THE DETERMINANTS OF FINANCIAL TECHNOLOGY (FINTECH) USAGE ACCEPTANCE AMONG UNDERGRADUATES

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ABSTRACT

Financial technology (FinTech) is one of the new fields made available to users through the introduction of technological breakthroughs. These advancements have made banking and finance-related services and transactions easier and more accessible for customers. As undergraduates, who represent the younger generation in the nation, complete their academic and associated work, they are increasingly exposed to these new technologies. While several surveys and studies from other nations have examined the variables influencing the adoption and utilisation of financial technology, Sri Lanka has not received sufficient attention in this specific area of inquiry. Therefore, this research aims to fill the current gap in the field by focusing on the final-year undergraduates of the University of Sri Jayewardenepura and identifying the key determinants underlying undergraduates' adoption of financial technology usage in Sri Lanka. 305 undergraduate students from the university's three main faculties were selected using simple random sampling, and PLS structural equation modelling was employed to analyse the data. The findings of the study indicate that the most significant factors influencing the adoption of financial technology usage are digital accessibility, convenience, and personal innovativeness. The results of the study provide valuable insights on how to promote awareness and usage of financial technology among students. The conclusions drawn from the study have significant implications for empowering FinTech usage within the Sri Lankan undergraduate population.

Keywords: Financial technology; Financial services; Final-year undergraduates; Usage adoption

1. Introduction

Financial technology, which is known as FinTech, has become a hyper-driving force in the world of banking and finance, which has led to an extensive transformation in the way that people and organizations access, administer, and use services that are related to the banking and finance sector. FinTech has gained huge attention ever since it was introduced, especially in recent years, altering financial transaction systems and reinventing the fundamental principles of how investments and financial transactions, as well as financial decisions, are being made. The rise of financial technologies (FinTech)

has opened access to financial services for all, regardless of any existing limitations. FinTech has emerged as a catalyst for inclusion, revolutionizing the financial landscape and extending services to groups that were previously excluded from traditional banking systems (Marinov, 2022). This trend has gained attraction in Sri Lanka among the younger generation. As device usage and internet connectivity have increased across the country, there has been a convergence of advancements and a strong entrepreneurial spirit, paving the way for a FinTech revolution that is reshaping the financial sector and fueling economic growth. The proliferation of mobile payment options and digital wallets stands out as one of the aspects of FinTech adoption among young Sri Lankans. Now, with a few taps on their smartphones, they can carry out transactions, make payments, and access financial services. These solutions have not only simplified dwellers' lives but have also made significant changes in rural areas where traditional banking infrastructure may have been lacking. Additionally, Sri Lanka has seen a rise in the number of traditional financial institutions offering FinTech banking services. Customers no longer need to physically visit bank branches to monitor their bank accounts, pay bills, or transfer money due to the availability of user-friendly online systems and platforms (Çoşkun and Dalziel, 2020). A more competitive and customer-focused environment has been created as a result of this shift in consumer behavior toward digital financial services, which has also compelled banks to innovate more and improve their online financial products. This study intends to identify the usage and adoption of FinTech by undergraduate students in this rapidly changing and financially driven world economy.

1.1 Background of the Study

The study on the factors influencing undergraduates' FinTech usage in Sri Lanka lies at the nexus of two rapidly evolving sectors: higher education and FinTech. It is increasingly essential to comprehend the elements that drive FinTech adoption among the younger generation, in particular undergraduates, as technological innovations continue to alter traditional financial landscapes and redefine consumer habits (Davis, 1989). By underlining the significance of FinTech, the demographics of undergraduates, and the larger economic and technical landscape in Sri Lanka, this background section seeks to contextualize the study. The FinTech revolution has been revolutionizing how financial transactions are handled, managed, and experienced all around the world. Fintech includes a broad spectrum of technology, including robot advisors, blockchain-based solutions, mobile payments, and digital wallets. These innovations upend conventional financial institutions and procedures by providing convenience, accessibility, and efficiency.

