FINANCIAL INCLUSION ON DIGITAL FINANCIAL LITERACY IN SMALL AND MEDIUM-SIZED ENTERPRISES (SMEs)

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ABSTRACT

The adoption of technology by Financial Technology (FinTech) has changed the financial landscape and led to a sharp increase in digital financial products and services. People are exposed to a number of hazards as a result of the increasing use of these services, including data theft, confidentiality issues, uncontrolled network operators, security threats, and a lack of expertise in digital and financial abilities. Therefore, this study aims to address this issue by investigating the impact of financial inclusion on Digital Financial Literacy (DFL) in Small and Medium-sized Enterprises (SMEs) in Sri Lanka. SMEs were in Western Province, Central Province, Northwestern Province, and North Central Province, as there are a significant number of SMEs that were established. The study employed a quantitative approach, drawing a sample of 372 SMEs under purposive sampling methods. A structured questionnaire was used to gather data, and four hypotheses were developed for the investigation. Digital financial literacy was the dependent variable, and financial inclusion was the independent variable in the research model. Regression analysis, correlation analysis, and descriptive statistics were the analytical tools used in the data analysis, which was conducted using the Statistical Package for Social Sciences (SPSS) version 25.0. The regression results revealed that access to and usage of financial services, financial innovation, and service quality in SMEs significantly impact digital financial literacy. The findings revealed significant relationships between financial inclusion and digital financial literacy, highlighting the importance of enhancing financial literacy to improve access and usage of digital financial services among small and medium-sized enterprises. The results offer valuable insights for policymakers, financial institutions, and stakeholders to develop targeted interventions, policies, and programs that promote financial inclusion and empower small and medium-sized enterprises. By improving digital financial literacy, small and medium-sized enterprises can better manage their finances, make informed decisions, and contribute to economic growth and poverty reduction in the region.

Keywords*: *Financial Inclusion, Digital Financial Literacy, Small and Medium-sized Enterprises

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1. INTRODUCTION

Global social and economic systems have undergone substantial change as a result of the fourth industrial revolution. Because of this, new electronic marketing channels and financial services have come about, along with new skills for both people and machines that depend on the technology that is supporting the financial sector's digital transformation (Semarang and Hakim, 2022). Therefore, small and medium-sized enterprises (SMEs) in Sri Lanka are also transforming due to changes in consumer behavior in the digital era. Changes in the financial sector during this era had a major impact on SMEs. Both Digital Financial Literacy (DFL) and Financial Inclusion are important factors that are vital to the formation and expansion of SMEs. SMEs are regarded as the foundation of many economies, including in Sri Lanka. However, SMEs frequently lack sufficient financial knowledge and skills as well as access to formal financial services, which makes it difficult for them to prosper and support the economy. For this, their financial literacy should be high. Financial literacy is the capacity to make wise decisions and utilize judgement when it comes to the usage and management of money (Okicic and Jukan, 2018). As the financial system develops, financial institutions are embracing digital transformation. Given the new developments in artificial intelligence and technology, it is critical to discuss how the economy is becoming increasingly digital. Knowledge and skills should be developed to suit the digital transformation. The combination of digital and financial literacy is known as DFL. This encompasses digital financial tools and services such as online financial platforms, digital payments, and mobile banking. To put it another way, understanding the online payment and banking systems for spending and saving is known as DFL. Ravikumar et al. (2022) with the usage of mobile phones, digital finance has tremendous potential for expanding basic services and promoting broader financial inclusion. Okicic and Jukan (2018) state that financial services and products are primarily digitalized, which directly supports greater financial inclusion generally. The economy moves towards financial inclusion through financial literacy (Kumar and Jie, 2023). One important factor in lowering or even eliminating poverty in the country is financial inclusion. Financial literacy is a key component of financial inclusion (Shakti and Singh, 2023). One way to conceptualize financial inclusion is by providing financial services and products to all social classes in the country. It must first be distributed to those who fall below the poverty line because any country that aspires to have a stable economy must start from scratch to grow. When people and businesses have access to affordable, practical financial products and services that meet their needs for credit, insurance, savings, payments, and transactions that are conducted responsibly and sustainably, this is referred to as financial inclusion. Recently, the digital revolution has altered the way that money is traded, opening up new opportunities for financial empowerment and inclusion for both individuals and enterprises.

