is need for YouTube and Facebook influencers on consumer purchase intention of the fashion retail industry in Sri Lanka. This study is conducted to exam the impact of social media influencers on consumer purchase intention of fashion retail in Sri Lanka. But author has not considered all platforms to investigate that impact. Future researchers have an opportunity to examine other platforms On the other hand, this concept can be investigated relevant to the industries such as technical industry.

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Operations Management

Simulation on the ticketing performance of the Kandy railway station

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Introduction

Queues at Ticketing counters in the transportation network are a common sight that can be observed in Sri Lanka. Railway transportation is considered one of the major transportation methods in Sri Lanka (Lanel, 2015). It carries over 86 million passengers and 1 million tons of goods per year (Halpita & Thelijjagoda, 2011), and more than 165 main railway stations are operating in Sri Lanka (Sri Lanka Railways, (2018). The Kandy railway station is one of the main railway stations, and it is considered a tourist destination and the secret city of Buddhist people because of the temple of tooth relic. Therefore, railway service provides tremendous service to the passengers who travel to Kandy.

Moreover, Kandy railway station performs as a hub for conducting operational activities on Kandy Colombo, Kandy Mathale, and Kandy Badulla routes (Perera et al., 2016). Therefore, the main focus of this study is to analyze the current system using ARENA software and introduce an improved model to reduce passenger queues and optimize the system of ticketing counters at the Kandy railway station. Simulation studies on queue optimization are mostly conducted with the software called ARENA, which is based on SIMAN simulation language (Rockwell Automation, 2009). Sanjay et al. (2014) carried out a research study using ARENA for student canteens' performance improvement at Calicut. Adding an extra counter for the canteen has been identified as a possible improvement for the performance enhancement of the canteen.

Methodology

The ARENA software was used to model the existing and proposed systems. For the study, 200 participants were selected as the sample size. The primary data required for the study were obtained through direct observation from 6 AM – 7 AM on two weekdays as long queues are visible in Kandy railway station during morning hours on weekdays since most foreign travelers begin their journeys and working people leave for their workplaces within these hours. The time duration was finalized using a pilot study done on weekdays at the railway station, Kandy. The tickets were issued from two counters, namely, counter 01 and counter 02.

Moreover, primary data was collected as customer arrival, service start, and service end time. The population and waiting room sizes are infinite, and the queue discipline is First in First Out basis. The inter-arrival rate and service rate are calculated based on the recorded data. Inter-arrival patterns of the people are identified using an input analyzer. A Weibull distribution was identified in the arrival rate analysis on both counters, while a Triangular distribution was identified in the service rate analysis in counter 01, and Poisson distribution was identified in the service rate analysis in counter 02.

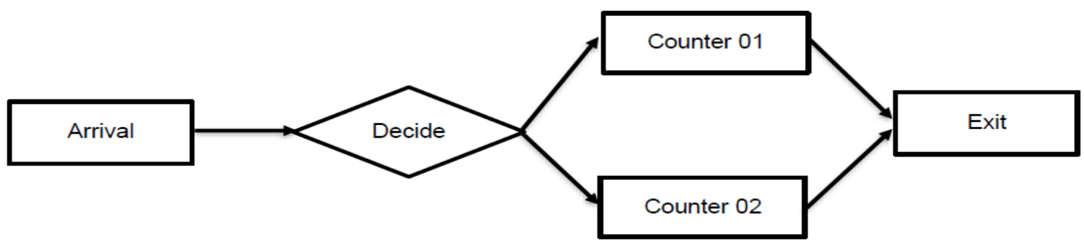

Figure 1. Conceptual Model for Railway Queuing System

Findings

The finding shows that the performance of the railway counters was inefficient as there was a high customer waiting time and a high number of customers waiting. To optimize the queues, the resources are doubled in each counter. As a result of doubling the resources, the waiting time of counter 01 in model 01, model 02, and model 03 are dropped by 3.95 minutes, 0.63 minutes, and 2.44 minutes respectively, compared to counter 01 in the existing system. The waiting time of counter 02 in model 02 and model 03 is decreased by 3.49 minutes and 2.8 minutes, respectively, compared to counter 02 in the existing system, but the waiting time of counter 02 in model 01 is increased by 0.43 minutes compared to the counter 02 of the existing model. In addition, the percentage of customers served is highest in model 03 compared to all the models described.

Table 1. Results of Existing and Proposed Systems

	Existing Model		**Proposed Models**					
			Model 01		**Model 02**		**Model 03**	
All Railway Counter No:	01	02	01	02	01	02	01	02
Waiting Time (minutes)	4.98	3.98	1.03	4.41	4.35	0.49	2.54	1.18
Number Waiting	9	6	2	9	7	1	5	3
Number In		185		232		179		235
Number Out		145		201		160		221
Percentage of Customers Served (%)		78.38		86.64		85.39		94.04

Model 01: Resources were doubled in all railway counter 01.
Model 02: Resources were doubled in all railway counter 02.
Model 03: Resources were doubled in both all railway counters.

Conclusion

The results showed that the performance of the existing railway counters was inefficient as there was a high customer waiting time and a high number of customers waiting. Therefore, the existing model needs to be further improved. The most practical option to enhance the performance of the railway counter is increasing the resource persons in a counter. Therefore, the study results concluded that Model 03 is the best-fitted model among the other proposed models as other models have high waiting times and the number waiting at least in one counter compared to Model 03.

Due to the prevailing adverse economic situation of the country and limited budget allocated for the Sri Lanka Railway Department it is difficult to double the resources in railway counters. However, for further improvements, railway stations could introduce smart ticketing approach which may help passengers who travel daily by train to use a train pass with a QR code and the payments can be done monthly through an online payment method. Then it may reduce the number of passengers who visit railway counters daily for ticketing purposes and the waiting time and number waiting can be reduced through this process. As a result, time and resources can be reduced consequently.

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The simulation on toll ticketing performance: a case study of the highway ticketing counter at Kadawatha interchange

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Introduction

Sri Lanka's extensive network of roads and highways is assisting in driving the economy and moving people and goods more quickly. With increased traffic in the future, the possibility of traffic queues forming at entry or exit points during congested periods can cause significant time delays and may result in reduced highway performance. At the moment, since manually operated toll gates have been installed and traffic has increased, it is intended to see if their efficiency is sufficient to handle higher vehicle volumes. In addition to recent expressway developments on the island, Kadawatha has been chosen as a major Colombo Expressway interchange connecting the Southern, Airport, and Central Expressways. The main objective of this study is to determine the impact of toll gate efficiency on the capacity of the Highway Kadawatha Interchange by measuring queue waiting time and to provide feasible solutions to increase its performance. The secondary objectives are to find any inefficiencies at toll gates that are manually operated, to suggest solutions (new systems) to minimise the queue at the toll gates and to check the feasibility of the designed systems for implementation in the Sri Lankan context.

Among the various types of transportation options available in Sri Lanka, road transportation covers more than 90% of the land transport in the country (Rodrigo & Edirisinghe, 2015). Highways mostly used to save time by avoiding traffic bottlenecks. When it comes to Sri Lanka, people waste their time at expressway counters due to huge lines, especially during peak hours (Sandaruwan, 2020). Vidanapathirana et al. (2017) evaluated the operational improvements of using electronic toll collection, incorporating the traffic characteristics of expressways in Sri Lanka. At present, Electronic Toll Collection System is used only in some of the Sri Lankan expressway lanes.

Methodology

This study uses an assortment of both primary data and secondary data. Primary data was collected through direct observation of customer arrival and service times. Secondary data, upon which the literature review and a conceptual model are developed, were searched through articles, journals and other relevant previous reports.

Data were collected during the peak hours of the premises to observe the arrival of vehicles at the toll plaza. The observation process was completed in a day from 3:00 p.m. to 4:00 p.m.; The time slot was selected referred to the popular time analysis displayed on Google. Data was collected as arrival time of vehicle, service start time of vehicle, and the service end time of the vehicle. The data were gathered using stopwatches by placing time recorders in vehicle arrival to the queues, service starting point, departure from the queue. The data (time) were reflected as when the vehicles joined the queue, got served and left the queue. Accordingly, 212 sample data was collected to obtain the behaviour of the system.

The service start time was subtracted from the service end time to deduce the service occurring time. Inter-arrival times and service times were obtained using the collected data and used the input analyzer, an ARENA built-in tool to identify the probability distribution for inter-arrival time and service time.

Based on the behaviour of the process a conceptual model was developed which consisted of two toll booths with two separate queues and with no chance to skip or avoid the queue.

The model was simplified based on the following assumptions,

- Vehicles arrive at the toll plaza in a random sequence.
- A continuous service was offered to the vehicles in a First In First Served method (FIFO).
- A vehicle arrives at that toll plaza once and only once on a given day.
- Vehicle arrivals are independent of each other.
- A vehicle joins the queue isolated, without any company.

Inter-arrival times and service times were fed to the input analyzer and distribution patterns were identified as follows.

- Beta distribution with expression 3.56 * BETA (0.616, 3.56) was obtained for inter-arrival times in lane 01 (counter 01).
- Beta distribution with expression -0.001 + 2.26 * BETA (0.787, 2.96) was obtained for inter arrival times in lane 02 (counter 02).
- Lognormal distribution with expression LOGN (0.308, 0.205) was obtained for service times for counter 01.
- Beta distribution with expression -0.001 + 1.36 * BETA (0.404, 1.63) was obtained for service times for counter 02.

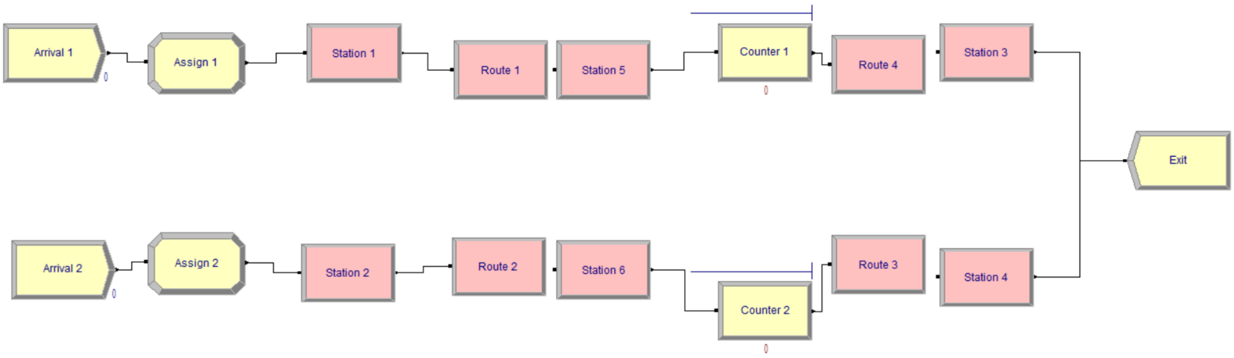

Figure 1. The existing system model

The simulation model for the existing system is depicted in Figure 01. The data were simulated for a replication length of 14,400 seconds. The Create, Process, Dispose, Route and Station symbols were used to create the model of the system.

When considering the existing model, 5815 vehicles entered the expressway and 5813 vehicles exited the expressway. The average waiting time in tolling counter 01 is 23.526 seconds while in tolling counter 02 it is 21.690 seconds. The number of vehicles waiting at tolling counter 01 is 0.7549 and at tolling counter 02 it is 0.7665.

Modified Simulation Models

Table 1. Modified Model Summary

Model	Avg. waiting time (seconds)		Avg. queue size (vehicle)		# of vehicles		Vehicles proceed (%)
	Counter 01	Counter 02	Counter 01	Counter 02	In	Out	
M1	16.5	15.108	0.531	0.5328	5823	5822	99.98
M2	1.1873	1.0993	0.0378	0.0389	5805	5804	99.98
M3	0.5209	0.4867	0.0166	0.0172	5793	5793	100

The results of the existing model explains longer waiting times and less productivity. Therefore, some modifications were deduced for the above model to obtain the optimum output. The modifications are as follows:

- Model with automated barrier arm (Model 01)
- Model with E-tag system installation (Model 02)

- Model with Open Road Tolling system installation (Model 03)

Various assumptions were made based on different models.

Findings

The parameters of the proposed model are significantly different from the existing model. Both M1 & M2 models were one vehicle short in the number of vehicles sent out but in model M3 all the vehicles were out. Model M2 and M3 have been identified with significantly lower waiting times when compared to model M1. Model M2 and M3 have recorded no vehicles waiting at the queues in the context of the number of vehicles waiting in the respective troll counter. But in the model M1, 1 vehicle is waiting at the toll counters.

Although model M1 shows significant development with reference to the existing model, compared with models M2 and M3, its performance is much lower. Therefore, the model with the automated barrier arm can be implemented from the proposed models. When compared to the other two models, M2 & M3, the M3 model performs better. But with the practical implementation of the model M3 is not feasible for a developing country like Sri Lanka, due to the huge finding requirement in the re-engineering process. Therefore, when considering all the feasibilities, model M2 which is an E-tag system installation, is selected as the most feasible one to replace the existing one.

When comparing the choices of toll counter alterations, the number of vehicles entered into the model M2 and M3 are 5,805 and 5,793 respectively, while 5,804 vehicles exited the model M2 and 5,793 vehicles exited the model M3. The average waiting time in the toll counter 01 of model M2 is 1.188 seconds and that of model M3 is 0.522 seconds. Moreover, the average waiting time in toll counter 02 of model M2 marked 1.098 seconds and that of model M3 marked 0.486 seconds. The number of vehicles waiting at toll counter 01 of model M2 is 0.0378 and that of model M3 is 0.0166. The number of vehicles waiting at toll counter 02 of model M2 is 0.0389 and that of model M3 is 0.0172.

Conclusion

This study assessed the existing queueing system at the Exit toll plaza of the Kadawatha highway interchange. The ARENA simulation was employed to simulate the existing model and understand the ongoing situation. It was observed that the average waiting time at toll counter 01 was greater than that of toll counter 02. This may be due to different reasons as the vehicles that join the toll plaza arrive from two different lanes, one lane may be more convenient to drive in than the other and there can even be a cognitive factor affecting the drivers in choosing their lanes.

There are three toll counters for vehicles to exit the Kerawalapitiya - Kadawatha expressway and the two counters placed under observation had a maximum of 6 vehicles on average at each toll counter at a given time with each vehicle spending an average of 20 seconds in the system. The number of vehicles will be increased in due course and the number of highway users also will be increased due to highway facility expansions. Therefore, service efficiency will be a great indicator of maintaining properly.