According to the EY Global FinTech Adoption Index (2019), as the globe grows more digitally networked, FinTech is having a significant impact on a variety of industries, populations, and economies. Young people studying higher education who are undergraduates make up a technologically adept and digitally native generation. This group is accustomed to using digital tools and platforms because they were raised in a time of rapid technological advancement. Their preferences and actions will probably influence how financial services are provided in the future as they grow up and become financially independent (Shinu and Mullappallykayamkulath, 2022). The historically and culturally

rich country of Sri Lanka has seen considerable changes recently. The nation has been working to upgrade its infrastructure and economy, with a particular focus on increasing digital connectivity. Internet and mobile phone usage have increased, especially among young people. The adoption of FinTech solutions that can close access gaps to finance and meet the population's shifting need is made possible by this dynamic technology environment.

In light of this, research on the factors underlying determinants of FinTech usage adoption among Sri Lankan undergraduates becomes not only necessary but also essential. The study attempts to offer information on the elements that promote or inhibit FinTech adoption in this particular group of undergraduates. Policymakers, financial institutions, and FinTech firms can better adjust their plans to the demands and preferences of the younger generation by knowing these determinants. This might result in developing more practical and user-friendly FinTech solutions, promoting financial inclusion, economic expansion, and national development as a whole. The primary objective of this study is to identify the underlying determinants of FinTech usage adoption in Sri Lankan context.

2. Literature Review

The Technology Acceptance Model (TAM) is a theoretical framework that tends to explain how users embrace and utilize cutting-edge technologies. This theoretical framework was originally proposed by Fred Davis in 1989 and later expanded by Davis and Richard Bagozzi. The framework highlights two main factors: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) which affect users to embrace new technologies. They prefer to embrace technology if they identify it as beneficial in enhancing productivity or if it seems to be useful in accomplishing their objectives and if they find it easy to navigate and operate. These perceptions directly influence their behavioral intention to use a new technology which is ultimately impacting actual usage of it. The simplicity and efficacy of this framework (TAM) has rendered it a cornerstone in understanding user behavior across various technology domains, providing organizations with valuable insights to design and implement technology solutions which are in-line with user requirements and preferences.

The initial unified framework is extended by the Extended Technology Acceptance Model, which offers a more comprehensive theoretical understanding of how consumers accept behavior in relation to technology. The expanded framework includes aspects such as felt satisfaction, subjective norms, perceived behavioral control, trust, and perceived danger, along with the fundamental ideas of perceived usefulness and perceived ease of use. The intricacies of the decision-making processes of users as well as the environmental, social, and psychological elements that affect their adoption of technology are captured by these additional factors. Organizations may create more encompassing strategies to encourage technology adoption, reduce resistance, and improve user happiness by taking these factors into account. Ultimately, the Extended TAM facilitates the design and employment of more user-centric technology solutions by providing a useful tool for

researchers and practitioners looking to comprehend and forecast user behavior in a variety of technological scenarios (Venkatesh et al., 2012).

The employment of cutting-edge technologies that are used in the banking and financial services industry is referred to as FinTech. This is identified as a different firm segment formed by innovative enterprises that significantly rely upon technology to build more efficient financial systems within the country's banking and financial system. It is, on the other hand, a different business model as well as a segment centered on the provision of financial services through mobile devices, software, and internet connection. As a result, both new startups and established businesses in the FinTech industry produce goods and services that are prompt, cost-effective, and customer-centric. As a result of these disruptive risks, incumbent players in the financial services sector, such as commercial banks, investment banks, financial firms, insurance companies, and leasing organizations, have been endangered. Fascination spreads far and wide as FinTech seamlessly penetrates into everyday life through the lens of the latest Ernst Young (EY) report. Data collected through surveys have shown that emerging economies have an impressive adoption rate, ranging from 82% to 87% especially in countries like Russia, China, and India. Among industrialized nations, the younger generations show a higher propensity toward financial technology adoption compared to the older generation.