Kumari's (2021) initiatives to increase financial inclusion can also increase economic growth, reduce income inequality, and improve society. SMEs in this region may encounter difficulties in adopting and effectively utilizing digital financial instruments and services, despite their importance. SMEs can overcome obstacles and enhance their financial management, operational effectiveness, and growth potential

by expanding access to affordable financial services and enhancing DFL. For policymakers, financial institutions, and other stakeholders (Azeez and Akhtar, 2021), it is critical to comprehend the state of DFL among SMEs in Sri Lanka. This study can assist in the creation of focused interventions, policies, and programs that advance financial inclusion and empower SMEs in the area by identifying current issues and opportunities. The goal is to make digital financial tools, information, and resources accessible to SMEs in this region so they can better manage their finances, make educated decisions, and improve their financial well-being. In terms of financial inclusion and DFL, the focus is on addressing the unique requirements and difficulties faced by SMEs in Sri Lanka. There is a limited amount of research affecting the understanding of the impact of financial inclusion on digital financial literacy. Thus, the issue of digital financial literacy is still relevant, and more needs to be discussed and researched. Thus, this study aims to bridge the empirical gap regarding the impact of financial inclusion on digital financial literacy in SMEs in Sri Lanka.

2. LITERATURE REVIEW

2.1 Financial Inclusion

Policymakers and economists worry about countries at the Bottom of the Pyramid (BOP) because cannot benefit from the expansion and growth that have occurred in developing economies. Regrettably, despite increased economic growth in emerging economies, the BOP continues to experience unacceptable levels of poverty and income inequality. The "financial nomads," or residents of the BOP who lack access to financial products and services and are shut out of numerous financial service providers, have been discussed (Realini and Karl Mehta, 2019). Therefore, because financial inclusion is a key component of inclusive growth, practitioners and policymakers have placed a strong emphasis on it. Financial inclusion is crucial for reducing poverty and promoting economic development because it allows households to spend more on durable goods, health care, education, and other expenses (Hedrick-Wong and Thomas, 2019).

Financial inclusion, according to a United Nations report, is the long-term provision of affordable financial services to allow the less fortunate to engage in the formal economy (United Nations, 2016). Financial inclusion may also be defined as the use of formal financial services by the poor (Beck et al., 2005; Bruhn and Love, 2014). By increasing the number of people, mostly the impoverished, who have access to formal financial services through bank accounts, financial inclusion lowers poverty and fosters economic growth. Increased financial inclusion makes it possible for people who were previously financially excluded to save money, make educational investments, and launch businesses, which helps to combat poverty and spur economic growth (Beck et al., 2005; Bruhn and Love, 2014). An inclusive financial system is ideal since it will allow everyone to move and access money, build capital, and reduce risk, especially the poor. Underprivileged and marginalized groups have official bank accounts and need digital access to conduct basic financial transactions remotely, according to the underlying assumption of the digital financial inclusion process. If the underserved and excluded population is aware of and persuaded of the

intended advantages of digital financial inclusion, an effective program for digital financial inclusion should be designed to meet their needs and responsibly delivered at a cost that is both affordable for consumers and sustainable for providers.

Digital financial inclusion is anticipated to assist banks in reducing expenses through fewer bank branches, less manual paperwork and documentation, and shorter wait times in banking halls (International Finance Corporation (IFC), 2017; Manyika et al., 2016). Since many depositors can easily move banks to digital financial inclusion, banks must provide comparable services or risk losing depositors to rivals. Regulators of the financial and monetary systems benefit from digital financial inclusion as well because it reduces the amount of physical currency in circulation, which lowers high inflation rates in developing and impoverished countries (Global Partnership for Financial Inclusion (GPFI), 2016). When people and companies have access to a dependable digital platform for financial transactions, such as bank account funds, digital financial inclusion can enhance their well-being (Consultative Group to Assist the Poor (CGAP), 2015). If obtaining a digital transactional platform that includes mobile phones, personal computers, and related devices is inexpensive or nonexistent for the impoverished, the anticipated advantages of digital financial inclusion can be fully realized.

For low-income households, financial inclusion offers a number of advantages. In addition to encouraging a high usage of bank deposits, which helps banks maintain a more solid deposit base during bad times, it provides low-income individuals with the opportunity to save for the future, which fosters stability in personal finances (Han and Melecky, 2013). Greater financial inclusion can also provide poor households with opportunities to build savings, make investments, and access credit (Lemma et al., 2010). Financial inclusion also enables them to handle income shocks over unforeseen emergencies such as illness or loss of employment (Seifelyazal et al., 2023). Financial inclusion also improves financial stability by reducing procyclicality risk. Increased financial inclusion would result in a large increase in small savers, which would strengthen and expand banks' deposit bases and lessen their reliance on "non-core" financing, which is usually more volatile during times of crisis (Khan, 2011), thus improving banking system stability. Also, low-income groups are relatively immune to fluctuations in economic cycles and including them in the financial sector will improve the stability of the deposit and loan bases in the financial system. Financial institutions serving the lower class of people have been shown by Hannig and Jansen (2010) to withstand macroeconomic downturns and contribute to the maintenance of regional economic activity. Furthermore, Prasad (2010) notes that since SMEs and small-scale entrepreneurs typically require a greater degree of labour for their operations, their inability to obtain sufficient credit has a negative impact on the growth of employment as a whole. Additionally, as the formal financial sector's share of the economy increases, the case for using interest rates as a crucial policy tool for macroeconomic stability is strengthened, which benefits economic growth. This means that higher levels of financial inclusion can encourage more economic sectors to join the formal financial system (Cecchetti and Kharroubi, 2012). Because these two actors are crucial in promoting financial inclusion, self-help organizations and microfinance institutions that take part in inclusion initiatives contend that