Three models have been identified to minimize waiting times and increase the efficiency of toll gates. For the Sri Lankan context, Model M2 (Model with E-tag system installation) can be suggested considering the feasibility of implementation and efficiency.

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The integration of lean management and six sigma strategies to improve the performance of the Sri Lankan apparel sector

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Introduction

Among the tools which are used to improve the efficiency and effectiveness of a manufacturing process, Lean management, and Six Sigma take have been identified as the driving forces to increase the efficiency of organizations (Adikorley, *et.al.*, 2017). Lean management can be identified as a tool that eliminates the non-value-adding activities (NVAs) from the production process while Six Sigma focuses on reducing the variations in value-adding elements (Karthi *et.al*. 2013). Lean management was firstly introduced in Japan in the 19th century and focused on the automobile sector which was a highly developed industry by then (Mothilal & Prakash 2018). But later Lean techniques were developed to be implemented by other industries as well (Silva *et.al.*, 2018). Motorola was the first company to introduce the Six Sigma concept in the 1980s to the world with the aim of reducing faults and giving a higher contribution to the company’s earnings (Hathwar & Rampur, 2017).

The Sri Lankan apparel sector is the most important contributor to the Sri Lankan economy, contributing around 40% to the Sri Lankan export revenue and providing around 900,000 job opportunities island-wide (BOI 2018). This development has laid the path for Sri Lanka to become an apparel hub in the region. Sri Lanka is providing a vast variety of products and services with a huge volume, to the local and international markets (Cooray 2018) and shows steady growth in the past thirty years (BOI 2018). Hence, there is further potential and opportunity for performance improvement in the apparel sector.

Apparel manufacturing consists of several activities in finishing a final product such as cutting, washing, sewing, printing, packaging, etc. There is a higher chance of having non-value-added activities when a product is going through these several activities. Sometimes apparel manufacturing organizations use separate facilities for activities such as cutting, washing printing, and these involve vast usage of labor and material. A slight increase in cost will highly impact the total cost as the quantity is very high (Adikorley, *et.al.*, 2017).

Because of that, it is very critical to plan, coordinate and control the behavior and the decision-making procedures of the managers and the employees in the apparel manufacturing sector and eliminate the non-value-added activities from the processes that will not add value to the final product and reduce the variations in the value-adding steps. Hence, this is where Lean and Six Sigma come into play. Even though many apparel manufacturing organizations in Sri Lanka have tried to implement lean and six sigma individually, most of them have not shown consistent success. They have not been able to embed these practices in the manufacturing process sustainably. The purpose of this research is to unveil the barriers to integrating Lean and Six Sigma in the apparel industry, the benefits of integrating Lean and Six Sigma, and how the integration of Lean management and Six Sigma will affect the efficiency of the Sri Lankan apparel sector.

Methodology

A qualitative approach was used to assess the problem at hand and a case study was identified as the most suitable approach for this research. A well-established apparel manufacturing organization was used, and it was tried to identify the management strategies and the techniques that affect the successful integration of Lean management and Six Sigma.

Based on the literature, the researchers developed the following conceptual framework, which demonstrates the relationship between the Lean Six Sigma strategies and the performance of the company.

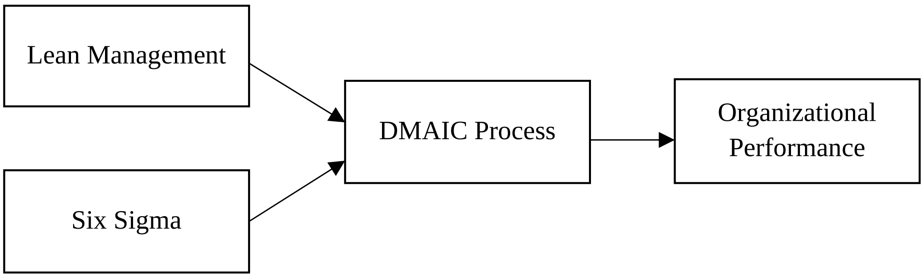

Figure 01: Conceptual Framework

Three types of data collection were used to collect primary data and secondary data. Primary data for the research were collected through semi-structured interviews conducted with factory managers who had over ten-year experience in the apparel industry and some questionnaires distributed among lower level and middle employees who were engaged in the Lean Six Sigma integration process. The source of secondary data was past literature, company annual reports, and internal documents such as agendas, minutes of the meetings, etc.

Findings

The information gathered from the interviews with the selected four Factory Managers of Cool Wear and questionnaire responses from the 24 Functional Managers from the selected four Factories of Cool Wear were qualitatively analyzed to identify the responses to the specific objectives of the study. When considering objective 1, as the barriers to integrating Lean and Six Sigma in the apparel industry the following were identified; lack of leadership from top executives, internal resistance, lack of knowledge, insufficient organizational alignment, absence of compelling reasons, wrong process parameter identification, and feedback being ignored.

The second objective of the study was to find out what are the benefits of integrating Lean and Six Sigma. Six main benefits were identified; reduction of operational cost, reduction of product cycle time, increasing productivity, enhancing customer satisfaction, helping better strategic planning, and increasing the revenue/ ROI.

Finally, data were synthesized to identify how the integration of Lean and Six Sigma Strategies improves the performance of the apparel sector in Sri Lanka, to answer the third objective. The following were identified; reduction of operational cost, reduction of product cycle time, increasing productivity, enhancing customer satisfaction, helping better strategic planning, and increasing the revenue/ ROI.

Conclusion

In light of the key findings of this study, researchers concluded that there are a few barriers to implementing Lean Six Sigma in the apparel industry, which can be strategically overcome by the management. The right leadership from top executives, supporting the staff with mitigating internal resistance, enhancing the knowledge of workers, rationalizing the process of parameter identification, and obtaining correct and timely feedback, would eliminate most of the barriers to implementing Lean Six Sigma in the apparel industry in Sri Lanka.

Despite the number of barriers to implementing the integrated Lean and Six Sigma, respondents were in the view that Lean and Six Sigma benefitted the apparel sector by reducing its operational cost, reducing product cycle time, increasing productivity, enhancing customer satisfaction, helping better strategic planning, and increasing the revenue/ ROI.

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Risk Management and Insurance

Study on the working womens' life assurance buying intention in Sri Lanka

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Introduction

The primary goal of an insurance policy is to reduce the risk that people face in the event of unexpected healthcare costs, preventing them from being negatively impacted by financial burden (Owolabi et al., 2016). Individuals can purchase life insurance to protect their families' financial future in the event of their own premature death. It also meets the savings and investment needs of people who are unfamiliar with or fearful of investing in mutual funds or the stock market (Giri, 2018).

In a region like South Asia, women are traditionally less likely than men to have life assurance products. Working women in families have less life insurance than working men. (Pradeepa & Ananth, 2017). Quality of life, exposure to risks, insurance culture, intelligence, perception of need for security, need for insurance, and affordability will demand a greater focus than ever before, and further price-quality trade-off of insurance policies will be the consumer's specific interest (Ulbinaite & Moullec, 2017).

A better understanding of women's life insurance purchasing behavior would undoubtedly facilitate better market penetration in the women's segment, however there is a knowledge gap in this area of study. As a result, the purpose of this research paper is to investigate women's insurance purchasing behavior in relation to the purchase of life insurance based on the Theory of Plane Behavior (TBP) (Kharde & Madan, 2018).

Methodology

In this study, the quantitative research method is used to identify the influence of selected independent variables; the Belief on Life Assurance (BI), Subjective Norms (SN), Perceived Behavioral Control (PBC) and Beliefs on Uncertainty of Life (BRL). The dependent variable is Buying intention (BI) of working womens' on Life Assurance in Sri Lanka.

The researcher uses the Morgan sample size table to determine the sample size. According to Morgan's table, the sample was selected which came to working woman in Sri Lanka were selected as the population and the selected sample was 120 individuals from the population by using a random sampling technique.

The study was performed on primary data gathered and analyzed. The primary data for the study was collected from women who working in private and public sectors across various demographic sections, using a structured questionnaire. In all of 120 questionnaires were distributed in various demographic sections, through personal model and electronic mode to reach the women respondents.

Figure 01 shows the conceptual framework used by the researcher to analyze the effect of selected variables on buying intention.

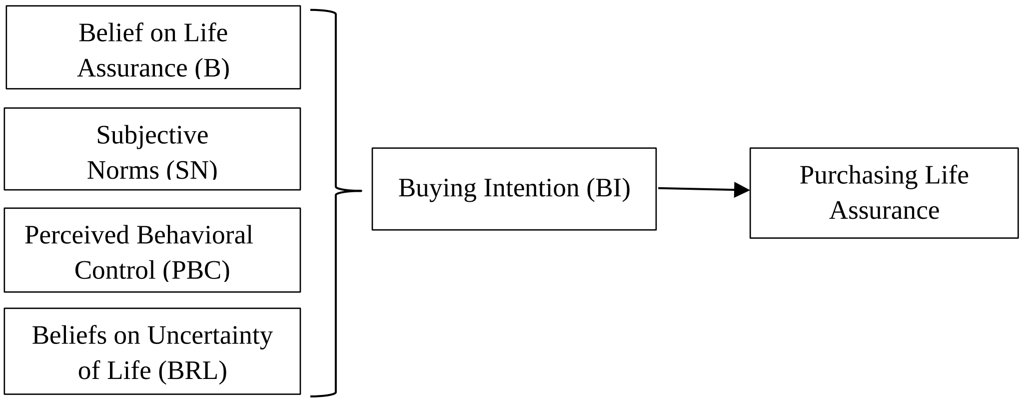

Figure 1: Conceptual Framework
Source: Developed by researcher

The researcher examines the significance of the results of the study and the research model. Further, the researcher obtained the coefficients of each variable and developed the multiple regression model. Finally, the researcher tests four hypotheses related to four independent variables.

H1: There is a significant positive influence of belief on life assurance on life assurance purchase intention of working women

H2: There is not a significant positive influence of subjective norms on assurance purchase intention of working women.

H3: There is a significant positive influence of perceived behavior control on life assurance purchase intention of working women

H4: There is a significant positive influence of belief of uncertainty on working women's buying intention.

After examining the direction of the relationship between the dependent and independent variables, the researcher conducted a multiple regression analysis. The following model is utilized to test the aforementioned hypothesis,

$Y = 0.103 + 0.233X1 + 0.111\ X2 + 0.262\ X3 + 0.346\ X4 + \varepsilon$

Y = Level of Working Women's Buying Intention, a = Constant level of Working Women's Buying Intention, X1 = Belief on Life Assurance, X2 = Subjective Norms, X3 = Perceived Behavior, X4 = Belief on uncertainty, ε = Error term

Findings

Correlation analysis demonstrated the extent to which factors influence purchasing intent and purchasing intention variables vary together, as well as the strength and direction of their relationship.

Table 1: Correlation between factors affecting buying intention of life assurance and buying intention

Dimension	Pearson correlation	P-value
Factors affect buying intention	0.876	0.000

Source: Survey data, 2022

According to table 1 correlation between independent variable for factors affecting buying intention and dependent variable working women buying intention was 0.876 and which implied that there was a strong positive relationship between factors and working women's buying intention of Life Assurance.

Furthermore, p-value of 0.000 emphasizes that there was a significant relationship between independent and dependent variables.

Following Table 2 illustrated the correlation between the factors which affecting for buying intention of working women's in Sri Lanka. According to the analyzed data, it is possible to decide whether are there any relationship between dependent and independent variables.

For the dimension of belief of Life Assurance, it denoted a 0.826 value of correlation with overall buying intention which was suggested that there was strong positive relationship between independent variable belief of life assurance and dependent variable working women's purchase intention.

Correlation coefficient of subjective norms and buying intention was 0.792 and which implied that there was also a strong positive relationship between subjective norms and buying intention. In addition to that, there was a significant association at 0.05 significant level between interaction and buying intention since P-value was less than 0.05 which was 0.000.

There was a significant relationship between perceived behavior and buying intention of life assurance at 0.05 significant level because of P-value was equal to zero. Moreover, there was a strong positive relationship between perceived behavior and buying intention of life assurance. The correlation coefficient was 0.788 which lied above the point 0.7.

The highest correlation coefficient was 0.831, between belief of uncertainty and buying intention of life assurance. Furthermore, there was a moderate positive relationship between those independent customization dimension and social media marketing. P-value of 0.000 implies that there was a significant relationship between belief of uncertainty and buying intention of life assurance at 0.05 level of significant. Hence, there was a significant relationship between belief of uncertainty and working women's buying intention.

Table 2: Correlation between factors affecting for buying intention and buying intention of Life Assurance

		Beliefs on Life Assurance	Subjective Norms	Perceived Behavior	Buying Intention	Belief on Uncertainty
Beliefs on Life Assurance	Pearson Correlation	1	.879**	.771**	.826**	.851**
	Sig.(2-tailed)		.000	.000	.000	.000
Subjective Norms	Pearson Correlation	.879**	1	.762**	.792**	.801**
	Sig.(2-tailed)	.000		.000	.000	.000
Perceived Behavior	Pearson Correlation	.771**	.762**	1	.788*	.759**
	Sig.(2-tailed)	.000	.000		.000	.000
Belief on Uncertainty	Pearson Correlation	.851**	.801**	.759**	.831**	1
	Sig.(2-tailed)	.000	.000	.000	.000	
Intention	Pearson Correlation	.826**	.792**	.788**	1	.831**
	Sig.(2-tailed)	.000	.000	.000		.000

*** Correlation is significant at the 0.01 level (2-tailed)*
Source: Survey data, 2022

Regression analysis was used for study linear relationships between independent and dependent variables. It is concerned with the study of dependence of one variable (dependent variable) on one or more other variable (independent variable) further tries to measure the relationship (impact) level quantitatively.

Table 3: Model summary of multiple linear regression analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.880[a]	.774	.766	.4717
a. Predictors: (Constant), Belief of uncertainty, subjective norms, Perceived behavior, Belief of uncertainty				

Source: Based on the analyzed data

R-squared is a statistical measure of how close the data are to the fitted regression line. It is also known as the coefficient of determination, or the coefficient of multiple determination for multiple regression. According to table 3, the R square value for the model was 0.774. It represents 77.4 percent of variation in working women's buying intention for life assurance was explained by belief on life assurance, subjective norms, perceived behavior and belief on uncertainty. In that case there was 22.6 percent of unexplained variation in this model.