This phenomenon is particularly prominent in well-developed countries like the Netherlands, UK, and Ireland. According to the Ernst Young (EY) Fintech Adoption Index, adoption rates surged by 60% by 2019, marking a significant increase from 2015 (16%) to 2017 (31%). As of 2019, global acceptance of Fintech had surged to 64%, surpassing forecasted growth rates from 2017 (52%) by a significant margin. Furthermore, research conducted in Germany investigated the adoption rate of the latest financial technologies among the population. Survey findings indicate that approximately 31% of respondents would contemplate transitioning from traditional providers to Fintech alternatives, signaling a potential weakening of entrenched companies' positions within the industry.

While Fintech firms expand at a steady pace around the globe, encompassing advanced economies and emerging ones, their growth trajectory diverges in developing territories. Moreover, consumers are remarkably aware of Fintech services, with 89% globally aware of in-store mobile phone payment platforms and 82% aware of peer-to-peer payment systems and non-bank money transfer services powered by Fintech (Ernst Young Global Fintech Adoption Index, 2019). Money transfers and payments, on the other hand, boast a higher worldwide adoption rate of 75%, whereas other Fintech categories such as savings and investments, budgeting and financial planning, insurance, and borrowing have a lower adoption rate of less than 50% (EY Worldwide Fintech Adoption Index, 2019). According to the Small and Medium Enterprises (SMEs) report, 56% of SMEs use banking and payment Fintech services. These numbers clearly indicate that global consumers and SMEs are selectively adopting FinTech services. Most importantly, this paradox has

created the prospect of FinTech adoption barriers in various financial technology service categories (Çoşkun and Dalziel, 2020)

A study on determinants of the use of Fintech in Generation Y has revealed that the cashless society is a new development in the developing world's economy (Coskun and Dalziel, 2020). FinTech refers to the technology or innovation used for financial transactions in various forms to accommodate people's demands, resulting from advancements in technology and developments in the financial sector. According to the UK Trade and Investment: Landscaping UK FinTech study (2019), there are two forms of financial transaction technology: traditional FinTech, in which large technology organizations enable and support technology in the financial sector, and emerging financial sector-related technologies. An emerging FinTech company or entrepreneur group creates new financial innovations by utilizing technology to reduce or eliminate the need for traditional financial intermediaries. Financial technology, as mentioned earlier, has a significant impact on people's financial patterns and behavior today. Financial institutions must transition to a new financial model in the digital era to keep pace with changing consumer behavior (Hadad, 2017). In this sense, FinTech can be likened to research and product development centers that respond to client needs as demand arises. It is a crucial aspect driving the growth of financial and investment services to promote convenience, speed, safety, and efficiency in the production of new financial products for the banking and finance market. Convenience has been one of the vital factors determining FinTech adoption in many countries worldwide.

Emerging technologies are increasingly integrating digital financial services, with usage patterns varying based on age, education level, and occupational demographics. Notably, the younger demographic, aged 19 to 36, exhibits distinct behaviors in financial transactions, influenced by their upbringing amidst advancing information technology (Venkatesh et al., 2016). Users of the younger generation also utilize the Internet for financial purposes more than older generations, such as paying for goods and services and learning about stocks and investments. They also use financial services apps like internet banking, mobile banking, and insurance queries at a higher rate than prior generations. Generation Y's behavior is influenced by technological advancements and the advent of new financial forms, distinguishing it from earlier generations. They also possess a stronger comprehension and protective mindset than other age groups when it comes to information infringement. According to Alekam et al. (2018), parental influence refers to the financial relationships between parents and their children. The educational backgrounds of children's parents influence their saving behaviors. Parents can influence their children's behavior by displaying proper behavior and teaching lessons applicable to real-world situations (Bucciol and Veronesi, 2014).