financial inclusion can be viewed as both a social obligation and a business opportunity.

2.2 Digital Financial Literacy

The rapid progress of digital products has led to a corresponding rise in public literacy in the field of digital finance, which is commonly referred to as DFL (Rahayu et al., 2022). According to Prasad et al. (2018), the collective understanding, analysis, management, and communication of personal financial matters constitute financial literacy. However, a person's level of DFL is determined by their thorough understanding of all aspects of financial literacy using digital technology. As a result, DFL encompasses both financial and digital literacy, emphasizing how crucial it is to be knowledgeable in both fields to effectively use digital financial services. At the same time, having a high degree of financial literacy enables people to effectively manage their money and make wise financial decisions (Yadav and Banerji, 2023). Understanding the available services and products, knowing how to obtain and utilize them, and utilizing the available tools and delivery channels to enhance people's lives are all fundamental components of financial literacy. Additionally, the primary components of DFL emphasize the relationship between digital and financial literacy by incorporating essential digital abilities and basic financial understanding.

DFL is related to the knowledge of the online systems of spending and saving through online payment and banking (Prasad and Meghwal, 2017). Tony and Desai (2020) stated that digital platforms and financial literacy are the two concepts that makeup DFL. DFL is therefore financial literacy in the context of digital financial technology. According to the OECD (2018) theory, DFL can enhance saving and spending habits. However, earlier studies only looked at how financial literacy affected people's saving and spending habits (Azlan et al., 2015; Frączek and Klimontowicz, 2015; Henager and Cude, 2016; Sabri and MacDonald, 2010; Varcoe et al., 2005; Widyastuti et al., 2016). There is rare empirical research investigating the effect of DFL on saving and spending behavior. Research about DFL has been conducted by Prasad and Meghwal (2017) and Tony and Desai (2020) in India, but the research did not specifically relate DFL to saving and spending behavior. Tony and Desai (2020), for instance, solely looked into the relationship between DFL and general financial inclusion. Also, Prasad and Meghwal (2017) only mapped DFL among the households. Since there is sparse empirical research investigating the effect of DFL on saving and spending behavior, research investigating the topic is still relevant, especially among Indonesian millennials.

Although the influence of DFL on saving and spending behaviour was not particularly examined in the prior research, the results of the study on the impact of financial literacy on saving and spending behaviour can explain the association between DFL and these behaviours. The digital version of the financial literacy standard is called DFL (Prasad and Meghwal, 2017). Thus, the effect of DFL on saving and spending behavior is supposed to be the same as the effect of financial literacy on saving and spending behavior. Moreover, Tony and Desai (2020) found that digitalization can enhance financial inclusion, including the use of digital platforms for spending and saving. Therefore, it is expected that improved DFL will lead to improved saving and

spending practices. When analyzing about how DFL affects people's savings behaviors, in previous studies (Azlan et al., 2015; Henager and Cude, 2016; Morgan and Long, 2020; Sabri and MacDonald, 2010; Varcoe et al., 2005; Widyastuti et al., 2016; Zulaihati et al., 2020), can underpin the relationship between the two variables. Sabri and MacDonald (2010) found that there was a positive effect of financial literacy on saving behavior among 2519 respondents from 11 universities in Malaysia. Also, Widyastuti et al. (2016) and Zulaihati et al. (2020) found that financial literacy could positively affect saving behavior among millennial teachers in Indonesia. Varcoe et al. (2005) found that senior high school students' saving behavior improved with financial literacy. Moreover, Azlan et al. (2015) also found that financial literacy significantly affected the saving behavior of college and university students in Kota Kinabalu, Sabah, Malaysia. In the younger age groups, Henager and Cude (2016) also found that financial knowledge could affect short-term financial behavior, including saving behavior. Morgan and Long (2020) found that higher financial literacy caused better saving behavior in Bhutan and Vietnam, respectively. Therefore, the previous literature suggests that DFL positively influences saving behavior.

