The Journal of **ARSYM**

A Publication of Students' Research of the
Annual **R**esearch **Sy**mposium in **M**anagement

The Journal of ARSYM

A Publication of Students' Research of the

Annual Research Symposium in Management

Volume: 1   Issue: 01   December: 2020

The Journal of ARSYM (JARSYM) is a refereed journal published bi-annually by the Faculty of Business Studies & Finance, Wayamba University of Sri Lanka. The aim of the JARSYM is to disseminate high-quality research findings on a variety of timely topics generated by the undergraduate and postgraduate researchers in the Wayamba University of Sri Lanka. Furthermore, it opens up avenues for the undergraduates involved in the industry to share their inventions, state-of-the-art discoveries and novel ideas. The main philosophy behind the JARSYM is to enhance the research culture within the faculty, thereby within the Wayamba University. All research articles submitted are double blind reviewed prior to publishing. Views expressed in the research articles are not the views of the Faculty of Business Studies and Finance, Wayamba University of Sri Lanka or the Editorial Board.

THE JOURNAL OF ARSYM

A Publication of Students' Research of the

Annual Research Symposium in Management

Faculty of Business Studies and Finance

Aims and Scope

The Journal of ARSYM (JARSYM) is a refereed bi-annual journal committed to publish undergraduate research papers of the Faculty of Business Studies and Finance, Wayamba University of Sri Lanka. The JARSYM publishes theoretical and empirical papers spanning all the major research fields in business studies and finance. The aim of the JARSYM is to facilitate and encourage undergraduates by providing a platform to impart and share knowledge in the form of high quality and unique research papers.

Core Principles

➢ Publication in the Journal of ARSYM is based upon the editorial criteria cited and the evaluation of the reviewers (each manuscript will be sent two reviewers).
➢ Priority is given for novelty, originality, and to the extent of contribution that would make to the particular field.

The journal welcomes and publishes original articles, literature review articles and perspectives and book reviews describing original research in the fields of business studies and finance. The core focus areas of the journal include;

- Accounting
- Banking
- Economics
- Entrepreneurship and Small Business
- Finance
- E-Commerce & Business Communication
- Management Information Systems
- Marketing Management
- Operation Management
- Risk Management & Insurance
- Strategic Management
- Human Resource Management & Organizational Behaviour

Editor- in- chief,

Journal of ARSYM (JARSYM)

Editorial Board

Panel of Reviewers

Dr. Menaka Kodisinghe

Senior Lecturer
Department of Business Management
Wayamba University of Sri Lanka

Mr. BM Basnayake

Senior Lecturer
Department of Business Management
Wayamba University of Sri Lanka

Mr. UES Kumara

Senior Lecturer
Department of Accountancy
Wayamba University of Sri Lanka

Ms. Ayoma Karunananda

Senior Lecturer
Department of Accountancy
Wayamba University of Sri Lanka

Ms. Niranjala Tennakoon

Senior Lecturer
Department of Business Management
Wayamba University of Sri Lanka

Ms. WAN Priyadarshani

Senior Lecturer
Department of Business Management
Wayamba University of Sri Lanka

Contents	Page No.
THE IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON FINANCIAL PERFORMANCE OF SELECTED DOMESTIC COMMERCIAL BANKS IN SRI LANKA *Tissakumara, M.D.U.W.D., Rathnasiri, R.A.*	**1-33**
IMPACT OF INTELLECTUAL CAPITAL ON THE FINANCIAL PERFORMANCE - A CASE OF SRILANKAN LICENSED COMMERCIAL BANKS *Fernando, V.R., Tharanga, B.B.*	**34-53**
IS CORPORATE GOVERNANCE A SUBSTANCE OF FAILURE? *Jayasinghe, M.J., Kumara, U.E.S.*	**54-72**
RELATIONSHIP BETWEEN WORK-LIFE BALANCE AND EMPLOYEE PERFORMANCE: (WITH SPECIAL REFERENCES TO MACHINE OPERATORS OF THE APPAREL INDUSTRY IN GAMPAHA DISTRICT, SRI LANKA) *Senanayaka, N.D.S.P., Dissanayake, D.M.T.D.*	**73-85**
IMPACT OF ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM IMPLEMENTATION ON THE ROLE OF ACCOUNTANTS: A SURVEY ON PUBLIC LISTED COMPANIES IN SRI LANKA *Gunasekara, M.G.H.C, Wijesinghe, B.A.C.H.*	**86-102**
THE ELECTRONIC COMMERCE ADOPTION OF EXPORT APPAREL INDUSTRIES IN GAMPAHA DISTRICT, SRI LANKA *Rajapakshe, H.I., Wijethunga, W.M.N.M.*	**103-121**
THE EFFECT OF FINANCIAL LITERACY ON ENTREPRENEURIAL PERFORMANCE WITH REFERENCE TO SMES IN GAMPAHA DISTRICT *Jayakody, D.S.K.M., Gunaratna, A.G.D.L.K.*	**122-146**
THE IMPACT OF MACRO-ECONOMIC VARIABLES ON STOCK MARKET RETURNS IN SRI LANKA *Bamunusinghe, B.A.P.S., Lakmal, W.A.I.*	**147-171**