Fintech has substantially altered the way of undertaking financial transactions worldwide. People prefer to use bank services via mobile phones rather than going to the bank, indicating that technological adoption has been beneficial. A notable gap between customer digital knowledge and Fintech service adoption was identified in a 2016 survey

conducted by CGI Group Incorporation. The survey revealed that 72% of customers are aware of the technology used in Fintech, with 33% expressing current or future intentions to use Fintech services. In Thai society, QR codes have become the most prevalent form of payment, with both small and large businesses accepting online payments for enhanced accessibility and efficiency. The younger generation, aged between 19 and 36, demonstrates the highest level of proficiency in embracing technology for financial transactions. Thailand employs six main forms of financial technology, including payments, insurance, investment management, fundraising, process efficiency, deposits and lending, and marketplace loans. Traditional payment methods like cash, credit cards, and over-the-counter transactions are being supplanted by ATMs, internet banking, mobile banking, top-up kiosks, and online payments.

Furthermore, the poll results indicate that customers highly prefer their current banking organizations. As a result, customers expect their current service providers to offer them value-added digital services, which they prioritize for reasons of trust, value, and convenience. The survey results also indicate that while consumers prefer traditional services, non-traditional service providers or FinTech enterprises rank second. Consequently, customer acquisition poses a significant challenge for FinTech businesses. Moshirian et al. (2019) suggest that the widespread acceptance of FinTech in Asia is largely due to its greater integration into real-life scenarios. For instance, the success of M-Pesa in Kenya illustrates how FinTech firms can uplift living standards in developing nations (Yermack, 2018). Its popularity lies in its ability to cater to consumers with basic mobile phones capable of sending text messages.

Social influence plays a crucial role in individual adoption intentions, particularly concerning emerging technologies in financial transactions. People are often motivated to adopt new systems by observing the actions of role models or influential members of society (Venkatesh et al., 2003). Given the unpredictability and perceived risk associated with FinTech products, numerous studies have explored the relationship between social influence and the intention to use such technologies (Rahi et al., 2019; Alalwan et al., 2017; Rodrigues et al., 2016; Slade et al., 2015; Tan et al., 2014; Venkatesh et al., 2016). For example, Moon and Hwang (2018) found that social influence predicts the intention to use a biometric payment authentication system, highlighting its significant impact. Similarly, Moon and Hwang (2018) demonstrated that the intention to use crowdfunding is influenced by the social impact created by users. Moreover, studies conducted in Sri Lanka have underscored the substantial influence of social factors on digital banking adoption (Chandrasiri and Karandakatiya, 2018; Jayasiri, Gunawaradana, Dharmadasa, 2016). Individuals may replicate certain behaviors as potential consumers become more hesitant to embrace FinTech products, underscoring the profound social influence on adoption decisions.

Everyday life undergoes significant shifts due to gradual changes driven by economic growth and advancements in FinTech, science and technology, and communication channels. Recent innovations in the financial industry have led to disruptions in transaction

processes, making financial transactions easier and quicker through FinTech. As FinTech providers rapidly gain users, their financial services enjoy expanded global coverage. Perceived benefits play a crucial role in customers' decision-making processes regarding FinTech adoption, outweighing perceived risks. Setiawan, Nugraha, Irawan, Nathan, and Zoltan investigated highlighting the importance of merging conventional banking with innovative FinTech to expand access to finance in Indonesia. Enhanced adoption optimizes FinTech usage, providing easier access to reputable financial services, particularly benefiting marginalized communities such as rural areas, where brick-and-mortar banking branches are scarce. User innovation directly influences the acceptance of FinTech technology among users in Indonesia. FinTech holds promise in serving individuals with limited financial knowledge and lower levels of monetary acumen.

Furthermore, Rogers and Singhal (2003) define personal innovativeness as the degree to which an individual adopts a novel thought before other members of a social system. The results revealed that personal innovativeness had an influence on mobile service adoption intention in research with 445 respondents in Greece. Moreover, it has been discovered that personal innovativeness was positively associated with technology infusion. This is because users of any technical solution must use all applicable applications for both intended and unintended reasons. Individuals' lack of innovativeness may thus restrict them from experimenting and experiencing novel technology and thus gaining additional insights. Additionally, empirically tested a relationship between personal innovativeness and purchasing through electronic banking apps, discovering that more innovative people have a greater tendency to adapt to FinTech compared to less innovative people (Venkatesh et al., 2016).