2.3 Financial Literacy Theory

Framework monetary comprehension is a form of human resource investment, and most relevant studies show that people need to learn more about what they are being taught (Gallery et al., 2011). The authors assert that financial literacy influences economic outcomes. The study's thinking should better inform theoretical and empirical models as well as public policy, according to the conclusion. The existence of dual-process theories of cognition and intuition may underline the behavior of individuals with high degrees of financial literacy, according to financial literacy theory. Double process theories embrace the notion that cognitive and intuitive processes can influence judgement (Eniola and Entebang, 2015). Many distinguishing fields have studied and applied theories of double process, for example, reasoning as well as social cognition.

Financial literacy continues to be an intriguing element in both established and emerging nations, since it has recently attracted a lot of attention due to the rapid changes in the financial landscape. Financial literacy is the sum of an investor's understanding of financial products and concepts, as well as their confidence and ability to identify financial opportunities and risks, make logical decisions, know where to find help, and take alternative courses of action to improve their financial situation (Atkinson and Messy, 2011). Investors must be educated and empowered in financial literacy in order for them to comprehend finance in a way that is relevant to their businesses and enable them to use this information to make logical decisions and assess products. According to Rieger (2020), it is greatly anticipated that with greater financial understanding we will be able to overcome the latest difficulties in the credit markets.

Through risk-reduction strategies, such as asset diversification, insurance, and risk accumulation, financial literacy equips investors for challenging financial times. By facilitating decision-making processes like appropriate debt management and on-time bill payment, financial literacy increases the creditworthiness of potential borrowers to support livelihoods, efficient financial systems, economic growth and development, and poverty reduction. Financial literacy also helps people take better control of their financial future, their prudent use of financial products and services, and their exposure to overzealous retailers and fraudulent schemes. As per Falicov (2001), encountering an educated group forces financial regulators to enhance the quality and efficiency of financial services.

2.4 Social Learning Theory

The proposer of the theory of social learning, Bandura (1961), illustrated how social elements, such as financial advice and information sources, influence people's behaviour. People's financial attitudes and ideals are shaped by their immediate surroundings. According to Nabavi (2014), A wide range of scenarios have been used to study and assess the effects of social interactions on an individual's behaviour. Social interaction is likely to have an impact on financial decisions as people get and absorb information through interacting with others. According to the US pension participation study, the fear effect affected retirement savings plans since many people had not thoroughly considered the advantages and difficulties of programs for themselves. When choosing to participate, many employees relied on information from their colleagues since they lacked the rational knowledge necessary to make wise retirement investing selections. Additionally, according to Gravetter and Forzano (2003), employees' decisions are further influenced by social norms due to the desire to have similaritieswith those in their social groups.

According to this theory, investors are more likely to base their investment decisions on information available in the market. If they are aware that there are investments in the market that will yield higher returns in the future, they are also more likely to make them. According to the theory's proponents, learning resulted in a lasting shift in behaviour, particularly when it came to financial decision-making. People can pick up new knowledge through observational learning even if they don't exhibit new behaviours (Glaeser et al., 2016). According to Wise (2013) , financial literacy is a broad set of knowledge that includes knowledge of financial products, comprehension of financial concepts, numeracy or mathematical skills for making wise financial decisions, and financial behaviours like financial planning. Therefore, the social learning theory was used in this study to illustrate why SMEs seek financial literacy, which includes knowledge of financial concepts and financial products that can help to improve financial inclusion.

2.5 Access to Financial Services and Digital Financial Literacy

"There is a significant impact of access to financial services on digital financial literacy in SMEs suggests that the availability and utilization of financial services have a noteworthy influence on the level of digital financial literacy among SMEs.

According to Changwesha and Mutezo (2023) provides evidence that increased access to financial services, such as mobile banking and digital payment platforms, positively affects the level of DFL among SMEs. Babych et al. (2018) highlight the positive correlation between financial literacy and SME performance, indicating that SMEs with higher financial literacy are more likely to effectively utilize financial services. It emphasizes the importance of AFS, including digital payment platforms and online banking, in improving the DFL of SMEs (Brixiová et al., 2020). These studies collectively suggest that AFS plays a crucial role in enhancing DFL among SMEs. The availability of financial services, particularly digital platforms, enables SMEs to develop skills and knowledge about utilizing digital financial tools effectively. This, in turn, can lead to improved financial management, increased access to credit, and overall growth and performance of SMEs in Sri Lanka.

H_1: There is a significant impact of access to financial services on digital financial literacy in SMEs in Sri Lanka.

2.6 Usage of Financial Services and Digital Financial Literacy.

"There is a significant impact of usage of financial services on digital financial literacy in SMEs suggests that the extent to which SMEs utilize financial services has a significant influence on their level of digital financial literacy.