THE ELECTRONIC COMMERCE ADOPTION OF EXPORT APPAREL ORGANIZATIONS IN GAMPAHA DISTRICT, SRI LANKA

Rajapakshe H.I[1], Wijethunga W.M.N.M[2]

Department of Business Management, Faculty of Business Studies and Finance, Wayamba University of Sri Lanka.
hishuwara@gmail.com[1], nisansala@wyb.ac.lk2

ABSTRACT

Creating an e-commerce-based portal for apparel sector is the central focus of many developing countries, as e-commerce (EC) gives a wide variety of advantages for the apparel organizations, thus would be benefitted to enhance the local income since apparels are the major income source of the Sri Lankan market context. The export apparel industry in Sri Lanka is heading in the right direction and the use of e-commerce plays a vital role for it to capture the global market and thus the industry flourished into a multi-million-dollar export earner. It is therefore crucial to understand the factors that would impact on e-commerce adoption of the export apparel organizations. This paper investigates the factors that impact on e-commerce adoption of the export apparel organizations. The study in a sample of 120 export apparel organizations in Sri Lanka confirming that computer literacy, perceived benefits and information technology infrastructure were found to have statistically significant impact on EC adoption.

Keywords-: E-commerce Adoption, Export Apparel Organizations, Developing Countries

1. INTRODUCTION

E-commerce (EC) finds its inception in the early 1970s when money was transferred electronically most among the financial institutions. "E-commerce is the production, distribution, marketing, sales or the delivery of goods and services by electronic means" (Monterio, 2017). The concept of EC has made a favourable situation regarding economical background of a country by enriching knowledgeable and skillful labour force. Because of the use of EC, the parties who are engaged in business, have been able to derive benefits. The perceived potential of internet and information technology impact on reducing transaction costs as well as assisting to the global supply chains to smooth flow of intermediary steps in developing countries (Molla & Licker, 2005).

It is important that the apparel organizations are central to the development of the developing countries and their contribution for the independence if the economy is vital. As per the United States Fashion Industry Association, Sri Lanka is ranked as the12[th] among the rapid growing apparel and textile manufacturing countries. Other than past single years, the Sri Lankan apparel industry has been fueled by a combination of growth- satisfactory and friendly economic policies, online buying, selling, EC adoption trading conditions together with the drive and ambition of the industry leaders and pioneers, the apparel industry in Sri Lanka flourished into a multi-million-dollar export earner (Weerakkody, 2019). The Sri Lankan textile and apparel industry is focusing on achieving a good growth and targets for their organizations. With the development of the technology as well as the EC portals, the growth of the apparel organizations is highly affected. Because of the usage of EC, the Sri Lankan apparel organizations have achieved a tremendous success especially in the export apparel organizations. Owing to the factors like e-commerce, the growth of apparel industry in Sri Lanka looks graced towards a rapid rise (Jain, 2018). In South Asia, Sri Lanka is ranked as one of the top apparels exporting nations. There were many significant changes that have taken place in the apparel sector in Sri Lanka in the past decade and most critical changes are the induction of innovative technology and EC and production of value-added textiles. Because of the sophisticated EC portals and the upgraded machinery of the country, direct access to European markets is opened (Cooray, 2018).

Therefore, it can be identified a growing success by using EC for apparel organizations and it is important to examine the factors which impact on the adoption of e-commerce. Further, it can be identified a limited number of researches of adoption of e-commerce (Molla & Licker, 2005) as well as limited number of researches can be identified of e-commerce adoption in developing counties (Kurnia et al. 2015). By considering the above facts, a knowledge gap is identified. In light of the above, the researcher conducted this study by selecting three factors which impact on e-commerce adoption such as computer literacy, perceived benefits and information and communication technology (ICT) infrastructure. The research was based on the research objectives as to find out how computer literacy, perceived benefits and ICT infrastructure impact on adoption of e-commerce in export apparel organizations in Gampaha district, Sri Lanka.

2. LITERATURE REVIEW

The study was based on the technology acceptance model (TAM) of Davis (1989). TAM is a theory that states, when a new technology is there, the user's acceptance and how they use that technology. Venkatesh & Davies (2000), extended the previous original TAM by adding additional factors namely of social influential processes and cognitive instrumental processes, renamed as TAM2. Since this study is not deeply

connected with additional expanded factors of TAM2, the researcher used the original TAM.

There can be identified a number of researches in e-commerce in literature. Plunket (2004), defines the e-commerce is the process of using internet & intranet to purchase, sell, transport, trade data, goods & services. According to Turban et al. (2008), the Electronic commerce is the buying and selling of goods and products, services and funds through computer networks, especially the internet has taken center stage in recent times. According to Marcelo (2014), E-commerce does encompass other telecommunications networks such as wireless internet. For the purpose of this study, e-commerce as stated by Monterio (2017), has been used because it emphasizes the overall process of production, distribution, marketing, sales or delivery of goods and services via electronically.

2.1. E-Commerce in Developing Countries

Nowadays, many more customers are digitalizing their businesses from physical to virtual one and the most of the transactions are now digitalized so as to be innovative, all in order to win many more customers as possible (Jovanovic et al. 2020).

The current situation of Covid-19 shows that EC is a vital tool for economy even for the developing countries. According to World Trade Organization (WTO) (2020), the situation which was happened due to the Covid-19 pandemic has resulted an increase of EC specially between businesses.