According to table 4.7, 0.766 adjusted R Square value was much lower than the 0.774 R Square value, it was an indication that regression equation may be over-fitted to the sample and limited generalizability

Summary

According to this analysis, the major determinants is Belief on uncertainty. Because it has the highest co-efficient value among all other dimensions (0.346) & how-ever there are other determinants like Subjective Norms, Perceived Behavioral Control, Belief of Uncertainty. The research also established that there is a clear significant relationship between all other excluding Subjective norms. The researcher concluded that Belief on Life Assurance, Subjective Norms, Perceived Behavior & Belief on uncertainty is an important factor to buying intention of working womens'.

Secondly, the regression analysis results also show that Working Women's Buying Intention of Life Assurance have a positive and strong correlation. This result is similar to the findings of Jones et al. (2002), Ruyter et al. (1998), Gremler and Brown (1996).

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Impact of service quality on customer loyalty: Evidences from ADZ Insurance Brokers (Pvt) Ltd

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Introduction

Insurance brokering is an intermediary function that works between insurance company and client. In contrast with insurance agents, insurance brokers are an independent party. Insurance Brokers provide their service on behalf of the clients. Broker - client relationship is very crucial thing even though the client is a corporate client or individual client.

This study attempts to describe the importance of service quality of ADZ Insurance Brokers (Pvt) Ltd, in Insurance Broker's perspective to enhance client relationships and satisfaction in order to achieve large number of client base. The findings of this study will help to enhance and build quality relationship between ADZ Insurance brokers and their clients by creating a customer friendly environment within the organization. On the other hand, this empirical study will help ADZ Insurance brokers to find out their defects and omissions in order to avoid those things. Thus, the results of this study will contribute to enrich the previous literature and to fill the existing knowledge gap.

The purpose of this study is to analyse how to affect Service Quality of ADZ Insurance brokers on their customer loyalty through fulfilling following research objectives;

- To identify the relationship between customer trust and customer loyalty
- To find out the relationship between customer commitment and customer loyalty
- To find out the relationship between customer satisfaction and customer loyalty
- To identify the relationship between service quality of ADZIB & Customer loyalty

According to the Ahmed Beloucif Trust, commitment and customer satisfaction positively influence relationship outcomes but not in equal measures and have different impacts at different stages (Beloucif et al., 2004). Kazi Omar Siddiqi has stated that all the service quality attributes are positively related to customer satisfaction and customer satisfaction is positively related to customer loyalty (Siddiqi, 2011). Olawale Adebisi (2010) indicates that Improvement in service quality can enhance customer loyalty. The researcher of Khan, Mubbsher Munawar; Fasih, Mariam stated that Service quality and all its dimensions have significant and positive association with customer satisfaction and customer loyalty (Kheng et al., 2010).

Based on these works, it can be concluded that service quality is made up of three relational constructs — trust, commitment and satisfaction — which are developed with the existence of effective communications between two parties and high service quality provided by an insurance broker. (Beloucif et al., 2004). ADZ Insurance Brokers (Pvt) Ltd (ADZIB) is an insurance brokerage firm who is always willing to provide their maximum service to the clients. Therefore, it's very important to identify the impact of their service quality on customer loyalty, since the loyal customer is the most valuable asset to the company.

On the other hand, because of the high competition in Sri Lankan Insurance Industry, it is essential to identify the factors that affecting to the customer loyalty through Service quality of insurance brokers, as insurance sector is playing a significant role in Sri Lankan economy. And also, when searching for a previous literature, it seems that even though there are few foreign studies were conducted regarding this concept, it is difficult to find local studies regarding practice of Quality service on client loyalty in brokerage industry.

Methodology

After literature review, Researcher have identified three elements that make up service quality. These three concepts are customer loyalty, customer satisfaction, and customer trust. By considering those factors researcher ask four main questions stated below.

- What is the relationship between customer trust and customer loyalty?
- What is the relationship between customer commitment and customer loyalty?
- What is the relationship between customer satisfaction and customer loyalty?
- What is the relationship existing service quality of ADZIB & Customer loyalty?

By referring previous literature researcher developed conceptual model in order to show the relationship of considering factors.

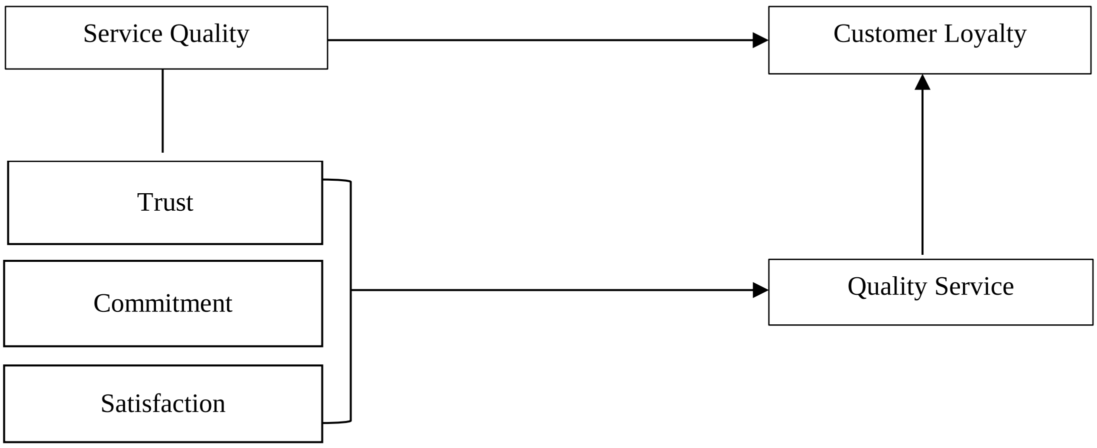

Figure 1. Conceptual Model

Conceptual framework represents the determinants of customer loyalty. The deductive technique of reasoning was used by the researcher because it is more suited to the positivist paradigm for establishing a causal relationship between variables. The data collection method in this study was surveying. In this study, the researcher used primary data. A common questionnaire was used to gather primary data. To test the theory and draw the study's conclusion, primary data were employed.

The corporate clients of ADZIB, who totalled about 500 Corporations, were the study's target population. With the use of prior literature, the sample size from the population was calculated. Therefore, 192 corporate clients were chosen as the sample for the research using a simple random sampling method based on the literature review. To gather data, the researcher employed a questionnaire method. To collect information from the corporate clients regarding Service quality and Customer loyalty, a standard questionnaire is used. For the statistical analysis of the respondent's data researcher use SPSS Software. To find out the reliability of the questionnaire the researcher used Reliability and Normality statistics. Researchers used correlation analysis to determine the link between service quality and customer loyalty, and multiple regression analysis to examine the effects of the service quality components on customer loyalty.

Findings

Pearson's multiple correlation analysis was conducted by researcher to identify the relationship between model variables. According to Correlations analysis following Tale has developed by the researcher in order to test hypothesis.

H_1 A: There is a positive relationship between Trust and customer loyalty

The relationship/impact suggested by the H1 was tested by using the correlation/regression analysis. Data support the null hypothesis ($r=-.082$, $p>0.05$). Consequently, null hypothesis was accepted and alternative hypothesis was rejected.

Table 1. Correlation Analysis

Predictor	Coefficient	P value (Significance)
Constant	.260	.234
Trust	-.082	.492
Commitment	.569	.000
Satisfaction	.219	.002
Service Quality	.234	.000

Source: Survey Data,2022

H_2 B: There is a positive relationship between Commitment and customer loyalty

The relationship/impact suggested by the H2 was tested by using the correlation/regression analysis. Data support the alternative hypothesis ($r=.569$, $p<0.05$). Consequently, alternative hypothesis was accepted and null hypothesis was rejected.

H_3 C: There is a positive relationship between Satisfaction and customer loyalty

The relationship/impact suggested by the H3 was tested by using the correlation/regression analysis. Data support the alternative hypothesis ($r=.219$, $p<0.05$). Consequently, alternative hypothesis was accepted and null hypothesis was rejected.

H4 D: There is a positive relationship between service quality and Customer loyalty.

The relationship/impact suggested by the H4 was tested by using the correlation/regression analysis. Data support the alternative hypothesis ($r=.234$, $p<0.05$). Consequently, alternative hypothesis was accepted and null hypothesis was rejected.

Conclusion

Four major conclusions were drawn by the researcher from the current study. The results showed that, with the exception of trust, there is a positive association between the other three independent characteristics and customer loyalty. When it comes to trust variable, even though preliminary researchers have confirmed that the positive relationship between customer loyalty and trust variable, current study indicates that there is an insignificant negative relationship between trust and customer loyalty. There is a positive significant relationship between commitment and customer loyalty in ADZIB. Hence, it confirms that when customer is more commit to the organization, there is a positive tendency to that customer become a loyal customer.

Customer satisfaction is positively and significantly affected to the customer loyalty. That means when the satisfaction is high customer loyalty also increase simultaneously. When conclude of the final variable of service quality, researcher conclude that there is a strong positive relationship between service quality and customer loyalty in ADZIB.

The research investigation found an inverse association between consumer loyalty and trust. As a result, ADZIB should increase customer trust while running the company. In addition to effectively resolving customer complaints, ADZIB ought to make customers' lives easier. ADZIB can effectively deal with their customers to further improve their commitment. Through consumer input, ADZIB should review their performance every quarter. Through various training programs and mentorship programs, ADZIB can educate their staff.

Like other studies, the current study has several limitations. The current study solely uses ADZ Insurance brokers as a specific case in order to highlight service quality and customer loyalty. When it comes to client satisfaction and loyalty, they are more likely to be emotional factors. As a result, it is difficult to measure something properly to a hundred percent because respondent replies may vary depending on the circumstance.

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Why paddy farmers having low insurance awareness on crop insurance: A qualitative study in Sri Lanka

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Introduction

Farmers have been severely affected by various natural calamities – floods, droughts and excessive rainfalls during the recent years**.** Crop insurance is purchased by agricultural producers to safeguard against the loss of their crops due to natural catastrophes (Nilwala, 2019)**.** In general, risk management techniques like insurance are employed to protect against potential losses. The way insurance works is by transferring the risk of loss from one party to another. farmers also can transfer the risk of paddy to insurance company for their losses. Then after insured pay the claims for crop losses to paddy farmers.

The existing studies in the area of crop insurance highlighted the necessity of doing more research to discover the reason behind the low usage and poor awareness of crop insurance by the paddy farmers in Sri Lanka. According to (Nilwala, 2019) the some farmers even not heard about the name of crop insurance. With the objective of filling the literature gap, this study aims to investigate the level of awareness of paddy farmers regarding crop insurance, and to develop a rational framework to improve the farmer's awareness level on crop insurance.

Methodology

Paddy Farmers

Table 1: Summary of paddy farmers

Variable	Category	Frequency
Education Level	Primary Level	5
	O/L	16
	A/L	4
	Degree	0
Age Level	Below 25	0
	25-35	1
	36-45	5
	46-55	10
	56-65	6
	66-75	3
	Above 75	0
Natural Disasters faced by Paddy Farmers	Heavy Rain	1
(Most of the farmers faced more than one natural disasters)	Flood	12
	Strong wind	6
	Drought	6
	Insect damage	4
	No any natural damages faced	3
Current Awareness	Aware	10
	Unaware	15
Obtaining Any Compensation from Crop Insurance	Yes	03
	No	22

To achieve the study objective, the researcher used qualitative research approach and interview method to collect the data from a selected sample from the north central province of Sri Lanka. The North Central province is the main paddy growing province in Sri Lanka and approximately 60% of the people in the North Central province are involved with the agriculture. Also, official statistical records show that 70% of farmers in Anuradhapura District and 67% of the Polonnaruwa district engage in paddy cultivation.

The study sample consists of two groups. Paddy Famers and Agrarian Development Officers. The paddy famers living in Rajanganaya area of the Anuradhapura District in the North Central Province were as selected together with Agrarian Development Officers in the area for the study sample. The Agrarian Development Officers are the government officers closely deal with the farmers to facilitate all the matters relating to the farming, fertilizer, loss or damages etc. By including the Agrarian Development Officers to the sample, the researcher attempted to get more precise overall view of the issue from another side. Therefore, following the qualitative research methodology, the researcher selected 25 Farmers and the 12 Agrarian Development Officers (ADO) for the interview to investigate why Paddy Farmers having low insurance awareness on Crop Insurance?

Agrarian Development Officers (ADO)

Table 02: Summary of agrarian development officers

Variable	Category	Frequency
Current situation of Obtaining Crop Insurance	Yes	2%
	No	98%
Providing any compensation to the farmers by ADO	Yes	8
	No	4
Reasons not to take agricultural insurance even though Farmers are aware of it	Low risk	4
	Useless thing	1
	No sufficient income	2
	Low trust	2
	Transportation problem	1
	Bad claim experience	2
	Low claim amount	1
Suggestions to Increase Awareness on Crop Insurance	Need authorized person support	1
	Awareness is done in season meeting	7
	No steps are followed	4

Findings

Sri Lanka, as a developing tropical island nation, is particularly vulnerable to the effects of climate change. As a result, the government places a strong importance on effective risk management and risk transfer systems, notably in the agriculture sector. Crop insurance systems that are effective might help to secure the livelihoods of Sri Lankans as well as the country's food security.

According to research, over 60% of farmers are unaware of crop insurance or have little faith in its performance; additional issues include the insurance schemes' indemnity-based character and the fact that they only cover specific sorts of occurrences and losses. The demand for current insurance plans is significantly low, according to a survey of 25 farmers performed as part of a research study by researcher at chosen places is Rajanganaya in Anuradhapura district. More than 40% of the farmers polled said they don't understand how crop insurance works. During the conversations, the majority of farmers stated that they are unaware of the true benefits of crop insurance for small-scale farmers like them. In rural regions, farmer ignorance appears to be a significant obstacle to insurance adoption. In Rajanganaya area, there is a huge impact from floods. most of the paddy farmers faced that risk. the reason is Rajanganaya dam is situated in this area. Most of the paddy farmers in the sample were only educated for O/L s. Generally, most of the farmers are not well educated. According to this research findings, the total of 40% of farmers who respondents were participate for training programmes, but the rest did not participate in the training programs.

The Agriculture Development Officers take two steps to improve the awareness about crop insurance. First one is they use seasonal meetings to share their knowledge with other farmers as a percentage we can take 58% percent. The second one is, need some of the authorized people to inform crop insurance for farmers as a new face. Then ADO thinks, farmers also join with this than now. It represents only 9% percentage. The other balance part 33% of The Agriculture Development Officers didn't get any action to increase the awareness on crop insurance for farmers.