Kumari (2021) finds that actively using financial services, such as banking and credit facilities, demonstrates higher levels of financial literacy, leading to improved performance. The report of the World Bank (2019) and Cammack (2019) provides an overview of the impact of digital financial services on financial inclusion. It highlights that SMEs that utilize digital financial services, such as mobile banking and digital payment platforms, tend to develop higher levels of DFL, enabling them to better manage their finances. SMEs that actively engage with financial services, including access to credit and digital payment systems, experience increased financial literacy, leading to improved business outcomes. Also, it emphasizes that SMEs that utilize financial services, such as digital banking and e-commerce platforms, are more likely to develop digital financial literacy skills, which enable them to effectively navigate the digital financial landscape (Nuryakin et al., 2018).

H_2: There is a significant impact of usage of financial services on digital financial literacy in SMEs in Sri Lanka.

2.7 Financial Innovation and Digital Financial Literacy

"There is a significant impact of financial innovation on digital financial literacy in SMEs suggests that the introduction and adoption of financial innovation have a notable influence on the level of DFL among SMEs in Sri Lanka.

This is primarily due to financial innovations that lower costs and improve risk management. Some of these known as "innovations" are based on business models that the cooperative movement in 19th century Continental Europe used. Examples of these business models include the use of social collateral, peer pressure, and joint liability, which are now widely used by microfinance institutions worldwide

(Thorsten, 2016). Akileng et al. (2018) claim that as time goes on, consumers and business actors will be able to benefit from new product platforms, which will increase access to financial services (insurance, investments, credit, savings, and payments) and lower the cost of financial service information and transactions. Therefore, increasing financial inclusion is aided by the advancement of digital financial technology. Further, financial inclusion and innovation have a positive relationship (Widyaningsih et al., 2021). who stated that the recent success of mobile money demonstrates how technological advancements have drastically altered how people conduct financial transactions. It acknowledged that the fast development of technology around the world has made ICT more important for financial inclusion. This shows how important it is to use new technologies in efforts to include more people in the economy (Akileng et al., 2018).

H_3: There is a significant impact of financial innovation on digital financial literacy in SMEs in Sri Lanka

2.8 Service Quality of Financial Institution and Digital Financial Literacy

"There is a significant impact of service quality on digital financial literacy in SMEs suggests that the quality of financial services provided to SMEs has a significant influence on their level of DFL.

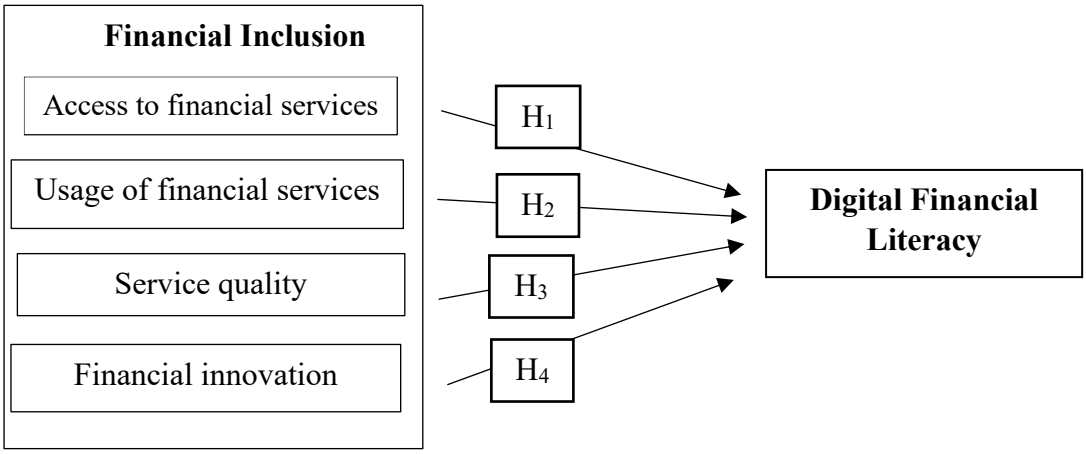
Two key concepts in financial inclusion are quality and customer satisfaction. The difference between the expectations of customers regarding a company and their perceptions of the services it provides is known as SQ. The consumer perceives quality as above average if what is perceived meets or exceeds expectations and as low if what is perceived falls short of expectations (Anoop, 2019). Customers' expectations of what they believe the service provider should provide, which are influenced by their own needs, experience, word-of-mouth, and communications from the service provider, are critical components of SQ that have been identified. When identifying the potential hazards of financial inclusion, concepts such as service quality and customer satisfaction are crucial (Nuryakin et al., 2018). Overall, providing high-quality financial services, particularly in the digital realm, can enhance SMEs' perception, satisfaction, and utilization of digital financial tools, leading to improved financial decision-making and overall growth in Sri Lanka.