However, there can be identified a great differ of benefits which are obtained from EC between the developing and the developed countries (Tan et al. 2007). The industries adopting EC which are located in the developing countries, face number of challenges such as lack of telecommunications infrastructure, lack of qualified staff to develop and support EC sites, lack of skills among consumers needed in order to use the internet, lack of timely and reliable systems for the delivery of physical goods, low bank account and credit card penetration, low income and low computer and internet penetration (Kapurubandara, 2009).

The development of the EC based businesses as well as the increased social application of technology are therefore the strongest tools for developing countries to ensure the growth of the country (Ghonyan, 2020).

Both policy makers and scholars have agreed that EC is a vital tool for developing countries for socio-economic progress (Hajli et al. 2014).

According to Sutanonpaiboon and Pearson (2006), the organizations which are located in the developing countries must understand the newest technologies and decide how they can use those technologies for their organizations in order to

effectively function within the organization as well as to develop EC initiatives since the EC technologies such as web and communication technologies are not easy to understand offer wide variety of functionalities which ranging from the static presentation of content to the dynamic capture of transactions with provisions for security and personalization.

Perceived benefits, ICT infrastructure, computer literacy, cost of information technology, innovativeness of the owner, attitude of managers regarding EC, size of the organization, resource availability, and the government support are some of the key factors that impact on adoption of EC identified by the previous researchers. Out of all those variables, for the study purpose, the researcher has identified some of the most influential variables including computer literacy, perceived benefits and ICT infrastructure. The empirical evidences of the variables that the researcher has selected for this research are described with details below.

2.1.1. Perceived Benefits

The perceived benefits which can be derived by using EC for organizations have been increasing in the recent years and those benefits usually have an impact on EC adoption.

Cooray (2019), emphasized that increasing customer satisfaction, improving marketing and advertising, enhancing efficiency and productivity are the benefits for the apparel organizations by using EC. Further, the research conducted by Rahayu (2015), has found out that the perceived benefits of e-commerce associated with businesses mostly depend on the level of EC adoption, thus greater the level of e-commerce adoption, an adequate technology infrastructure needed and the higher benefits will be gathered. This research results agree with the study of both Kraemer (2002), and Prananto (2003).

Other than the past single physical marketplace nowadays, markets are expanded not only to local geographical area but also into the borderless national and international markets facilitated by EC, thus empowering people in both urban and rural areas to enjoy different kind of products, services, information communicate with other people than past, hence people have been able to expand their business connections as well as interact with people in different locations of the world as well as to enhance the precision for exchange of information, businesses can use EC as well as businesses can use EC to reducing the transaction costs such as costs of sales management, determining availability of products, provision of price quotes and order-taking processes (Schneider, 2011).

According to the research conducted by Khan (2016), the main perceived benefits that can be grabbed by using EC are increasing revenue, improves the internal and

external communication, develop the company image and brand, raising customer loyalty and retention, developing customer and supplier relationships, reducing operation and maintenance cost, purchase and procurement cost, transportation cost.

Research conducted by Al- Alawi (2015) found out that the perceived benefits are the most influential factors to motivate to adopt the e-commerce, in terms of perceived benefits, when the owners/ managers discovered more benefits of using ecommerce and they recommend that to gain the competitive advantage such adoption of e-commerce can be used as value added tools.

2.1.2. Computer Literacy

Garg & Choeu (2015), conducted a research to identify the factors affecting e-commerce in small industries and found out that the firms were not perturbed by the notion that computer knowledge greatly affects the adoption of EC and the users have a fair knowledge about how EC can be used to derive business profits.

Govinnage and Sachitra (2019) founded that the computer literacy greatly influences the adoption of e-commerce in small organizations in Sri Lanka and the positive significant impact was also identified. Further, they emphasized that the government can take initiations to improve the computer literacy and knowledge which would eventually improve the potential benefits of EC.

Lapointe and Rivard (2005) recommended that it is necessary to give an adequate technological expertise to manage and support EC software adoption within the organization. According to Lawson et al. (2003), the tendency of adopting EC and innovative technologies depend on IT level of people within the organization, thus there is a high impact of computer literacy and skills on adoption of EC can be identified. As a result, studying of computer literacy on adoption of EC is a vital factor since from previous researches, it provides strong clues regarding that there is an impact of computer literacy on adoption of e-commerce. Consequently, the researcher selected this variable.

2.1.3. Information & Communication Technology (ICT) Infrastructure

According to the United Nations Conference on Trade and Development (UNCTAD) (2006), the majority of people continue to view the internet and its application as simply a medium for e-mail, faxing communication and web surfing, because of web access in developing countries is principally restricted to e-mail communication, as well as in global setting a large number of people are not fully aware of other web-based applications.

According to Govinnage & Sachitra (2019), the research regarding the factors affecting EC in small industries in Sri Lanka, there is a negative relationship between

IT infrastructures on adoption of EC. Further, they have emphasized that the possible reasons for this as high cost of website building and hosting and complex processes.

Oxley & Yeung (2012) emphasized that the users need the access to the necessary equipment in order to become active EC participants unless they have a reasonable confidence in the integrity of transactions undertaken online and therefore IT infrastructure & access positively influence in EC adoption.