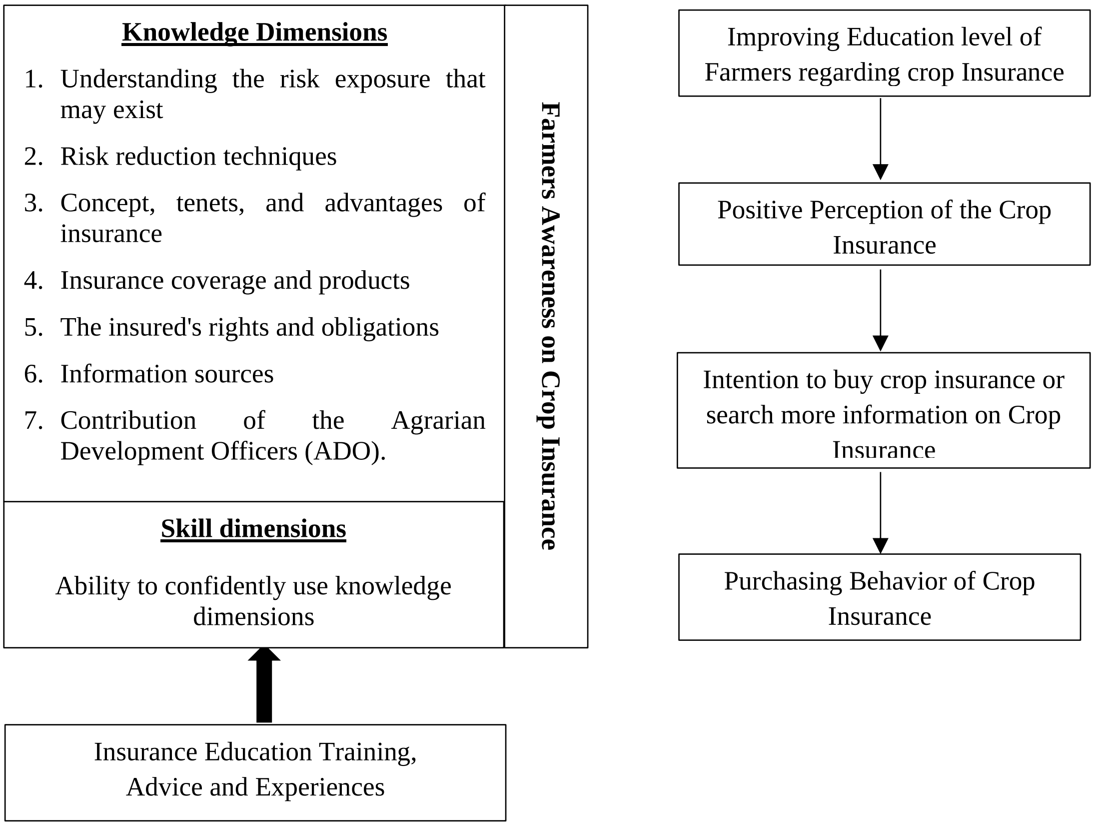

Figure 01: Associations between insurance Awareness, insurance education, behavior and well-being

Hamdan et al. (2019), based on this researcher suggested a framework to examine the associations between insurance literacy, insurance education, behavior, and the well- being. To provide a more reliable measurement, researcher have defined seven insurance knowledge subject categories that should be included.1) Understanding the risk exposure that may exist, 2) Risk reduction techniques,3) Concept, tenets, and advantages of insurance, as well as 4) insurance coverage and products 5). The insured's rights and obligations, and 6). Information sources and 7) Contribution of the Agrarian Development Officers (ADO). Then researcher developed a conceptual framework to get idea how the knowledge/ awareness is affected to buy a crop insurance. when improving the education level of the farmers, it will positively affect to the perception of the crop insurance favorably. Then the farmers intention to buy crop insurance if it is not they will search more information on crop insurance. then finally it will affect to the behavior of the crop insurance.

Conclusion

When researcher considers about the awareness of the paddy farmers regarding the crop insurance it is in low level. According to the findings also same. The researcher of Journal(2017), also founded that a limited numbers of farmers are aware about the crop insurance and Over 60% of farmers are said to be ignorant of crop insurance when it comes to the current situation of crop insurance awareness among paddy farmers. According to the study, more than 40% of the farmers who participated in the poll said they had no idea how crop insurance worked.

According to this research findings, the total of 40% of farmers who respondents were participate for training programmes, but the rest did not participate in the training programs. That farmers have little faith in government initiatives and believe they are a waste of time.

Based on findings and the conclusions of this research, below recommendations were made on the impact of the awareness on crop insurance of faddy farmers in the Rajanganaya area. The Agricultural Development Offices can improve crop insurance knowledge/ awareness of farmers who lives in Rajanganaya area in Sri Lanka by conducting seminars, workshops symposiums and other Medias in order to ensure a better knowledge among paddy farmers, first of all, Agrarian Development Officers should have good understanding about Crop Insurance before informing to the farmers. According to researcher findings it appears that Farmer Development Officers also have lack much awareness, make sure to improve the crop insurance experience of the paddy farmers in Sri Lanka by motivating to purchase the crop insurance cover through the Agrarian Development Officers. Then they can solve the transport problems also, Expand the number of local Insurance officers in charge of the crop insurance, Expand the number of respondents which cavers the all areas of the society in order to have a clear and accurate picture, Extend the time to find respondents in order to meet the criteria for further research.

Researcher had to face following limitations while conducting this study. The time limitation is the main limitation which the researcher had to face. Hence, the researcher had to use a narrow sample to do the study, Researcher had to select a sample only from one area of Sri Lanka but it did not cover the entire people of Sri Lanka due to the hardness of collecting data.

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Life insurance buying intention of middle-class consumers in Sri Lanka

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Introduction

Life insurance companies in the world play a major role for human well-being by providing financial protection for people against unexpected death or accident. All life insurance companies are looking for attract more customers, satisfy and retain them. Since Sri Lankan are having poor insurance literacy, they don't have much motivation to purchase life insurance products. As a result of that case, Sri Lanka shows a lower life insurance penetration when compared with other similar countries. So many reasons affected on such kind of lower purchasing behavior of life insurance policies. Hence, this study aimed to examine the life insurance buying intention of middle-class consumers in Sri Lanka by considering selected four independent factors; insurance literacy, reference groups, beliefs on risk of life and negative emotions towards insurance. The main objective of this study was to examine the level of influence of selected independent variables; insurance literacy, reference groups, beliefs on risk of life and negative emotions towards insurance on the dependent variable; life insurance buying intention of middle-class consumers in Sri Lanka. Furthermore, this study was mainly based on the Theory of Planned Behavior (TPB).

Previous studies were done in different contexts related to this topic area. A study conducted by (Weedige et al., 2019) investigated the influence of insurance literacy on buying decision of personal insurance. Findings of this study revealed that behavioral intention significantly and positively influenced by insurance literacy. The results of the study conducted by (Driver et al., 2018) revealed that less insurance literacy influenced on less purchasing decision towards personal insurance. A study conducted by (Poh & Chin, 2017) showed that family and peer influence significantly influenced on perception towards life insurance. The findings of the study conducted by (Keat et al., 2020) highlighted that social influences significantly impacted on life insurance purchasing intention. A study conducted by (Chiappori & Salanié, 2003) identified that more risk averse individuals were more likely to purchase insurance. A study conducted by (Yang et al., 2020) identified that there was a significant relationship between the risk perception and the willingness to purchase hazard insurance. Findings of the study conducted by (Ghasemaghaei et al., 2016) revealed that there was a negative relationship between consumers' negative attitudes and customer attraction.

Methodology

In this study, quantitative research method was used to identify the influence of selected independent variables on the dependent variable. The purpose of this study was testing hypothesis. This study tried to identify the cause-and-effect relationships using the same natural environment. The researcher tried to identify the relationship between the dependent variable and the independent variables. This study was a cross-sectional study since the data in this study were gathered just once. Individuals have been selected as the unit of analysis. In this study, data were collected from individuals who were middle-class consumers in Sri Lanka. This study followed deductive research approach. To achieve the research objective, the researcher used a representative sample consist with 100 respondents who were middle-class consumers in Sri Lanka. This study mainly depended on the source of primary data. The researcher gathered primary data from respondents through an online questionnaire. Further used SPSS software program as the data analysis tool and used multiple regression analysis as the data analysis method.

Based on the previous evidences, the researcher developed the conceptual model for this study.

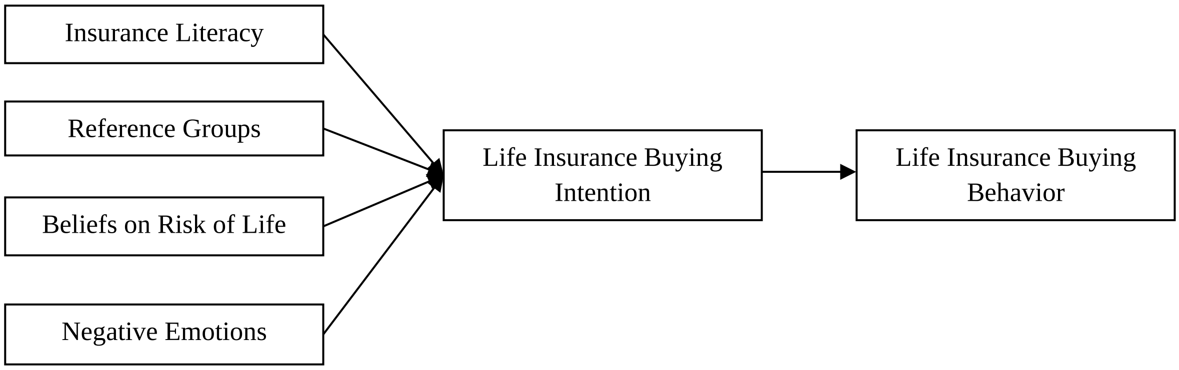

Figure 1. Conceptual Framework

Source: Developed by the Researcher, 2022

Four hypotheses were developed by the researcher;

H_1: Insurance Literacy significantly and positively influence on Life Insurance Buying Intention.

H_2: Reference Groups significantly and positively influence on Life Insurance Buying Intention.

H_3: Beliefs on Risk of Life significantly and positively influence on Life Insurance Buying Intention.

H_4: Negative Emotions significantly and negatively influence on Life Insurance Buying Intention.

Findings

Majority of the respondents were female. It was 62% from the total respondents. 68% of the total respondents were in the age group of 18-29 years. Out of total respondents, 69% were in single status. Majority (77%) of the total respondents were Sinhala. 69% of respondents had a Bachelor's Degree. Out of total respondents, 45% of respondents earned below Rs. 30,000 monthly incomes. Half (50%) of respondents had a life insurance policy and other half of respondents didn't have a life insurance policy.

According to the findings of reliability analysis, Cronbach's Alpha value for each variable showed as greater than 0.8. It can be concluded that there was an excellent internal consistency in the data set. According to factor analysis, Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.835. Since it was greater than 0.5, validity of the data set was good. Since skewness and kurtosis values were between -1 and +1 and z values of the skewness and kurtosis were between -1.96 and +1.96, it can be concluded that data were normally distributed. Variance Inflation factor (VIF) for each variable showed as less than 5. According to results of multicollinearity analysis, it can be concluded that there were no collinearity issues in this research model. Further, the researcher identified that there was the goodness in this data set.

Table 1 shows the results of the multiple regression analysis.

Table 1: Multiple Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Result/ Decision
	B	Std. Error	Beta			
(Constant)	1.152	.422		2.731	.008	
Insurance Literacy	.140	.124	.133	1.135	.259	H_1 : Rejected
Reference Groups	.232	.092	.233	2.516	.014	H_2 : Accepted
Beliefs on Risk of Life	.488	.113	.437	4.328	.000	H_3 : Accepted
Negative Emotions	-.197	.074	-.199	-2.660	.009	H_4 : Accepted

Source: Survey Data, 2022

Table 1 shows that Sig. value of the independent variables except the variable of insurance literacy were lesser than 0.05 ($P<0.05$). Since Sig. value was lesser than 0.05, researcher identified that reference groups, beliefs on risk of life and negative emotions towards insurance had a significant impact on life insurance buying intention. But Sig. value of insurance literacy was greater than 0.05 ($P>0.05$). Hence, there was no significant impact of insurance literacy on life insurance buying intention. According to table 1, insurance literacy, reference groups and beliefs on risk of life showed positive B coefficients. Then researcher in this study identified that those three variables had a positive impact on life insurance buying intention. But negative emotions towards insurance showed a negative B coefficient and that variable had a negative impact on life insurance buying intention.

In this study, findings related to the variable of insurance literacy revealed that insurance literacy positively but not significantly influenced on life insurance buying intention. That findings not aligned with the study carried out by (Weedige et al., 2019). That's why findings of (Weedige et al., 2019) revealed that consumers' insurance literacy significantly and positively influenced on consumers' favorable attitude towards personal insurance. But findings of this study aligned with the study conducted by (Tennyson, 2011). In this study, findings related to the variable of reference groups revealed that reference groups positively and significantly influenced on life insurance buying intention. That findings aligned with the studies conducted by (Poh & Chin, 2017) and (Keat et al., 2020). In this study, findings related to the variable of beliefs on risk of life revealed that beliefs on risk of life positively and significantly influenced on life insurance buying intention. That findings aligned with studies carried out by (Ben-Zur & Zeidner, 2009), (Outreville, 2015) and (Chiappori & Salanié, 2003). In this study, findings related to the variable of negative emotions revealed that negative emotions towards insurance negatively and significantly influenced on life insurance buying intention. That findings aligned with the study conducted by (Ghasemaghaei et al., 2016).

Conclusion

The objective of this study was to examine the influence of insurance literacy, reference groups, beliefs on risk of life and negative emotions towards insurance on life insurance buying intention of middle-class consumers in Sri Lanka. Based on the findings of this study, researcher concluded that reference groups, beliefs on risk of life and negative emotions towards insurance significantly but insurance literacy not significantly influenced on life insurance buying intention of middle-class consumers in Sri Lanka. Also researcher concluded that insurance literacy, reference groups and beliefs on risk of life positively but negative emotions towards insurance negatively influenced on life insurance buying intention of middle-class consumers in Sri Lanka. Based on the Theory of Planned Behavior (TPB), researcher concluded that positive life insurance buying intention positively impacted on life insurance buying behavior.