H_4: There is a significant impact of service quality on digital financial literacy in SMEs in Sri Lanka

3. METHODOLOGY

3.1 Conceptualization of Variables

The following variables and concepts identified in the research problems are conceptualized to identify the operational definitions of the concepts. Figure 01 shows the conceptual framework for this study.



(Source: Developed by Researcher - 2024)

Figure 01: Conceptualization

3.2 Research Approach and Design

Deductive research typically involves starting with a theoretical framework or hypothesis and testing it with empirical data, while inductive research involves starting with empirical observations and using them to generate new theories or hypotheses. Based on the problem statement and problem justification, this study applied a deductive approach to ascertain the financial inclusion of digital financial literacy in SMEs in Sri Lanka. This study shows how current theories from previous researchers are applied to produce hypotheses that guide the collection of data that can be assessed. The study was primarily quantitative.

3.3 Population and Sampling

SMEs in Sri Lanka would be the study's target population. Mainly, SMEs were located in Western Province, Central Province, Northwestern Province, and North Central Province, as there are significant numbers of SMEs that were established. According to the Mogan table, the sample size would be 372, under the confidence interval of 95%. The final sample will consist of 372 observations and use the convenience sampling method.

3.4 Development of Questionnaire

In this study, the questionnaire is the instrument for the study's data collection. The questionnaire is developed using previous literature, expert opinion, and the standard questionnaires of the studies. The questionnaire was distributed among 372 SMEs in Sri Lanka. Section A of the questionnaire consists of five questions that represent the personal information of the respondents. The study analyzed these questions separately. Section B consists of questions that measure the independent variables: access to financial services, usage of financial services, financial innovation, and

service quality. The questions in Section B measure the independent and dependent variables using a five-point Likert scale.

3.5 Data Collection Method

The questionnaire was distributed among the sample as a Google form in both languages, Sinhala and English. One week was given for the respondents to send the filled Google form back. Ethical standards are maintained as the respondents are anonymous, and the respondents are given the freedom to withdraw from the survey at any time without notification.

3.6 Method of Data Analysis

Many academics have adopted SPSS and other statistical software for data analysis because of their precision in carrying out statistical functions. The statistical analysis of the data gathered from the questionnaire in this study was done using the SPSS (Statistical Package for Social Science) 25 version.

4. RESULTS AND DISCUSSION

4.1 Response Rate

The questionnaire was distributed among 372 SMEs in Sri Lanka covering the most populated province. The researcher received 358 responses. A 96.23% response rate was provided, which is considered highly adequate.

4.2 Reliability and Validity Analysis

4.2.1 Reliability Test

Based on the number of factors used to compute the reliability, Cronbach's Alpha for this study was computed using SPSS.

Table 1: Reliability Analysis

Variable	Cronbach Alpha Value	Comment
Access to Financial Services	.710	Accepted
Usage of Financial Services	.712	Accepted
Financial Innovation	.826	Accepted
Service Quality	.813	Accepted
Digital Financial Literacy	.826	Accepted

Source: Survey Data (2024)

The reliability analysis using Cronbach's Alpha demonstrates strong internal consistency across all study variables, including AFS, UFS, Financial Innovation, SQ, and DFL, with values ranging from 0.710 to 0.826, exceeding the 0.70 threshold. Notably, Financial Innovation and DFL had the highest reliability at 0.826. As a result, these results show that the Likert scale questions accurately measure the

concepts that were meant to be measured. This means that the data can be trusted and used for further analysis.

This enhances the study's credibility and provides a robust basis for understanding the relationships between financial services and innovation.

4.2.2 Validity Test

The construct validity can be assessed using the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy. The validity of the study's measures was assessed using the KMO and Bartlett's tests. 0.5 is the minimum value required to guarantee validity.

Table 2: Validity Test

Variable	KMO Value	Sig. Value
Access to Financial Services	.721	.000
Usage of Financial Services	.718	.000
Financial Innovation	.865	.000
Service Quality	.839	.000
Digital Financial Literacy	.868	.000

Source: Survey Data (2024)

The results, presented in Table 2, indicate strong validity across all variables: AFS, UFS, financial innovation, SQ, and DFL. Each variable showed adequate to highly adequate sample adequacy (KMO values between 0.718 and 0.868) and statistically significant correlations (Sig. Value = 0.000), which proved that they could be used for testing construct validity.

These findings underscore the robustness of the study's measurement instruments and support the validity of its conclusions, ensuring that the data collected is reliable and appropriate for analyzing the dynamics of SMEs in the specified region.