The research conducted by Chepngeno (2017) reveals that there is an impact of IT access & infrastructure on the EC adoption in Kenya. Anas and Katsoiloudes (2014) found out that there is a significant relationship between ICT infrastructure and EC adoption and they have also identified that it is necessary to improve the IT infrastructure, tools and access to adopt EC. Therefore, it is important to study about ICT infrastructure on adoption of EC. From above strong findings, the researcher selected these variables.

Accordingly, the study tested the following hypotheses.

H₁: There is a significant impact on computer literacy on adoption of e-commerce in export apparel organizations in Gampaha district in Sri Lanka.

H₂: There is a significant impact on perceived benefits on adoption of e-commerce in export apparel organizations in Gampaha district in Sri Lanka.

H₃: There is a significant impact on ICT infrastructure on adoption of e-commerce in export apparel organizations in Gampaha district in Sri Lanka.

3. METHODOLOGY

Deductive approach was used and the conceptual framework was developed based on the prior studies stated in literature. Based on existing literature along with TAM, this research has been created. The descriptive research strategy was used as the research strategy which is concerned with determining the frequency with which something happens or the connection between variables. Further, a cross-sectional study has been used. The unit of analysis was the owners' /Marketing managers of the export apparel organizations. The targeted population of this study was 163 of registered export apparel organizations which are located in Gampaha district. Out of that, a sample 125 has been selected in accordance with Morgan table.

To measure the EC adoption, the researcher used the instrument of Looi (2005) and indicators such as online marketing & advertising, sales transactions, supplies & procurement, payment systems, internal online transactions. Computer literacy was measured by the training of IT, IT skills, maintenance & operation of the system, technical expertise according to Looi (2005) and Chepngeno (2017).

Perceived benefits were measured through efficiency and productivity, time and operational cost reduction, communication with trading partners, improve marketing and advertising, customer satisfaction, sales & revenue according to Park et al. (2014), Chepngeno (2017), Pease and Rowe (2005), Heung, (2003). ICT infrastructure was measured using six indicators adopted from Park et al. (2014) which include indicators such as IT resources, infrastructure, web-based applications, users' confidence in the integrity of transactions, online marketing and advertising tools and online connections.

The figure presented below, indicates the research model of factors that would impact on adoption of EC.

Independent Variables

Dependent Variable

Computer literacy (X1)

Perceived benefits (X2)

ICT infrastructure (X3)

E-commerce adoption
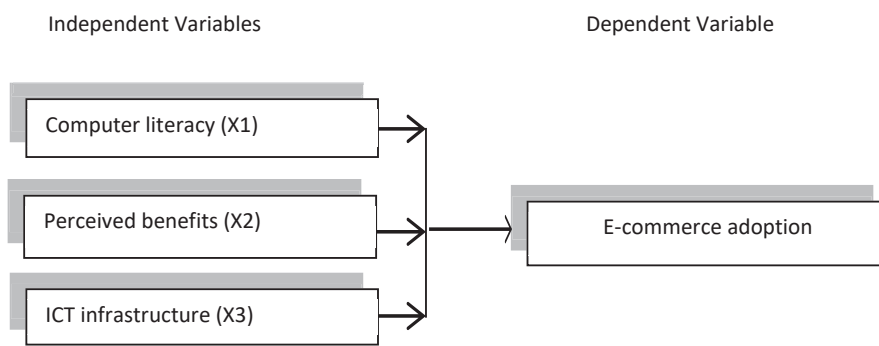
Figure 1: Conceptual Framework

Source: Researcher Constructed, 2020

4. RESULTS

The primary data were collected from a population of 163 of registered export apparel organizations. Out of that, 125 of organizations are selected by employing simple random sampling technique and the questionnaires were distributed as a Google document. 120 questionnaires were returned and analyzed. This represents 96% of the response rate.

4.1. Examining the Data
4.1.1. Demographic Analysis

To analyse the demographic profile of the responded organizations, frequency and percentages were used. Out of 120 respondents, 52 (43.3%) were males, 68 were females (56.7%). Among age groups, 35.8% are included in between 26 – 35 years and 37.5% for 36 – 45 years. Lower percentage can be seen for age category of 46 – 55 which is 26.7%. From this data, it can be identified as the higher percentage of age group is between 36 – 45. Considering the level of education, the majority (34.2%) are of MBA level of education while 25% are graduates. For professional

qualifications, it includes 24.2% and the lowest percentage (16.7%) is for other levels of education.

4.1.2. *Reliability Analysis*

Table 1: Reliability Analysis by Using Cronbach's Alpha Value

Variable	Cronbach's Alpha
Computer literacy	0.71
Perceived benefits	0.74
ICT infrastructure	0.72
E-commerce	0.76

To determine if the questions of the questionnaires are reliable, measure of internal consistency (reliability) can be considered. Table 1 suggests that Cronbach's Alpha value of all variables are higher than the acceptable value of 0.7 that is used by the scientist for social studies. Therefore, it can be concluded that the questions in the questionnaire are reliable.