Based on the findings of this study, researcher recommended that life insurance companies should make aware the general public about life insurance and they should try to build trust among clients towards life insurance. Researcher had to face some limitations while conducting this study. Time limitation was the main limitation which had to face by the researcher. Due to the time limitation, the sample size was restricted to only 100 respondents. Moreover, this study only focused on individuals who were middle-class consumers in Sri Lanka. Furthermore, researcher only selected four independent factors to investigate the life insurance buying intention.

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Customers' perceived justice in motor insurance claims settlement on customer switching behavior in Sri Lanka

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Introduction

Every vehicle owner has a risk of getting affected by life and life security threats. Due to the uncertainty of the life threats, people struggled to find a solution to secure their lives and dependents. As a result, demand for Motor insurance covers were recognised as the most emerging trend. And also, it is statutorily mandated in Sri Lankan vehicle owners should have minimally Third-party motor insurance cover. Having a motor insurance policy provides protection against accidents and protection on consequential effects on the said accidents such as financial, medical and personal protection, and also Safeguard the investment made on vehicles, it Provides financial compensation to cover liability for any injuries caused by the driver or owner of a vehicle to other people or their property, it pays for damage repairs, due to theft or natural disaster, Strengthen peace of mind of the insured every time and Promoting road safety and reduce road collisions are the importance of having Motor insurance. And also motor claims can be high frequent than other insurances. Because of the high risk of accidents, one policy holder can often make claims several times a year. In such cases, the insurance company is liable to settle the claims. Issues of service quality, settlement delays, pricing problems and unfair practices are the main reasons for switching to another company. Customer feel that he doesn't achieve the reasonable or fair justice at the time of claim settlement. Maybe it is a lack of knowledge about the insurance policy. Therefore, that is harder to long term retention of motor policy holders and significant issue in the motor insurance industry. Hence, the research problem of this study includes "How about the opinion on claim settlement and did they get justice that effect on customer switching behavior with reference to motor insurance policy holders of insurance companies in Sri Lanka"

Main objective of this study is to assess the impact of customers' perceived justice in motor insurance claims settlement on customer switching behavior in Sri Lanka. Author has used payment equity, service quality, perceived value as independent variables and customer switching behaviour as dependent variable and perceived justice got as the moderator. And also used 125 customers who are having after claims settlement experience in three leading motor insurance companies which are operating in Sri Lanka. The study will also serve as a source of valuable information that can help understand the factors that lead to relevant customer transfers. If they are genuinely fair, or if the insurance company is fair, but consumers are not impressed, then they focus on actions that can be taken. The study essentially reveals the dimensions of service quality that are considered. Therefore, this will support the advancement of the insurance industry and the management strategic decisions of several critical areas of their business. Furthermore, the findings and results of this study will provide valuable insights and reliable guidance to policy makers such as government agencies such as the Insurance Regulatory Commission of Sri Lanka, as well as to clients, investors, and corporate employees in particular, while monitoring the impact of operations on the general insurance industry.

The literature review of this study is a descriptive explanation regarding the previous studies done by various researchers relating to the research area of "customers' perceived justice in Motor insurance claim settlement on customer switching behavior".

Methodology

This study was conducted based on a research question, the author has followed the deductive research approach and review the literature regarding the customer switching behavior in motor insurance industry in Sri Lanka, and the hypotheses are developed accordingly. To conduct and study the research findings, author has used data of three leading motor insurance companies which are operating in Sri Lanka and were gathered 125 sample data sets. This will provide a more credible scientific step and perspective for describing and evaluating their customer feedback and satisfaction on claims through the findings and results that help general insurance companies manage and succeed. In this study, the researcher mainly depended on the source of primary data. In addition, researcher obtained secondary data from previous published journal articles, e-books, case studies and web based resources related on this study. The author has used the SPSS 20 Software program to analyse the main tests such as Correlation and regression model. Reliability test, validity test, normality test and multicollinearity tests were done to test the goodness of the data and questionnaire which are supported to take the final findings.

Regression equation can be express as follows;

Main Model

Customer Switching Behavior (SB) = $\beta 0 + \beta 1\ PE + \beta 2\ SQ + \beta 3\ PV + \beta 4\ PJ + \varepsilon i$

PE = Payment Equity, SQ = Service Quality, PV = Perceived Value, PJ = Perceived Justice

Sub Models

Customer Switching Behavior = $\beta 0 + \beta 1\ PE + \beta 2\ SQ + \beta 3\ PV + \varepsilon i$

Perceived Justice = $\beta 0 + \beta 1\ PE + \beta 2\ SQ + \beta 3\ PV + \varepsilon i$

Customer Switching Behavior = $\beta 0 + \beta 4\ PJ + \varepsilon i$

Based on the empirical and theoretical justifications, the researcher developed the conceptual framework of this study as follows;

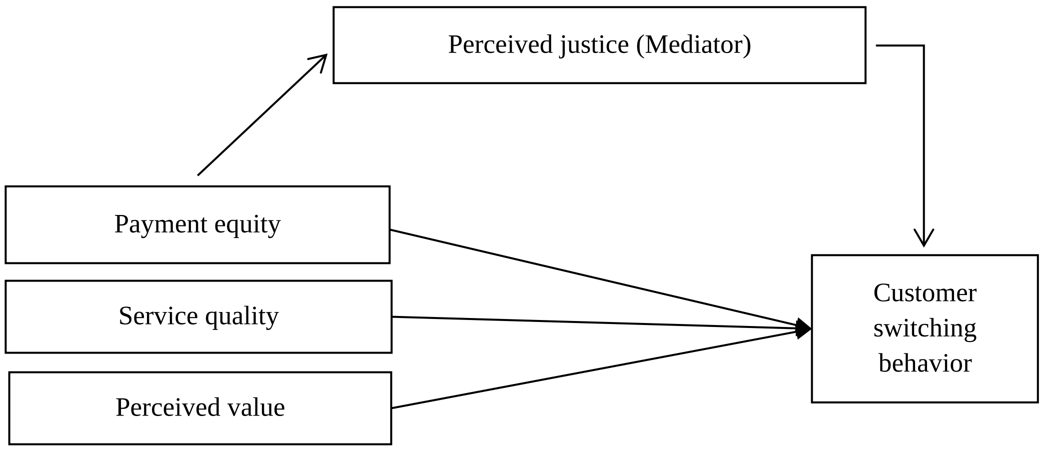

Figure 11: Conceptual Framework

Findings

The researcher was chosen three independent variables (payment equity, service quality and perceived value) and one dependent variable (consumer switching behaviour). In addition, perceived justice was taken as mediating which were influenced to the Motor insurance switching behavior.

The actual sample of this study was 125 respondents. Among 125 respondents, majority of the respondents were Male. It was 60% of the total respondents. 48.8% respondents were in age group of 25-34 age group. Among the 125 respondents, 100% of the respondents are having a Motor insurance policy. So, all the respondents who are having a Motor insurance policy and having claim settlement experience are examined by this study. According to tests which have been done for testing the goodness of the data and the questionnaire, researcher proved that there is the goodness of data. In addition, researcher identified that selected three independent variables were good for the research model.

Table 15: Summary of the Correlation Analysis

Independent Variables	Correlation value	Significance value	Relationship exhibits with purchase intention
Payment equity	0.328**	0.000	Significant moderate positive relationship
Service quality	0.310**	0.000	Significant moderate positive relationship
Perceived value	0.352**	0.000	Significant moderate positive relationship

Source: SPSS output

Based on the correlation and regression analysis, there is significant positive relationship exist between payment equity and customer switching behavior. Previous studies also supported with this findings according to (Lakmal, 2020). There is significant positive relationship exist between service quality and customer switching behavior. But, the previous studies not supported with this according to the findings of (Clemes et al., 2010). There is significant positive relationship exist between perceived value and customer switching behavior. Previous studies also supported with this findings according to (Ellyawati et al., 2012). Perceived justice mediates the relationship between selected factors and customer switching behavior. Previous studies also supported with this findings according to (Ellyawati et al., 2012)

The results of this study the factors significantly and positively affect to the customer perceived justice in Motor claims settlement on customer switching behavior.

Table 2:Coefficient value table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.159	.299		7.213	.000		
	Payment Equity	.041	.215	.044	.192	.848	.141	7.105
	Service Quality	-.019	.183	-.021	-.105	.916	.190	5.274
	Perceived Value	.334	.234	.331	1.427	.156	.135	7.422

a. Dependent Variable: Switching Behavior

As per above coefficient values of research variables, the researcher revealed the influence of chosen factors on customer switching behavior and developed mathematical equation.

$$Switching\ Behavior = (2.159) + (0.041)PE + (0.019)SQ + (0.334)PV + \varepsilon$$

Table 3. Impact of service recovery factors and perceived justice on customer switching behavior

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.192	.292		7.518	.000
	Service Recovery	.633	.232	.632	2.725	.007
	Perceived Justice	.291	.217	.312	1.343	.182

a. Dependent Variable: Switching Behavior

Based on above table, Unstandardized Coefficients and standard error for Service Recovery (Payment equity, service quality, and perceived value) were 0.633 and 0.232 respectively Then the researcher performed Sobel test identify mediator effect on customer switching behavior.

Table 4. Sum up of Sobel test calculation

a	0.998
b	0.633
S_a	0.035
S_b	0.232
Sobel test statistic	2.7160
Two-tailed probability	0.0066

Based on above result, the researcher concluded consumer attitudes act as mediating effect for determining customer switching behavior (P < 0.05).

Conclusion

This study was conducted to investigate the influence of selected three independent variables; payment equity, service quality and perceived value to the customer perceived justice in Motor insurance claims settlement on customer switching behavior in Sri Lanka. Sample of 125 respondents; customers who are having Motor insurance policy & claims settlement experience in three leading motor insurance companies in Sri Lanka was used to examine the impact of selected independent variables on the dependent variable (switching behavior). Researcher developed hypothesis based on the previous research studies in order to achieve the objectives of the study.

Then how chosen independent variables shaped an influence on the consumer switching behaviour was analyzed by means of statistical techniques. Correlation and regression analysis were utilized as inferential techniques. Reliability test, validity test, normality test and multicollinearity test were done to test the goodness of the data and questionnaire. according to those tests, researcher identified that there is the goodness of the data. Furthermore, Multiple regression analysis was used to achieve the main objective of the study.

As per descriptive statistics, Mean rank values for the switching behavior, payment equity, service quality, perceived value and perceived justice were reported as 3.28, 3.17, 3.38, 3.26 and 3.27 respectively and it more often than not came under neutral with the indicators relates to those research variables (Average rank value lied among 3.40 – 2.60 range).

As per correlation analysis, there was moderate positive relationship existed between selected independent variables and with consumer switching behavior. Those relationships were statistically significant.

The degree of goodness of fit of the regression model reported over 10.3 % of variance of the dependent variable (consumer switching behavior) also could describe by the regression model. Altogether, selected three independent variables created significant impact on consumer switching behavior. The researcher identified each factor created positive impact on consumer switching behavior.

According to regression analysis and Sobel test, the researcher identified perceived justice act as a mediator for determines consumer switching behavior.

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Organizational factors affecting job satisfaction of life insurance sales staff; with special reference to Kandy district

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Introduction

At present, the main challenge of the management of an organization is implementing successful human development strategies with the aim of enhancing organizational performance and productivity (Anita, 2012). Job satisfaction can be identified as a main reason that influence the productivity and performance of an employee and organization. The success of a company depends on customer satisfaction. Customer satisfaction has a direct relationship with job satisfaction (Anita, 2012). Because, when an employee is satisfied with their job, they become more committed to the company and aims at delivering higher customer satisfaction. Thus, the management of an organization mainly focuses on the level of job satisfaction among its employees.

According to Locke E. A (1969) even though there are many researches on the study of Job satisfaction and dissatisfaction, the understanding of this area of study has not yet advanced parallel to all those efforts. Many kinds of research focus on the job satisfaction of the employees of various industries and various companies in various countries. Yet, there are only a handful of researches that focus on the job satisfaction of the employees in the insurance industry. When the Sri Lankan context is considered, this number is quite a few.

Even though in Sri Lanka, the insurance industry is not prominent as in many other countries, job satisfaction of the employees of this sector too must be considered given that they face many challenges and difficulties with the sales targets and the negative perception of the society towards insurance, mainly life insurance.

The insurance sales staff is the group that maintains a direct relationship with the customers and have to face high competition when achieving their sales targets. Insurance is considered an unsought good and the responsibility of selling the product vests upon the sales staff. The remuneration and the other monetary benefits and chance for promotion of life insurance sales staff depend on achieving sales targets.

The factors that influence the job satisfaction of an employee depend on personal factors and organizational factors. Personal factors can be listed as age, gender, education, and income level etc. Organizational factors can be listed as salary and wages, personal growth opportunities, work environment, work stress, and supervisor support. The factors that motivate insurance sales staff may differ compared to the other members of an insurance company. So, it is vital for an insurance company to clearly understand the factors that affect the job satisfaction of their insurance sales staff, especially the job-related factors such as salary and wages, an opportunity for personal growth, work environment, work stress, and supervisor support.

Accordingly, the objective of this study is to find out the organizational factors which affect the job satisfaction level of the life insurance sales staff of Kandy district, Sri Lanka,

Methodology

This research was quantitative type and descriptive nature in the research design. The researcher has identified the job satisfaction level of the life insurance sales staff as dependent variable and salary, growth opportunities, work environment, job stress, and supervisor support as independent variables. The following conceptual framework is developed by the researcher based on the literature.

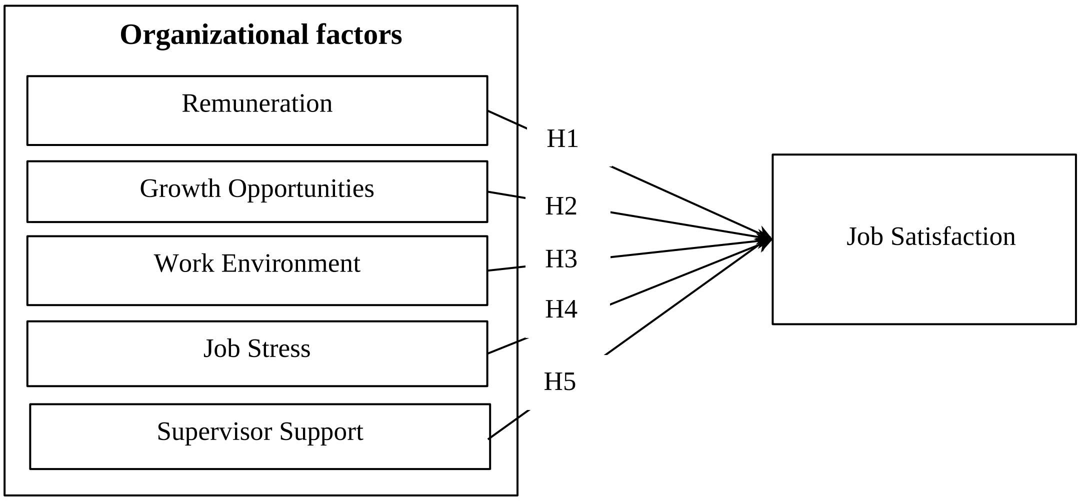

Figure 1. Conceptual Framework

Source: Researcher Constructed, 2022

The researcher has developed the following hypotheses according to the conceptual framework.