4.3 Descriptive Analysis

The data indicates overall positive perceptions and high levels of engagement in financial services and innovation, coupled with a strong understanding of digital financial concepts.

Table 3: Descriptive Analysis

Descriptive Analysis	Min:	Max:	Mean	Std. Deviation
Access to Financial Services	2.40	5.00	4.336	.481
Usage of Financial Services	2.40	5.00	4.378	.463
Financial Innovation	1.33	5.00	4.371	.526
Service Quality	2.00	5.00	4.365	.533
Digital Financial Literacy	2.14	5.00	4.292	.501

Source: Survey Data (2024)

The AFS had a mean score of 4.336 out of 5 stars from 358 respondents, which means that most people thought they had easy access to financial services. Scores ranged from 2.40 to 5.00, and the standard deviation was 0.481, which shows that the results were consistent. For UFS, the mean was 4.378, showing extensive usage of financial services, with minimal variation (SD = 0.463). Financial Innovation had a mean score of 4.3710, indicating strong adoption, though responses varied slightly (SD = 0.526). Service quality scored an average of 4.365, reflecting high satisfaction (SD = 0.533), while DFL had a mean of 4.2921, showing a good understanding of digital finance (SD = 0.501). Overall, responses were consistent, with minimal variability across all constructions.

4.4 Correlation Analysis

These correlations indicate the extent to which these variables are related and how they influence each other within the context of SME operations.

Table 4:1 Correlation Analysis

Correlation Analysis		AFS	UFS	FI	SQ	DFL
AFS	Pearson Correlation	1				
UFS	Pearson Correlation	.614**	1			
FI	Pearson Correlation	.619**	.748**	1		
SQ	Pearson Correlation	.672**	.681**	.720**	1	
DFL	Pearson Correlation	.654**	.673**	.661**	.682**	1

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Survey Data (2024)

There are strong positive connections between DFL and AFS, UFS, FI, and SQ in the SMEs study, with correlation coefficients of 0.654, 0.673, 0.661, and 0.682, in that order. All variables are significant at the 0.01 level ($P < 0.01$). These results confirm strong positive correlations between digital financial literacy and access, usage, innovation, and service quality, supporting the hypotheses. The findings highlight the interconnectedness of financial services, innovation, service quality, and digital literacy in driving SME growth.

4.5 Regression Analysis

4.5.1 Multiple Regression Analysis

Multiple regression analysis is used when there are two or more independent variables, according to (Saunders et al., 2019).

4.5.1.1 Model Summary

Table 5: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.768[a]	.590	.586	.322
Predictors: (Constant), SQ, AFS, UFS, FI			

Source: Survey Data (2024)

With an R value of 0.768, the multiple regression model summary shows that the independent variables (SQ, AFS, UFS, and FI) are strongly related to the dependent variable in a positive way. The R^2 value of 0.590 indicates that 59% of the variance in the dependent variable is explained by the model. The adjusted R^2 is 0.586, accounting for the number of predictors. With a standard error of 0.32278, the model demonstrates a good fit, confirming that the independent variables significantly predict the dependent variable and support the hypotheses.

4.5.1.2 ANOVA Table

Table 6: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	53.003	4	13.251	127.183	.000[b]
Residual	36.778	353	.104		
Total	89.781	357			

a. Dependent Variable: DFL

b. Predictors: (Constant), SQ, AFS, UFS, FI

Source: Survey Data (2024)

The ANOVA table shows the model's significance in explaining DFL variance. The regression sum of squares is 53.003, while the residual sum is 36.778, indicating a substantial portion of the variance is explained by the model. With a high F-value of 127.183 and a p-value of .000 (below 0.01), the model is statistically significant. This confirms that the independent variables (SQ, AFS, UFS, FI) significantly impact DFL, validating the hypotheses and the robustness of the regression model.

4.5.1.3 Coefficients

Table 7: Coefficients Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.402	.177		2.272	.024
AFS	.259	.050	.249	5.140	.000
UFS	.261	.059	.242	4.394	.000
FI	.147	.055	.154	2.685	.008
SQ	.224	.052	.239	4.319	.000

a. Dependent Variable: DFL

Source: Survey Data (2024)

The coefficients analysis shows that AFS, UFS, SQ, and FI all have significant positive impacts on DFL. AFS has a coefficient of 0.259 (Beta = 0.249), UFS at 0.261 (Beta = 0.242), FI at 0.147 (Beta = 0.154), and SQ at 0.224 (Beta = 0.239), all with p-values below 0.01. This confirms that access to and usage of financial services, financial innovation, and service quality are key factors in enhancing digital financial literacy among SMEs.