4.1.3. Descriptive Statistics

Table 2: Descriptive Statistics of Variables

	N	Mean	Standard Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic
Computer literacy	120	4.3056	.36753	-.526	.622
Perceived benefits	120	4.2611	.56745	-.624	-.297
ICT infrastructure	120	4.3488	.40014	-.817	1.197
E-Commerce	120	4.5514	.31445	-.364	-.671

Overall, the results of the table 2 indicates that the average number of respondents have agreed with computer literacy, perceived benefits, ICT infrastructure and EC adoption. Skewness of all variables are negative values that lead to negative distribution and since the kurtosis value is greater than 0.263 there can be identified for leptokurtic or high peak distribution of all variables.

4.1.4. Correlation of the Independent Variables with Level of Adoption of EC

The results of Pearson correlation values are as follows.

Table 3: Pearson Correlations values

Variable	Correlation Value	Significance Value
Computer literacy	0.437	0.000
Perceived benefits	0.708	0.000
ICT infrastructure	0.636	0.000

The positive correlation coefficients of computer literacy, perceived benefits and ICT infrastructure are 0.437, 0.708 and 0.636 respectively indicate that those three independent variables are positively correlated with the adoption of EC, while the p-value of 0.000 for all three variables indicates that the relationship is significant at the 95% confident level.

4.1.5. Multiple Regression

A regression analysis was performed to provide meaningful interpretations of the relative importance of the three constructs. Three independent variables were regressed on the adoption of EC as the dependent variable using the regression function in statistical package for social sciences (SPSS), and the results obtained are listed below.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.828[a]	.685	.677	.17874

a. Predictors: (Constant), ICT infrastructure, literacy, benefits

Table 5: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.061	3	2.687	84.106	.000[b]
	Residual	3.706	116	.032		
	Total	11.766	119			

a. Dependent Variable: ecommerce

b. Predictors: (Constant), ICT infrastructure, literacy, benefits

Table 6: Coefficients and Multicollinearity

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity statistics	
	B	Std. Error	Beta			Tolerance	VIF

	(Constant)	1.386	.232		5.985	.000		
1	Computer Literacy	.144	.048	.168	3.002	.003	0.869	1.151
	Perceived Benefits	.285	.032	.514	8.986	.000	0.829	1.206
	ICT Infrastructure	.307	.045	.390	6.747	.000	0.812	1.231

a.   Dependent Variable: ecommerce

In the model summary table, the multiple correlation coefficient (R), is 0.828 which lies in between 0.8 and 1, can be interpreted as a very high correlation. R Squared indicates 68.5% of the total variation in EC adoption is explained by this equation. Accordingly, the regression line predicts the model accurately. The adjusted R Squared of 0.677 is used to incorporate the effect of including additional independent variables in a multiple regression equation.

Table 5 is the ANOVA table, the F value is the mean square regression (2.687) divided by the mean square residual (0.032), yielding 84.106. The p-value with this F value is 0.000 which is lower than alpha level of 0.05(0.000 < 0.05). Therefore, the overall regression model statistically and significantly predicts the outcome variable, EC adoption.

Considering the Coefficients table, under the beta values of unstandardized column, there can be identified beta values as 1.386, 0.144, 0.285 and 0.307 for constant, computer literacy, perceived benefits and ICT infrastructure respectively. The all values are positive which means when computer literacy increases, EC adoption will increase, when perceived benefits of EC increase, EC adoption will increase, when ICT infrastructure increases, EC adoption will increase. Further, it can be interpreted as when computer literacy, perceived benefits and ICT infrastructure are zero, EC adoption is equal to 1.386. The regression equation can be presented in the following manner.

E-commerce Adoption = 1.386 + 0.144 Computer Literacy + 0.285 Perceived

The p-values of computer literacy, perceived benefits and ICT infrastructure are 0.003, 0.000, and 0.000 respectively which is lesser than 0.05 alpha level, which means that all three variables are statistically significant.

Next column is beta values for standardized coefficients. The beta coefficients for computer literacy, perceived benefits and ICT infrastructure are 0.168, 0.514, and 0.390 respectively. The highest beta coefficient among three attributes is for

perceived benefits (0.514) shows in comparison, perceived benefits variable is the most important variable in adoption of EC among export apparel organizations.

The value of VIF is $1 < VIF < 5$; it means that variables are moderately correlated with each other.

Table 7 shows summary of significance values of coefficients. All three independent variables are statistically significant. Therefore, overall results indicate that three hypotheses, H_1, H_2 and H_3 are accepted.

Table 7: Hypotheses Testing

Hypotheses	Significance Values [Coefficients (Table 2)]	Decision
H₁: There is a significant impact on computer literacy on adoption of EC	0.003	Accept H_1 (Alternative hypothesis)
H₂: There is a significant impact on perceived benefits on adoption of EC	0.000	Accept H_2 (Alternative hypothesis)
H₃: There is a significant impact on ICT infrastructure on adoption of EC	0.000	Accept H_3 (Alternative hypothesis)

5. DISCUSSION

When considering about the mean value of the adoptability of EC (4.56), there can be identified a high level of EC adoption in the selected export apparel organizations and it is a good sign that the export apparel organizations located in Sri Lanka, have understood the opportunities which are available for them to expand their businesses by identifying the potential importance of EC. Further, the relevant benefits associated with EC into business operations allow businesses in Sri Lanka to determine whether they should adopt EC.