H1 : There is a relationship between remuneration and job satisfaction level of the life insurance sales staff.

H2 : There is a relationship between growth opportunities and job satisfaction level of the life insurance sales staff.

H3 : There is a relationship between work environment and job satisfaction level of the life insurance sales staff.

H4 : There is a relationship between job stress and job satisfaction level of the life insurance sales staff.

H5 : There is a relationship between supervisor support and job satisfaction level of the life insurance sales staff.

The researcher has used primary data for this study. The primary data was collected from the standard questionnaire distributed through online platforms. The standard questionnaire consisted of closed, open-ended, and opinion-behaviour-attribute questions. A nominal scale and five-point Likert scale ranging from strongly disagree to strongly agree have been used to measure the questions collected from the respondents. The population of this study was life insurance sales agents in Kandy District and according to (Sekaran, 2003)Sekaran (2003), 249 life insurance sales agents have been selected as the sample using a convenience sampling technique. The collected data was analysed using SPSS version 26. Kaiser-Meyer-Olkin test was used to identify the sampling adequacy. The normality test was used to identify whether the observation is normally distributed. Skewness and Kurtosis values were used to identify the normality. The multicollinearity test was used to identify the relationship among each and every independent variable. The tolerance and VIF values have been used to identify multicollinearity. Pearson correlation analysis was used to measure the developed hypotheses.

Findings

The goodness of the set of data was established through the results of the reliability and normality tests. The following diagram shows the results of the reliability tests.

Table 1: Results of the reliability test

Variable	Cronbach's Alpha	No.of items
Job satisfaction	0.895	4
Remuneration	0.903	4
Growth opportunities	0.886	4
Work environment	0.886	4
Job stress	0.908	4
Supervisor support	0.914	4

According to the table 1 all the independent variables have a value that is greater than 0.8 and it indicates that the reliability of the variables is excellent.

Table 2: Statistics of Normality and Multicollinearity

Variables	Normality Statistics		Multicollinearity Statistics	
	Skewness	Kurtosis	Tolerance	VIF
Job satisfaction	-1.555	-1.694		
Remuneration	-1.470	1.763	0.221	4.519
Growth opportunities	-1.242	.725	0.175	5.700
Work environment	-1.335	1.292	0.181	5.518
Job stress	-1.341	1.345	0.179	5.599
Supervisor support	-1.498	1.563	0.190	5.275

Source: Researcher Constructed, 2021

Pearson correlation analysis was used to identify the relationship between the dependent variable and the independent variables. The summary of the Pearson correlation and the hypothesis results was included in Table 3.

Table 3: Correlation Analysis and Hypothesis Result

	Pearson Correlation	Significance	Relationship	Hypothesis result
Remuneration (H_1)	0.859	0.000	Strong	Accepted
Growth opportunities (H_2)	0.858	0.000	Strong	Accepted
Work environment (H_3)	0.846	0.000	Strong	Accepted
Job stress (H_4)	0.804	0.000	Strong	Accepted
Supervisor support (H_5)	0.835	0.000	Strong	Accepted

Source: Survey Data,2022

Correlation coefficients between .10 and .29 represent a small association, Coefficients between .30 and .49 represent a medium association, and Coefficients of .50 above represent a strong relationship (*Cohen et al.*, 2003).

There are two conditions that must be fulfilled when testing alternative hypotheses as values should not be equal to zero and p-values should not be greater than 0.05 ($P < 0.05$). According to Table 3, the researcher can accept all the alternative hypotheses because of fulfilling both conditions. Further according to table 03 remuneration, growth opportunities, work environment, job stress, and supervisor support are significantly (positively) and strongly related to job satisfaction.

Conclusion

According to the analysis, all alternative hypotheses were accepted. Remuneration, growth opportunities, work environment, job stress, and supervisor support have a significant strong relationship with job satisfaction of life assurance sales agents. Companies can provide a satisfactory remuneration and other benefits for the life insurance sales staff to increase the level of job satisfaction them. The supervisors can support and encourage their team members the working environment can be improved including the physical conditions. The sales targets must be based on the designation and the skills of the agent so that their job satisfaction can be improved. The organizations must provide satisfactory training opportunities and opportunities for promotions of life assurance sales agents. The job responsibilities of the sales agents must be clearly defined.

In this study researcher aimed to find out the relationship between five organizational factors and job satisfaction of life assurance sales staff in the Kandy District. However, there are personal factors and some other institutional factors that affect the job satisfaction of life insurance sales staff. Further, the results are based on a study performed in only one district of Sri Lanka. Therefore, these limitations have created new opportunities for future researchers.

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Impact of marketing mix strategies on sales performance of life insurance companies in Sri Lanka

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Introduction

This study primarily focuses on the effectiveness of marketing mix strategies on the sales performance of life insurance companies in Sri Lanka. The existing scientific literature evidence that only limited studies have been carried out to study the effect of marketing mix strategies despite their importance on life insurance demand in Sri Lanka. The insurance industry plays a vital role in the financial sector and the overall economy. Accordingly, the stability of the Insurance Industry, especially the Life Insurance Industry, is more important for any economy's development, success, and stability. Many insurance companies in Sri Lanka have developed specific strategic plans to increase their businesses as a strategy to increase the level of penetration in the Sri Lankan insurance industry. Additionally, life insurance companies have used various methods to improve their sales performance, but the argument is that the major contributor to sector performance is the marketing strategies adopted by insurance companies. It is important to emphasize that good marketing practices are essential for insurance companies to effectively play a key role in the overall development of the country. According to the background information of this study the performance and achievements of many insurance companies largely depend on the use of effective marketing strategies tailored to customer needs among other strategies. This argument makes it clear that developing and implementing an effective marketing strategy is a very important task for an organization.

There are several previous studies which have done parallel relating to this topic area. The study of Mustafa (2018), registered a positive relationship between product and promotion as a marketing strategy and company performance at 0.638 and 0.176 respectively. It is critical for any insurance company to effectively diversify and increase its market share investment in product innovation. All the components of the marketing mix in 4P, help to achieve the corporate objectives of maximizing profits with a high sales volume and gaining a high market share (Singh, 2012). Keramati, Ardalan, and Ashtiani (2012) researched that the marketing mix has a significant correlation with sales performance. This means that all assumptions are supported, and that there is a relationship between product, price, promotion and location as a marketing mix with sales performance as a marketing strategy. Dastak and Aligholi (2014) showed that products, personnel, promotion and training, physical evidence, price and other costs of insurance policies have a significant influence on the purchase and sale of insurance policies of Insurance Companies.

Methodology

In this study, the quantitative research method is used to identify the influence of selected independent variables; Product strategies, Price strategies, Place strategies, and Promotion strategies on the dependent variables; (Sales Performance) Sales Volume and Profitability of life insurance companies in Sri Lanka.

The researcher uses the Morgan sample size table to determine the sample size. According to Morgan's table, the sample was selected which came to 320 employees were selected as the population and the selected sample was 175 individuals from the population by using a simple random sampling technique. There were 169 effective respondents and 06 respondents did not give their responses.

This study was conducted through an online questionnaire as the primary data collection method by covering all life insurance companies in Sri Lanka, exclusively for employees working in the alternative channel / sales department of head offices in the life insurance companies in Sri Lanka, because they are having a better knowledge and experience in marketing activities. The research design used was descriptive survey study. The respondents were asked to answer all items in the questionnaire based on five-point Likert-type scales. IBM SPSS (Statistical Package for Social Sciences) statistical software version 26 was used for data display and analysis. It stands out as an approachable tool.

Figure 01 shows the conceptual framework used by the researcher to analyze the effectiveness of marketing mix strategies on the sales performance of life insurance companies in Sri Lanka.

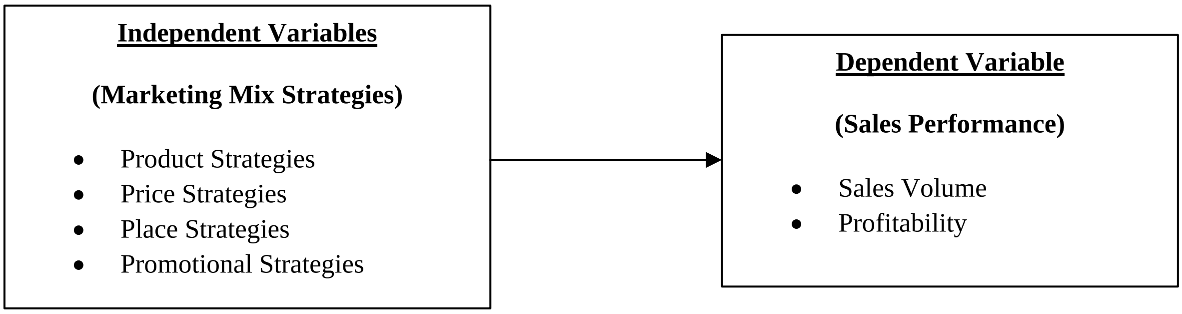

Figure 1: Conceptual Framework

Source: Developed by researcher

The researcher examines the significance of the results of the study and the research model. Further, the researcher obtained the coefficients of each variable and developed the multiple regression model. Finally, the researcher tests four hypotheses related to four independent variables.

H1; Product strategies are significantly and positively effect on sales performance of Life Insurance Companies in Sri Lanka.

H2; Price strategies are significantly and positively effect on sales performance of Life Insurance Companies in Sri Lanka.

H3; Place strategies are significantly and positively effect on sales performance of Life Insurance Companies in Sri Lanka.

H4; Promotion strategies are significantly and positively effect on sales performance of Life Insurance Companies in Sri Lanka.

After examining the direction of the relationship between the dependent and independent variables, the researcher conducted a multiple regression analysis. The following model is utilized to test the aforementioned hypothesis,

$SP = B_0 + B_1P_1 + B_2P_2 + B_3P_3 + B_4P_4$

Where;

SP = Sales Performance, P_1 = Product Strategies, P_2 = Price Strategies, P_3 = Place Strategies, P_4 = Promotion Strategies

Findings

The researcher used Regression analysis, ANOVA, validity and reliability tests. Furthermore, to measure the reliability of the variables of the study the researcher used Cronbach's Alpha separately for the marketing strategies (product strategies, price strategies, place strategies and promotion strategies) are 0.808, 0.914,0.893 and 0.814. According to the frequency statistic table, the all-independent drivers as well as dependent driver of the Sales performance are approximately normal due to the skewness value of the variables (drivers) are within the range of -2 and +2 and all are negatively skewed and kurtosis shall be near +3. This result leads the study with the parametric for individual driver analysis. Then it indicates all of the data is normally distributed.

Table 1: Results of Correlation Analysis

Variables	Pearson's Correlation Coefficient	P- Value
Product Strategies	.792	.000
Price Strategies	.739	.000
Place Strategies	.801	.000
Promotion Strategies	.758	.000

Source: Survey data, 2022

As the table above reveals, all the Pearson correlation values consisted of positive signs. The relationship between all variables was statistically significant (P<0.01). Based on the correlation analysis, study has accepted the alternative hypothesis and reject the null hypothesis under the 5% of significance level. It means that the changes in independent variables significantly impact sales performance of life insurance companies in Sri Lanka and the place strategies are the most significant variable in the estimated model. P value is less than 0.05 (05%) and hence it is evident that the overall goodness of the formula exists. The model can explain 68.30% (R squared) of variation out of the total variation of the model. Further, when adjusted for number of variables, the model can explain 68.30% of the total variation.

Table 2: Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.064	0.123		0.518	0.048		
	Product	0.222	0.084	0.214	2.648	0.008	0.127	7.886
	Price	0.353	0.062	0.271	5.714	0	0.37	2.701
	Place	0.522	0.117	0.504	4.465	0	0.653	1.31
	Promotion	0.115	0.419	0.18	3.472	0.006	0.575	4.066

a. Dependent Variable: Sales Performance

Source: Survey data, 2022

Durbin-Watson statistic is 1.936, which is approximately equal to the + 02. Therefore, there is no any auto correlation between variables. Additional, Tolerance of each variable > 0.10 and VIF < 10. These results indicate that there is no Multi – Collinearity on independent variable.

Below research model can be developed according to the results.

$$SP = 0.064 + 0.222\,P_1 + 0.353\,P_2 + 0.522\,P_3 + 0.115P_4$$

According to the regression results; the independent factors such as Product Strategies (Regression Coefficient 0.222), Price Strategies (Regression Coefficient 0.353), Place Strategies (Regression Coefficient 0.522) and Promotion Strategies (Regression Coefficient 0.115), have a significant impact on employee performance: reference to Life Insurance companies in Sri Lanka, at 5% level of significance.

Conclusion

The purpose of the study was to identify the impact of marketing mix strategies on sales performance of life insurance companies in Sri Lanka. According to the regression results, the most significant independent variable that impacts sales performance is place strategies and all marketing mix variables positively and significantly impact on sales performance of life insurance companies in Sri Lanka.

A wide range of users will be informed about the impact of marketing mix strategies on company performance. This research will help the investors and management of life insurance companies to make proper decisions, manage the risks associated with the companies and increase the profitability and sales performance of life insurance companies in Sri Lanka.

Researcher recommended to, the management of Sri Lankan life insurance companies should adopt good and quality strategies in their products and services, insurance companies should endeavor to ensure that they adopt affordable pricing strategies, should be expanded companies sales force, should keep all rounded personal profile of customers to retrieve easily whenever needed, marketing promotion should be further expanded by using online platforms.

Due to limitations of time and scope, the study is limited to only one area of life insurance. If the study could be expanded to include more industries and variables (7 P's), and also by including the use of secondary data to confirm the extent to which sales performance in terms of profitability is affected by marketing strategies the results would be more reliable.