4.5.2 Regression Equation

Based on the weights of the coefficients, the linear regression model can be constructed as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \ldots (1)$$

(Y - Digital financial literacy (DFL), X_1 - Access to financial services (AFS), X_2 - Usage of financial services (UFS), X_3 - Financial innovation (FI), X_4 - Service quality (SQ), β – Intercept, ε - Error term)

$$DFL = 0.402 + 0.259(AFS) + 0.261(UFS) + 0.147(FI) + 0.224(SQ) \ldots\ldots (2)$$

This means that the baseline level of DFL, when all independent variables are zero, is 0.402. Each coefficient represents the expected change in DFL for a one-unit change in the corresponding predictor variable, holding all other variables constant. Specifically, a one-unit increase in AFS results in a 0.259 increase in DFL, a one-unit increase in UFS leads to a 0.261 increase in DFL, a one-unit increase in FI results in

a 0.147 increase in DFL, and a one-unit increase in SQ leads to a 0.224 increase in DFL. These findings highlight the significant and positive contributions of access to and usage of financial services, financial innovation, and service quality to enhancing digital financial literacy among SMEs. This quantification underscores the importance of these factors in fostering better financial literacy in the digital age.

5. RESULTS AND DISCUSSION

Based on the results of related literature, it has been determined that these four variables influence digital financial literacy. The investigations listed below can be regarded as analogous to the ones being conducted now.

H_1: There is a significant impact of access to financial services on digital financial literacy in SMEs

Based on the regression analysis, H_1 is supported, showing that AFS has a positive effect on DFL among small businesses. The unstandardized coefficient for AFS is 0.259, with a t-value of 5.140 and a p-value of 0.000. This demonstrates that increased access to financial services significantly enhances digital financial literacy, confirming the hypothesis. The standardized beta value of 0.249 further indicates the relative importance of AFS in predicting DFL. These findings underscore the necessity for SMEs to have better access to financial services to improve their digital financial literacy, which is crucial for their growth and competitiveness in the modern economy.

H_2: There is a significant impact of usage of financial services on digital financial literacy in SMEs

The regression analysis also supports H_2, demonstrating a significant positive effect of UFS on DFL. The unstandardized coefficient for UFS is 0.261, with a t-value of 4.394 and a p-value of 0.000, indicating a strong and statistically significant relationship. The standardized beta value of 0.242 highlights the importance of UFS in enhancing digital financial literacy among SMEs. These results suggest that the more SMEs engage with financial services, the more their digital financial literacy improves, highlighting the critical role of practical engagement with financial services in fostering digital financial skills and knowledge.

H_3: There is a significant impact of financial innovation on digital financial literacy in SMEs

The regression analysis confirms H_3, showing that FI has a significant positive impact on digital financial literacy. The unstandardized coefficient for FI is 0.147, with a t-value of 2.685 and a p-value of 0.008, indicating a significant relationship. The standardized beta value of 0.154 shows the contribution of financial innovation to enhanced DFL. These findings suggest that innovative financial products and services play a crucial role in improving the digital financial literacy of SMEs. Embracing financial innovation can thus be seen as a key strategy for SMEs aiming to stay competitive and adapt to the evolving financial landscape.

H_4: There is a significant impact of service quality on digital financial literacy in SMEs

H_4 is supported by the regression analysis, demonstrating that SQ significantly impacts DFL. The unstandardized coefficient for SQ is 0.224, with a t-value of 4.319 and a p-value of 0.000, indicating a strong and statistically significant relationship. The standardized beta value of 0.239 highlights the importance of high-quality financial services in promoting digital financial literacy among SMEs. This result highlights that not just the availability and use of financial services, but also their quality, are crucial for enhancing digital financial literacy. High-quality services likely provide better information, support, and user experiences, thereby improving the digital financial skills and knowledge of SME owners and managers.

5. CONCLUSION

The research effectively met its goal of evaluating the impact of financial inclusion on digital financial literacy (DFL) among SMEs in Sri Lanka. The findings revealed a positive correlation between access to financial services (AFS) and DFL, showing that SMEs with better access have higher digital financial capabilities. It also confirmed that using financial services, such as online banking, enhances DFL and that financial innovation (FI) plays a significant role in improving digital financial skills. Additionally, service quality (SQ) was found to positively influence DFL, emphasizing the importance of high-quality financial services for promoting literacy. The study addressed key challenges, such as the gap between theoretical and practical financial literacy, by demonstrating the importance of real-world experience with financial tools. It also tackled the difficulty of measuring DFL through reliable statistical methods by providing accurate insights. It also showed how targeted financial inclusion programs can help reduce inequality among small businesses in rural areas. This shows how increasing access to financial services and digital tools can help improve DFL.

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