Perceived benefits emerged as the most important factor impacting the adoption of EC in export apparel organizations. Many apparel organizations adopted EC because of the wide range of perceived benefits such as increases customer satisfaction, improves the marketing and advertising of the product quickly, enhance the productivity as well as efficiency of the organization, and reduces the time per transaction rather than doing physically or in traditional manner. Further, this results simply reconfirmed the findings by Beckinsale and Ram (2011).

Research conducted by Al- Alawi et al. (2015), also found out that the perceived benefits are the most influential factor to motivate to adopt the EC, in terms of perceived benefits, when the owners/ managers discovered more benefits of using EC

and they recommended that to gain the competitive advantage such adoption of EC can be used as value added tools.

Rather than engaging with traditional approaches, EC gives a variety of advantages for organizations. Since the perceived benefits are the most influential factors on adoption of EC, it is necessary to enhance this factor. Accordingly, both organizations & government should take necessary steps to improve technology equipment, facilities and tools to develop technology infrastructure, thus would impact on obtaining wide variety of benefits. Therefore, EC adopters in the export apparel organizations should continue to utilize EC technology while non/low-adopters should consider the perceived benefits of EC rather than conducting physical organization that can be grabbed through adoption of EC to further enhance their operations and effectiveness.

Prananto (2003) recommended that the perceived benefits of EC associated with businesses mostly depend on the level of EC adoption, thus greater the level of EC adoption, an adequate technology infrastructure needed and the higher benefits will be gathered. Accordingly, this leads to enhance the perceived benefits of EC adoption. This recommendation agrees with the study of Kraemer (2002), and Rahayu (2015). By considering this, researcher can recommend that Sri Lankan government should try to further improve technological infrastructure of apparel organizations in order to enhance perceived benefits of EC.

ICT infrastructure is found to be the next significant factor. The results indicate that the current level of ICT infrastructure highly influence on the decision to adopt EC tools. The possible reasons for the positive coefficient value can increase the technology accessibility & availability, smooth and easy infrastructure processes are introduced, and development of awareness of web-based applications among the apparel organizations, sufficient reasonable confidence in the integrity of transactions undertaken online by users in export apparel organizations in Sri Lanka which agree with the research results of agree with Oxley and Yeung (2012).

The results show that if export apparel organizations are having necessary ICT infrastructure, it leads to adopt EC more and more, thus it is necessary to enhance ICT infrastructure in Sri Lanka in order to motivate the adoption of EC. It is advisable for managers or owners in export apparel organizations to invest in activities that improve the ICT infrastructure, especially in building IT equipment and tools, if they are to receive the full advantages of EC adoption. The research results agree with Anas and Katsoiloudes (2015), and they also recommended to improve the IT infrastructure, tools and access to adopt e-commerce.

Further, the researcher can advocate that the Sri Lankan government should support and intervention is necessary to build speedy ICT infrastructure & access in order to

stimulate the adoption of EC. Van Akkeren and Cavaye (1999) recommend that both industry and government authorities should play a vital role in developing and promoting ICT infrastructure to adopt EC.

The last most important factor impacting EC adoption is computer literacy which shows the significant and positive impact on adoption of EC. The research results agree with the results obtained by Bull (2003), as for any organization the IT level that people have, lead to success of adoption of a technology and EC, due to poor training or even lack of training are some kind of reasons that people within an organization may resist the adoption of a technology. Further, the research results agree with the findings of Govinnage & Sachithra (2019).

Like above two factors, it is necessary to enhance the computer literacy. The researcher can recommend for export apparel organizations to launch more programs to develop the knowledge and skills of employees working in the organization. The Managers should provide necessary trainings to employees whenever it is necessary in order to make confidence of employees to grab the ever-changing technological adjustments. Further, giving the knowledge of configuration, operation and maintenance of a system is a key success factor to enhance computer literacy among employees in the organization and this is a responsibility of managers in export apparel organizations. Lapointe and Rivard (2005), recommended that to manage and support EC software adoption within the organization, it is necessary to give an adequate technological expertise.

Further government can take initiations to enhance computer literacy among employees. Blackburn and Athayde (2000), recommended that IT training of the labour force is regarded as a key component of government authorities. Therefore, researcher can recommend that Sri Lankan government should launch necessary programs to improve further computer related skills and knowledge of employees working in the apparel sector to gain maximum advantages of adoption of EC.

6.   CONCLUSION

The objective of this study was to find out how each independent variable impact on the adoption of EC in the export apparel organizations in Gampaha district, Sri Lanka. The results indicate that all three variables; perceived benefits, computer literacy and ICT infrastructure have a positive and significant impact on adoption of EC.

This study also contributes to and extends the understanding of the EC as a medium commercial use in export apparel organizations, identifying the rationales for adopting the EC by export apparel organizations. From a managerial viewpoint, the findings provide support investment decisions for the decisions relating to the

development and improvement of the EC adoption that addresses and takes the concerns and the needs of the organizations into consideration.

The current research about the factors impact on EC adoption of export apparel organizations in Gampaha district had to be conducted in a broad way because existing literature related to the selected subject in Sri Lankan context was limited. This study has examined a subset of the variables that are found to be important determinants of EC adoption. Other variables may provide explanation strong include, cost of information technology, top management support, financial resources, perceived complexity, perceived ease of use and organizational competence. Future research can investigate these possibilities and the impacts.