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Rising motor insurance premiums and policyholders' attitude towards insurance fraud in Sri Lanka

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Introduction

Insurance fraud is a deliberate deception perpetrated against or by an insurance company or agent for the purpose of financial gain. It is reported that, globally, 10% of all insurance claims filed by consumers are fraudulent, with the insurer detecting only one-fifth of these false claims (CAIF, 2022). As per the Insurance Regulatory Commission of Sri Lanka (2019), the motor insurance business had the highest net earned premium, which amounted to LKR 58,753 million and represented 71.27% of the total net earned premium, indicating a 3.27% increase over the same period in 2018. Furthermore, the motor insurance business maintained its position as the largest subsector of net claims incurred in 2019 amounting to LKR 34,704 million, representing 59.39% (2018: 66.04%) of total claims incurred, resulting in a net claims ratio of 59.07% (2018: 60.96%). But in 2019, the net claims ratio has been reduced by 1.89%. However, compared to the four years of consecutive double-digit growth, the motor insurance has reported the lowest growth rate of 2.20%. This was primarily due to a decrease in personal vehicle imports combined with an increased tax structure on most categories of personal vehicle imports in the Government Budget 2019.

Aside from the obvious economic impact on motorists, the cause of these increases in motor insurance costs is widely debated, with varying degrees of blame being assigned to various stakeholders such as insurers, the legal profession, and government regulations such as import restriction policies, and fraudulent claimants. It was recently reported that motor insurance premiums are rising while the number of claims are decreasing (IRCSL, 2019). It may also give the impression that insurers are raising prices unfairly despite of falling cost of claims. These increases in automobile insurance premiums, combined with negative news stories about the insurance industry, appear to have harmed insurers' reputations. Previous research has shown that when people have a negative attitude toward the insurance industry, they are more tolerant of insurance fraud (Tonenciuc, 2015). Increased tolerance for insurance fraud is positively correlated with the frequency of motor injury claims (Cummins & Tennyson, 1992) which has a direct impact on motor insurance costs. However, there is a dearth of studies that capture the relationship between cost of motor insurance to the policy holder and the attitude toward insurance fraud. Therefore, this study sought to assess whether rising motor insurance premiums have an impact on policy holders' attitude towards insurance fraud.

Methodology

The study used primary data to assess the association between cost of motor insurance to the policy holder and attitude towards fraud. Quantitative research techniques were used to collect data. An online questionnaire was designed using Google Forms and distributed along with a covering note. The questionnaire contained several sections from demographic information to information and perceptions related to motor insurance policies. Non-probability convenience sampling strategy was used to gather data, which is advised when time and money are limited (Saunders et al., 2008). The population of the study was all the motor insurance policy holders in Sri Lanka whereas the sample size was limited to 391 online survey respondents. Morgan Table was used to determine the sample size (Krejcie et al.,1996).

Independent variable of the study is the cost of motor insurance to the policy holder as measured by the value of the policy based on the vehicle to be insured. The attitude to commit insurance fraud is the dependent variable and it was measured using several questions about perceptions of customers towards committing an insurance related fraud. Perceived fairness was measured using six questions in which later was converted to a single variable using factor loading. The other moderating variable was the number of years of driving experience.

Figure 01 shows the conceptual framework used by the researcher to analyze the relationship between growing motor insurance premium and policyholders` attitudes towards insurance fraud.

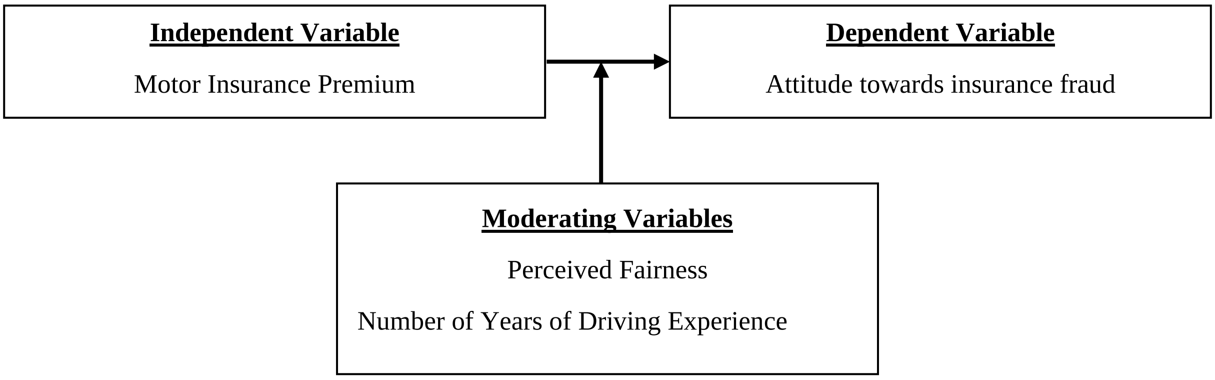

Figure 1. Conceptual Framework

Further, following hypotheses were used in this study.

H1: There is an impact of the cost of motor insurance policy on customers' attitude to commit a fraud.

H2: There is an impact of perceived fairness on customers' attitude to commit a fraud.

H3: There is an impact of number of years of driving experience on customer attitude to commit a fraud.

The following model is utilized to test the aforementioned hypotheses

$$FA_i = \beta_0 + \beta_1 CP + \beta_2 PF + \beta_3 DE + \varepsilon$$

Where; FA = Customer Attitude to commit a Fraud, CP = Cost of Motor Insurance Premium, PF = Perceived Fairness, DE = Number of years of Driving Experience, E = Error Term

Findings

The researcher used Regression Analysis, ANOVA, validity and reliability tests. To measure the reliability of the variables of this study, the researcher uses "Cronbach's Alpha" separately for the independent variable of perceived fairness as well as for the dependent variable of Customer attitude towards insurance fraud. Cronbach's Alpha value for perceived fairness and Customer attitude towards insurance fraud are 0.768 and 0.875 respectively. This indicates that the responses of the survey respondents are reliable as per the statistic.

Further to the inter rater reliability, correlation analysis was also conducted to measure the direction and the degree of the association between considered independent and dependent variables. As per the correlation analysis, Perceived Fairness have a negative correlation with the dependent variable whereas cost of motor insurance premium and the number of years of driving experience have a positive correlation with the attitude towards insurance fraud. Study of Walker & Baker (2000) supports this conclusion.

Table 01 presents the descriptive statistics for all variables adopted in estimating the impact between growing motor insurance premiums and attitudes towards insurance fraud.

Table 16: Descriptive statistics of the variable

	CP	PF	DE	FA
Median	3.00	3.20	3.20	3.00
Range	2.60	2.20	2.80	3.17
Variance	0.354	0.262	0.375	0.450
Mean	3.0719	3.1948	3.2328	3.0838
Std. Deviation	0.59488	0.51177	0.61255	0.67079

Source: Survey Data (2022)

The independent variables of cost of motor insurance premium, perceived fairness, and number of years driving experience were found to be statistically significant in explaining the attitude towards insurance fraud. The Number of years driving experience is the most significant variable in the estimated model. The Durbin-Watson statistic is 2.100, which is approximately equal to the + 02 thereby implying that there is no auto correlation between variables. Moreover, tolerance of each variable is greater than 0.10 and VIF is less than 10. These results indicate that there is no Multi – Collinearity of independent variables. P value is less than 0.05 (05%) and hence it is evident that the overall goodness of the formula exists. The model can explain 75.2% (R squared) of variation out of the total variation of the model. Further, when adjusted for number of variables, the model can explain 75.2% of the total variation.

Table 2: Regression Analysis

Variable	Coefficient	Std. Error	t	Sig.	Hypothesis	Decision
(Constant)	.268	.110	2.448	.015		
Motor insurance premium	.419	.080	5.218	.000	H1	Not rejected
Perceived Fairness	-.254	.064	-3.963	.000	H2	Not rejected
Number of years of driving experience	.943	.065	14.446	.000	H3	Not rejected

Source: Survey Data (2022)

As per the results of the regression analysis in Table 2, the following model can be developed.

$$FA = 0.268 + 0.419\,CP - 0.254\,PF + 0.943\,DE + \varepsilon$$

The results of this model is similar to the findings of Jones & Kavanagh (1996) in which it can be concluded that higher the cost of the policy to the policy holder greater the inclination towards committing a fraud. Further, when number of years of driving experience increases, policy holders is more prone to commit an insurance fraud. However, when the perceived fairness of the policy holder is higher, it will reduce the probability to commit an insurance fraud.

Conclusion

The purpose of this study was to identify whether rising cost of motor insurance policies exert an impact on committing motor insurance fraud. In addition to the major independent variable, the researcher identified two other controlling variables which are perceived fairness and number of years of driving experience. The results established that there is a significant positive relationship between the cost of motor insurance premiums and customer attitude. Further, it had been identified that higher the perceived fairness, lower the tendency to commit a fraud. Moreover, the study could identify a positive relationship between number of years of driving experience and attitude towards fraud.

Traditional predictors of the customer attitude such as growing motor insurance premiums still have a powerful impact on the customer attitude. The attitudes of the policy holders could be a significant issue that not solely forces the behavior to not staying fraudulent with the organization but, to the extent to which a policy holder is loyal to a particular insurer. Hence, it is imperative to the insurance industry to consider these factors in their pricing and marketing decision making. Future research could be carried out to excavate the other factors that have an impact on fraudulent behavior of policy holders.

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Factors affect to the customers' perception on life assurance in Kurunegala district

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Introduction

Life Assurance is a financial protection for lives which are filled with lot of uncertainties. People are busy with their life schedules to earn money at present but they do not pay much attention to their life survival. Life Assurance is a much more effective concept for heads of households to look after their beneficiaries/dependents without any financial problems whenever they died. It is not the only benefit of Life Assurance policies but also used as an investment tool.

While paying more attention to life assurance plans, there is negative demand for them in Sri Lanka. As life assurance products have been categorized under the negative demand with reference to marketing demand concepts. Therefore, the idea about the product among the consumers will create a major impact in the purchase behavior (Guru P,2020). This states there is a negative demand for life assurance products. The perception of the customer affects that kind of negative demand for life assurance products. So, the Customers' Perception is more important to Life Assurance companies to survive in their industry. When the company understands its customers properly, they can innovate new insurance products which are matching with the customers' needs and expectations. When comparing with other developing countries Sri Lanka has got low customer awareness and lack of insurance knowledge. Therefore, in the last few decades, it is a researchable issue for professionals and academicians to find out factors that lead customers to perceive life assurance products (Adhikari, 2020).

Instead, with the negative perception of the customers on life assurance there is no more demand for life assurance products. According to the Insurance Regulatory Commission of Sri Lanka (IRCSL) annual report, 2020, the insurance penetration level is relatively low (less than 2%) when compared to the other countries in the region. Therefore, the aim of this study is to find out the factors which affect the customers' perception on life assurance in Kurunegala District.

Methodology

This research was quantitative type and descriptive nature in the research design. The researcher has identified Customers' Perception (CP) of life assurance as a dependent variable and demographic factors (DF), Peer Influence Factor (PI), Social Factors (SF), and Service Quality (SQ) as independent variables. The following conceptual framework is developed by the researcher based on the literature.

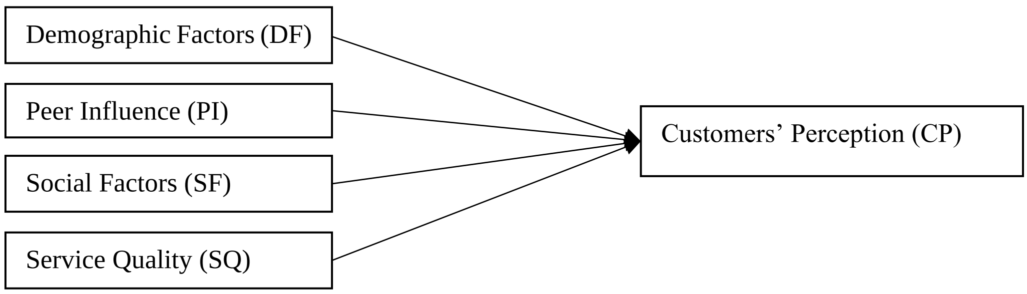

Figure 1. Conceptual Framework

The researcher has developed the following hypotheses according to the conceptual framework.

H_1: There is a significant relationship between the demographic factors and the Customers' Perception on Life Assurance.

H_2: There is a significant relationship between the peer influence and the Customers' Perception on Life Assurance.

H_3: There is a significant relationship between the social factors and the Customers' Perception on Life Assurance.

H_4: There is a significant relationship between the service quality and the Customers' Perception on Life Assurance.

The researcher has used primary data for this study. The primary data was collected from the standard questionnaire distributed through online platforms. The standard questionnaire consisted of closed, open-ended, and opinion-behavior-attribute questions. A nominal scale and five-point Likert scale ranging from strongly disagree to strongly agree have been used to measure the questions collected from the respondents. The population of this study was life insurance customers in Kurunegala District and according to Krejcie and Morgan's table (Krejcie & Morgan, 1970), 384 life insurance customers have been selected as the sample using a stratified random sampling technique. The collected data was analyzed using SPSS version 26. Kaiser-Meyer-Olkin test was used to identify the sampling adequacy. The normality test was used to identify whether the observation is normally distributed. Skewness and Kurtosis values were used to identify the normality. The multicollinearity test was used to identify the relationship among each and every independent variable. The tolerance and VIF values have been used to identify multicollinearity. Pearson correlation analysis was used to measure the developed hypotheses.

Findings

According to the analysis of Kaiser-Meyer-Olkin test, all demographic variables have taken 0.516. Therefore, it was in the acceptance rule of KMO value should be higher than 0.5. Then, there was adequate sample size has been used in this study. The KMO value above 0.9 got superb acceptance level, in the .80s, meritorious, in the .70s, middling, in the .60s mediocre, in the .50s, miserable and less than .5, unacceptable. The suggest accepting levels are between 0.5 and 0.7 are mediocre and values between 0.7 and 0.8 are good. (Kaiser, A second generation little jiffy, 1970) (Kaiser & Rice, Little jiffy, mark IV , 1974). The results of normality test and multicollinearity test were included in Table 1.

Table 1: Statistics of Normality and Multicollinearity

Variables	Normality Statistics		Multicollinearity Statistics	
	Skewness	Kurtosis	Tolerance	VIF
Demographic factors	-.156	.355	.786	1.273
Peer influence	-.560	-.015	.765	1.308
Social factors	-1.267	1.993	.522	1.915
Service quality	-1.065	.619	.419	2.385
Customers' Perception on Life Assurance	-.433	.468		

Source: Researcher Constructed, 2021

According to the Table 1, the analysis of normality statistics, both Skewness and Kurtosis values are in the acceptance rule of (+2 to -2). Therefore, the researcher could be identified that the observation of this study is normally distributed. When the analysis of multicollinearity statistics, the tolerance and VIF values are in the acceptance rule of tolerance values should be greater than 0.2 and VIF values should be less than 4.