REFERENCES

Al-Alawi, A.I., & Faisal, M. (2015). Factors affecting e-commerce adoption in SMEs in the GCC: An empirical study of Kuwait. *Research Journal of Information Technology*, *7*(1), 1-21.

Al-Qirim, N. (2007). The adoption of e-commerce communications and applications technologies in small businesses in New Zealand. *Electronic Commerce Research and applications, 6*(4), 462-473.

Anas, A., Katsoiloudes, M. (2014). The factors affecting e-commerce adoption by Jordanian SMEs. *Management Research Review*, *38*(7), 1-24.

Beckinsale M., & Ram, M. (2006). Delivering ICT to ethnic minority businesses: An action- research approach. *Environment and Planning C*: *Government and Policy*, *24*(6), 847-867.

Blackburn, R., & Athayde, R. (2000). Making the connection: the effectiveness of internet training in small businesses. *Education + Training Journal*, *42*(4/5), 289-299.

Bull, C., (2003), Strategic issues in customer relationship management (CRM) implementation. *Business Process Management Journal*, *9*(5), 592-602.

Chepngeno, W. (2017). *Factors influencing adoption of e-commerce within small and medium enterprises: The case of selected small and medium enterprises in Kamukunji Constituency, Nairobi Kenya* (MBA). University of Nairobi, Kenya.

Chewelos, P., Benbasat, I., & Dexter, A.S. (2001). Research report: empirical test of an EDI adoption model. *Information Systems Research*, *12*(3), 304-321.

Chong, S. (2008). Success in electronic commerce implementation: A cross-country study of small and medium sized enterprises. *Journal of Enterprise Information Management, 21*(5), 468-492.

Cooray, M.P.T. (2018). Apparel Industry: Eyes the World as Its Market. Retrieved from https://www.srilanka-apparel.com/latest-news/724-apparel-industry-eyes-the-world-as-its-market

Davis, F. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 318 – 339.

Garg, A.K., & Choeu, T. (2015). The adoption of electronic commerce by small and medium enterprises in pretoria east. *The electronic journal of information systems in developing countries, 68*(7), 1-23.

Ghonyan, L. (2020). *E-commerce, opportunities and challenges: prospectus for developing countries* (MBA). University of London, Royal Holloway.

Gibbs, J.L., & Kraemer, K.L. (2004). A cross-Country Investigation of the Determinants of Scope of E-commerce Use: An Institutional Approach. *Electronic Markets, 14*(2), 124-137.

Govinnage, D.Y., & Sachitra, K.M.V. (2019). Factors affecting e-commerce adoption of small and medium enterprises in Sri Lanka: Evidence from retail Sector. *Asian journal of advanced research and* reports*, 6*(2), 1-10.

Hajli, N., Lin, X., Featherman, M., and Wang, Y. (2014), Social word of mouth: how trust develops in the market. *International Journal of Market Research, 56*(5), 1 – 30.

Jain, J. (2018). Apparel industry in Sri Lanka: Expected growth in 2018. Retrieved from https://www.bizvibe.com/blog/textiles-and-garments/apparel-industry-in-sri-lanka/

Jovanovic, J.S., Vujadinovic, R., Mitreva, E., Fragassa, C., & Vujovic, A. (2020). The Relationship between E-Commerce and Firm Performance: The Mediating Role of Internet Sales Channels, *Sustainability 2020*, *12(17)*, 6993. Retrieved from https://doi.org/10.3390/su12176993

Kapurubandara, M. (2009). A framework to e-transform SMEs in developing countries. *The electronic journal of information systems in developing countries, 39*(3), 1-24.

Khan, A.G., (2016). Electronic Commerce: A study of benefits and challenges in an emerging economy. *Global Journal of Management & Business research: B Economics and Commerce, 16*(1), 2249-4588.

Koh, S.C.L., & Maguire, S. (2004). Identifying the adoption of e-business and knowledge management within SMEs. *Journal of Small Business and Enterprise Development, 11*(3), 338-348.

Kraemer, K.L., Dedrick, J., & Dunkle, D. (2002). Ecommerce: A mile wide and inch deep, Globalization and E-commerce project of the center for research on information technology organizations (CRITO).

Kurnia, S., Alzougool, B., Ali, M., & Alhashmi, S.M. (2009). Adoption of Electronic Commerce Technologies in Malaysia. In *Proceedings of the 42nd Hawaii International Conference on System Sciences.* Malaysia.

Kurnia, S., Choudrie, J., Mahbubur, R. M., Alzougool, B. (2015). E-commerce technology adoption: a Malaysian grocery SME retail sector study. *Journal of Business Research*, *68*(9), 1906–1918.

Lapointe, L., & Rivard, S. (2005). A Multilevel Model of Resistance to Information Technology Implementation. *MIS Quarterly, 29*(3), 461-491.

Lawson, R., Alcock, C., Cooper, J. and Burgess, L. (2003). Factors affecting the adoption of electronic commerce technologies by SMEs: an Australian study, *Journal of Small Business and Enterprise Development*, *10*(3), 265-276.

Lee, J., Claudine, K., Chris, C. and Sean, S. (2001). Top e-players open to change. Asian Business, *37*(7), 37-8.