Pearson correlation analysis was used to identify the relationship between the dependent variable and the independent variables. The summary of the Pearson correlation and the hypothesis results was included in Table 2.

Table 2: Correlation Analysis and Hypothesis Result

	Pearson Correlation	Significance	Relationship	Hypothesis result
Demographic Factors (H_1)	.250	.000	Weak relationship	Accepted
Peer Influence (H_2)	.312	.000	Moderate relationship	Accepted
Social Factors (H_3)	.608	.000	Strong relationship	Accepted
Service Quality (H_4)	.382	.000	Moderate relationship	Accepted

Source: Survey Data2022

Correlation coefficients between .10 and .29 represent a small association, Coefficients between .30 and .49 represent a medium association, and Coefficients of .50 above represent a strong relationship (Cohen, Cohen, West, & Aiken, 2003).

There are two conditions that must be fulfilled when testing alternative hypotheses as values should not be equal to zero and p-values should not be greater than 0.05 ($P < 0.05$). According to Table 2, the researcher can be accepted H1, H2, H3, and H4 because of fulfilling both conditions. Further according to table 02 there is a significant (positive) weak correlation between the demographic factors and customers' perceptions. Peer Influence and service quality are significantly (positively) and moderately related to Customer Perception while social factors are significantly (positively) and strongly related to Customer Perception. These findings are consistence with the findings of (Adhikari, 2020), (Gangil & Vishnoi, 2020) and (San, 2019).

The multiple regression analysis was used to measure the impact of independent variables. The summary of the regression analysis was included in Table 3.

Table 3: Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.403	.196		7.155	.000
Demographic V	.073	.062	.053	1.175	.241
Peer In	.200	.052	.174	3.821	.000
Social Factor	.529	.045	.647	11.727	.000
Service Quality	-.168	.061	-.169	-2.740	.006
$R^2 = 0.397$					

Source: Survey Data,2022

According to the Table 3, R^2 is 0.397 (39.7%). It refers to the dependent variable of customers' perception of Life Assurance that has been defined only 39.7% from the independent variables of Demographic Factors, Peer Influence Factors, Social Factors, and Service Quality.

According to the regression results; Peer Influence Factors, Social Factors, and Service Quality have a significant impact on customers' perception. But Demographic Factors not significantly impact on customers' perception.

Conclusion

According to the study, Demographic Factors, Peer Influence Factors, Social Factors, and Service Quality have a significant relationship with customers' perception of Life Assurance. But the Demographic Factors have a weak relationship with the customers' perception when compared to the other factors. As well as Social Factors have a strong relationship with the customers' perception. According to the regression results, Peer Influence Factors and Social Factors positively and significantly impact customers' perceptions while Service Quality negatively and significantly impacts. But demographic Factors do not significantly impact customers' perceptions. Therefore, life assurance companies must pay more attention to social factors when they dealing with their customers. According to the findings, life assurance companies should provide better service to their customers to build their perception. The insurance company should pay more attention to the Peer Influence, Social Factors, and Service Quality provided by the insurance companies to retain and attract more life assurance customers to their companies.

In this study researcher aimed to find out the relationship between the four factors which are affecting the customers’ perception and customers' perception in Kurunegala District. However, there are more influential variables in the customers’ perception of life insurance. Further, the results are based on a study performed in only one district of Sri Lanka. Therefore, these limitations have created a new opportunity for future researchers.

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Analysis of factors affecting customers' switching behavior in motor insurance industry in Sri Lanka

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Introduction

Insurance is defined as a community or unity or corporate instrument that provides financial compensation for the effects of hardship, with payments paid from the aggregated obligations of all entities involved in the plan (Liedtke, 2007). Globally motor insurance is the biggest and fastest growing category of general insurance. Currently, there is a huge competition among the insurance companies (pentions committe, 2021). Hence, insurance companies make huge efforts to attract new customers and retain the existing customers with them, as they experience switching the motor policyholders to competitors at the renewal due to many reasons. Accordingly, switching behavior of motor insurance policyholders is a significant issue in the motor insurance industry in Sri Lanka. Switching behavior of the policy holders in motor insurance industry is most critical factor and it highly impact on the company performance and profitability (Keaveny, 1995). Therefore, it is essential to identify the factors affecting the switching behavior of motor insurance policy holders in Sri Lanka.

Different scholars have identified different factors that affect customer switching behavior. According to Boote (1998), switching behavior reflects the decision that a customer makes to stop purchasing a particular service or patronizing the service firm completely. Price defined as the cost at which something is obtained. Price is an attribute that must be given up or sacrificed to obtain certain kinds of products or services (Zeithaml, V.A., Berry, L., & Parasuraman, A, 1996). According to Keaveny, (1995), the "pricing" factor includes all critical switching behaviors relating to prices, rates, fees, charges, surcharges, service charges, penalties, price deals, coupons, and/or price promotions. When customers discover a disadvantaged inequality, negative price fairness perceptions trigger negative emotions such as disappointment and anger which may lead to consequent negative behavioral intentions of spreading negative word-of-mouth, making complains, switching to competitors, seeking legal action (Zhang ,2009). According to Bloemer (1998), service quality directly and indirectly effect customer satisfaction then it affects the switching behavior. Nieke *et.al* (2012), concluded that insurance companies could try to improve the interaction with claimants by communicating more directly as claim procedure affect the switching behavior. Service providers should keep an eye on company brand image, and improve when necessary to retain satisfied consumers (F H Zinna, 2020).

Methodology

The researcher has identified price, service quality, company image, claim procedure and customer knowledge as independent variables and customer switching behavior as dependent variable through literature review.

The researcher used the below research model and hypotheses for the study.

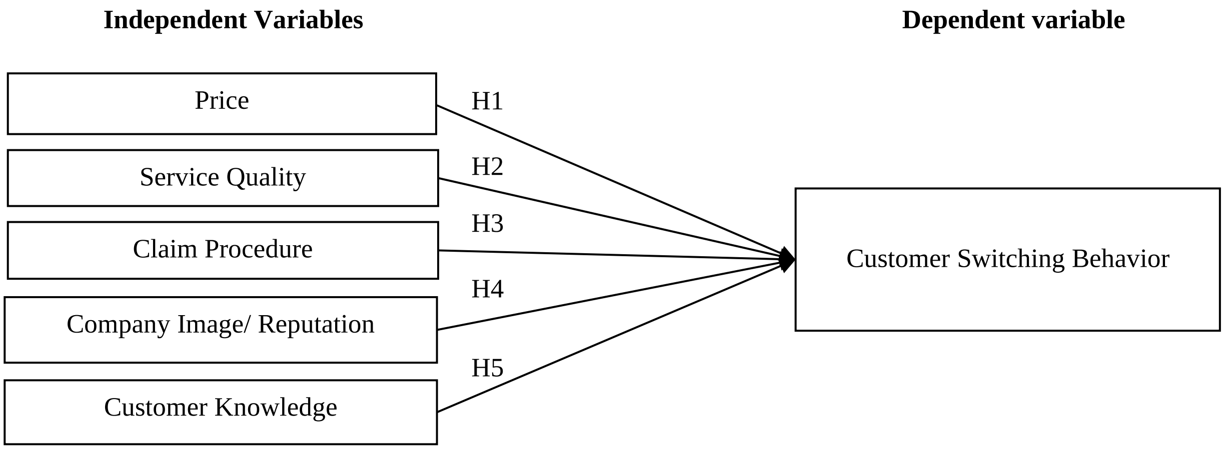

Figure 1: Conceptual Framework

H1: There is a significant impact of price on customer switching behaviour in motor insurance industry in Sri Lanka

H2: There is a significant impact of service quality on customer switching behaviourin motor insurance industry in Sri Lanka

H3: There is a significant impact of Claim procedure on customer switching behaviourin motor insurance industry in Sri Lanka

H4: There is a significant impact of Company image on customer switching behaviour in motor insurance industry in Sri Lanka

H5: There is a significant impact of Customer knowledge on customer switching behaviour in motor insurance industry in Sri Lanka

This study is correlational study which aimed to examine a relationship and unit of analysis of individual as researcher focused individual's behavior. Further, this is cross selection study which the researcher collected data at once. In this study researcher used non probability, convenience sampling method. The researcher considered motor insurance policy holders as the population and selected the sample as 100 individuals of who has motor insurance policy, with the available time and for the convenience of research requirements. The major data source was primary data collected from questionnaires. The internal consistency of the questionnaire was tested by using Reliability analysis of Cronbach's Alpha value. Alpha value for all the variables separately and as a whole were greater than 0.6. Hence, the items in the questionnaire and the whole measuring instrument of the study are reliable and can be used for analyzing purposes.

Findings

According to analysis of demographic criteria using descriptive analysis, distribution of respondents in which the majority of the respondents are male, accounting for 61% of the total, while the female are accounting for 39%. Further, the majority of the respondents are less than 21 years old, accounting for 32% of the total, while the least number of respondents are older than 55 years, accounting for 13%. In addition, respondents between 22–32 years represent 16%, 33–43 years represent 15%, and 44–54 years of age group respondents represent 24%.

The R value which is 0.787 implies a good level of prediction of Customer Switching Behavior by the predictors namely, Price, Service Quality, Claim Procedure, Company Image, and Customer Knowledge. Moreover, as per the R Square value independent variables Price, Service Quality, Claim Procedure, Company Image, and Customer Knowledge all together explains 61.9% of variations in the dependent variable Customer Switching Behavior.

The Multiple Regression analysis is used for testing the hypotheses of the study.

Table 1. Multiple Regression Coefficient Table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.478	.288		1.659	.100
	Price (P)	-.048	.129	-.061	-.376	.708
	Service Quality (SQ)	.420	.085	.465	4.950	.000
	Claim Procedure (CP)	.159	.100	.186	1.591	.115
	Company Image (CI)	.459	.093	.507	4.934	.000
	Customer Knowledge (CK)	-.105	.186	-.121	-.565	.573

a. Dependent Variable: CSB
Source: Researcher constructed, 2022

According to multiple regression analysis, Price has a coefficient of -0.048, which suggests a negative impact on Customer Switching Behavior and it is not statistically significant as the p value is 0.708 ($p<0.05$). Service Quality has a coefficient of 0.420, which suggests a positive impact on Customer Switching Behavior. A statistically significant prediction is made about this association, as the significance value which is 0.000 does not exceed the specified level of significance of 0.05 ($p<0.05$). Claim Procedure has a coefficient of 0.159, which suggests a positive impact and it is not statistically significant as value is 0.115. Company Image has a coefficient of 0.459, which suggests a positive impact on Customer Switching Behavior and it is statistically significant as the significance value which is $p<0.05$.Customer Knowledge has a coefficient of -0.105, which suggests a negative impact on Customer Switching Behavior. It is not statistically significant as $p>0.05$.

Conclusion

This study was carried out by the researcher to fill the existing research gap where few studies were conducted in relation to the Analysis of Factors Affecting Customers' Switching Behavior in Motor Insurance Industry in Sri Lanka topic in the context of Sri Lanka. Thus, this study is significant for the motor insurance companies in Sri Lanka to decide their strategic initiatives and make decisions. Hence, the study is based on a scientific methodology to investigate the customer switching behavior of customers in the motor insurance sector in Sri Lanka.

The findings of the study suggest that service quality and company image are the strong factors that impact customer switching behavior in the motor insurance industry. According to Inger Roos, Bo Edvardsson (2004), price is commonly expressed as a switching determent and critically impact to the switching behavior. Service quality plays a huge role in retaining and satisfying customers. Customers are more intelligent than before. They search for a number of reliable and satisfying options through their service provider. Service quality influences brand switching behavior favorably, according to Sobia et al. (2015) and Sarwat et al. (2013), and this study likewise reveals the same conclusion. Therefore, it may be concluded that service quality has a favorable impact on brand switching behavior. Therefore, H2 is approved. Further competition among companies has been enhanced unexpectedly. Therefore, maintaining quality is critical to avoid customers switching to another company. Customer loyalty, satisfaction, as well as customer retention are highly influenced by service quality. On the other hand, company image is also another criterion where customers focus when deciding to switch to another company. The company image has a favorable effect on brand switching behavior, according to Sobia et al. (2015), Saleh et al. (2015), and Sarwat et al. (2013), and this study supports these findings. It follows that the company image has a favorable effect on brand switching behavior. Therefore, H4 approved. When the number of companies is increasing, customers face the issue of quality of service. Hence, they consider company image as a measuring tool to select the best company to make their investment in. Customers look for better reviews, comments, and recommendations made by customers regarding companies when selecting a company. Thus, it can be concluded that customer switching behavior is influenced by the service quality and company image. Contrary to previous research that found claimants to be disturbed by a lack of contact and information, the participants were fairly pleased with the information supplied and the way they were treated by their lawyer. (Rajkumari, 2013) Provides a thorough analysis of Supreme Court rulings as well as instances involving torts and negligence in which motor vehicle accident claims were made using the rules and application forms of the tribunal. Therefor H3 is not approved.

According to findings of this study company image and service quality positively impacts the Switching behavior. In here according to the hypothesis testing significant impact of Service Quality and company image on Customer Switching Behavior. And thus, the Alternative hypotheses of the study have to be accepted while rejecting Null hypotheses regarding Service Quality and company image.

This study would assist companies in the motor insurance industry in strategic planning, initiating strategic initiatives, implementing strategies, and controlling the strategic nature of the companies to retain their loyal and existing employees without letting them switch to another company. It is also revealed in the literature that 25–95% of the profits of the companies can be generated through making efforts to increasing customer retention by 5% the company. The particular investigation also revealed that there is a 60–70% success rate when a company is trying to sell its goods to an existing customer, while the success rate falls to 5-20% when a company is trying to sell products to a new customer (Taylor, 2022).

The researcher recommends the following in relation n to reducing customer switching behavior from one company to another. Based on the results of the study; Motor industry companies must enhance their service quality, including the physical quality of the workplace as well as the quality of human resources, to ensure the delivery of service quality. Motor industry companies must try to enhance their company image to reduce customers' switching behavior. Hence, customers are highly concerned about the image of the company when deciding to stay with the company or leave the company.

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