Looi, H.C. (2005). A model of factors influencing electronic commerce adoption among small and medium enterprises in Brunei Darussala. *International Journal of Information Technology,* 10, 72-87.

Marcelo, P., Joao, T., Lisboa, V., & Yasin, M.M. (2014). E-commerce strategies and corporate performance: an empirical investigation. *Competitiveness Review, 24*(5), 463-481.

Molla A., & Licker P.S. (2005). E-Commerce adoption in developing countries: a model and instrument. *Journal of Information & Management, 42*(6), 877-899.

Monteiro, J. and Tech, R. (2017, July), *Provisions on electronic commerce in regional trade agreement.* (WTO Staff Working Paper No. ERSD-2017-11). Retrieved from https://dx.doi.org/10.2139/ssrn.3005148

Nath, R., Akmanligil, M., Hjelm, K., Sakaguchi, T. and Schultz, M. (1998). Electronic commerce and the internet: issues, problems, and perspectives. *International Journal of Information Management, 18*(2) 91-101.

Oxley, J.E., & Yeung, B. (2012). E-commerce readiness: Institutional Environment and International Competitiveness. *Journal of International Business Studies, 32*(4), 705-723.

Park S., Makame, W.H., Kang, J. (2014). Factors influencing electronic commerce adoption in developing countries: The case of Tanzania. *South African Journal of Business Management, 45*(2), 83-96.

Park, S. Y. (2009). An Analysis of the Technology Acceptance Model in understanding university students' behavioural intention to use e-Learning. *Journal of Educational Technology and Society. 12*(3), 1-360.

Plunkett, J.W., (2004). *E-commerce & internet business almanac 2004.* Houston, United States: Plunkett Research Ltd.

Poon, S., & Swatman, P.M.C (1999). An exploratory study of small business internet commerce issues. *Journel of information & management,* 35, 9-18.

Prananto, A., Mckay, J., & Marshall, P.A. (2003). Study of progression of e-business maturity in Australian SMEs: Some evidence of the applicability of the stages of growth for e-business model. In *Proceedings of the PACIS, Adelaide.*

Puschmann, T. & Alt, R. (2001). Enterprise Application Integration- the case of the Robert Bosch Group. *Proceedings of the 34th Hawaii International Conference on System Sciences, 9*(p.9047).

Rahayu, R., Day, J. (2015). Determinant factors of e-commerce adoption by SMEs in developing country, evidence from Indonesia. *Procedia – Social and Behavioral Sciences,* 195, 142-150.

Raymond, L. (2001). Determinants of web site implementation in small businesses, *International Research, 11*(5), 411-424.

Schneider, G.P. (2011*). E-Business.* China: Joe Sabatino Annual Press Release.

Scupola, A. (2008). Conceptualizing in E-Services Adoption and assimilation in SMEs. *Journal of Electronic Commerce in Organization, 6*(2), 78-91.

Shah Alam, S., Ali, M.Y., & Mohd. Jani, M.F. (2011). An empirical study of factors affecting electronic commerce adoption among SMEs in Malaysia. *Journal of Business Economics and Management, 12*(2), 375-399.

Simpson, M., & Docherty, A.J. (2004). E-commerce adoption support and advice for UK SMEs'. *Journal of Small Business and Enterprise Development, 11*(3), 315-328.

Sutanonpaiboon, J., & Pearson, A.M. (2006). E-Commerce Adoption: Perceptions of Managers/Owners of small-and Medium-Sized Enterprises (SMEs) in Thailand. *Journal of Internet Commerce. 5*(3), 53-82.

Tan, J., Tyler, K., & Manica, A. (2007). Business-to-Business Adoption of E-commerce in China. *Journal of Information Management, 44*(3), 332-351.

Torre, J., & Moxon, R.W. (2001). E-commerce and global business: the impact of the information and communication technology revolution on the conduct of international business. *Journal of International Business Studies, 32*(4), 17-39.

Turban, E., Lee, J.K., King, D., Mckay, J., and Marshall, P. (2008). *Electronic Commerce: A Managerial Perspective.* Upper Saddle River, NJ: Pearson Prentice Hall.

UNCTAD, (2006). Trends in information and communication technology: Broadband. Retrieved from http://www.unctad.org/tem-plates/webflyer.asp?docid=7678&intItemID=8&ng

Van Akkeren, J.K., & Cavaye, A.L.M. (1999). Factors affecting entry-level internet adoption by SMEs: an empirical study. In *10th Australian Conference on Information Systems* (pp. 2, 1716-1728) Australia.

Walczuch, R., Braven, G.V., and Lundgren, H. (2000). Internet adoption barriers for small firms in the Netherlands. *European Management Journal, 18*(5), 61-72.

Weerkkody, D. (2019, January 29). Export Development Board salutes Sri Lanka apparel's journey to success. *Daily Financial Times.* Retrieved from http://www.ft.lk/apparel__fashion__design/EDB-salutes-Sri-Lanka-apparel-s-journey-to-success/10404-671838

World Trade Organization. E-Commerce, Trade and the Covid-19 Pandemic. May 2020. Retrieved from https://www.wto.org/english/tratop_e/covid19_e/ecommerce_report_e.pdf

Annual Research Symposium in Management
Faculty of Business Studies and Finance
Wayamba University of Sri Lanka