Shinu and Mullappallykayamkulath (2022) highlighted that digital transformation driven by technology influences financial services businesses. Due to the increasing digitalization of financial products and services, it is now possible to manage money and set financial plans using a smartphone, a computer, plastic money, and cyberspace. The COVID-19 pandemic has unintentionally increased the use of digital financial services. Customers are attracted to Digital Financial Services (DFS) because of its ease of use, speed, dependability, safety, and low cost. In India, the millennial generation is the most likely to use digital technology, and a sizable number of them are influenced by social media when making financial decisions. The study has taken into consideration the analysis of phenomena associated with digital financial literacy and saving and spending habits among millennials using a structured questionnaire developed with the support of previous research in the field. The study investigates the impact of digital financial literacy on the financial behavior of millennials.

Financial behavior was assessed using two variables: saving and spending habits, while digital financial literacy was evaluated across four dimensions: knowledge, experience, awareness, and skill. According to the study, digital financial literacy significantly influences both saving and spending habits. Additionally, it was found that spending behaviors positively impact saving habits. This suggests that the millennial generation

demonstrates superior financial behavior, encompassing both saving and spending habits, and possesses a higher level of digital financial literacy. Security considerations were integrated into the methodology by incorporating the Risky Technology Adoption (RTA) paradigm. If consumers anticipate loss due to security vulnerabilities, their adoption of FinTech products may be delayed or outright rejected. Previous research has shown that risk-taking behavior varies significantly across individuals, countries, domains, and time (Dohmen et al., 2011; Falk et al., 2018; Fisher and Yao, 2017; Mata et al., 2016). Some individuals, particularly in developing countries, fear becoming targets for fraudulent attacks, leading them to continue making large cash transfers (Jones, 2018).

As a result, both incumbents and new entrepreneurs must focus more on building customer trust and market trust. The trade-off between the perceived benefits and the monetary cost of a certain FinTech product, according to Venkatesh et al. (2012). The study found that affluent consumers are less sensitive to the price of FinTech products; a substantial amount of other research in various fields confirms the positive relationship between a product's cost-benefit and behavioral intention to adopt. When applied to the digital financial industry, it is obvious that clients are more concerned about transaction costs such as stamp tax, interest costs, late payment costs, and other types of service expenses. Consumers appear to be quite satisfied with FinTech products that offer the best value for money. It could be identified that digital accessibility is one of the crucial determinants of FinTech usage adoption, especially among the younger generation.

Based on the above discussion researchers formulate the following hypotheses:

H1: Digital Accessibility has a positive effect on FinTech Usage

H2: Convenience has a positive effect on FinTech Usage

H3: Digital Capability has a positive effect on FinTech Usage

H4: Social Influence has a positive effect on FinTech Usage

H5: Personal Innovativeness has a positive effect on FinTech Usage

Unlike traditional banking and financial services, FinTech services have allowed users to enjoy banking and finance-related services more, as they can complete transactions quickly without wasting time. Many researchers from different countries have focused on identifying how users, especially the younger generation, use FinTech, referring to various demographics. Although many financial services companies have introduced FinTech into the market, there is less research conducted to identify factors affecting FinTech usage in the Sri Lankan financial and banking sector, especially among the younger generation. To address this gap in the field of study, this research aims to highlight the underlying determinants of FinTech user adoption by undergraduates, with a special focus on the University of Sri Jayewardenepura, considering undergraduates as a crucial demographic among the younger generation in the country. Accordingly, this research is focused on answering the research question: What are the determinants of FinTech usage adoption among undergraduates of the University of Sri Jayewardenepura, Sri Lanka?

3. Materials and Methods

3.1 Conceptual Framework

The conceptual framework of the study outlines the relationship between variables considered in the phenomenon. In this study, FinTech usage adoption among undergraduates of the University of Sri Jayewardenepura is the dependent variable. Meanwhile, digital accessibility, convenience, digital capability, social influence, price value, and personal innovativeness factors are considered independent variables. Below is a graphical representation of the independent and dependent variables considered in the study.

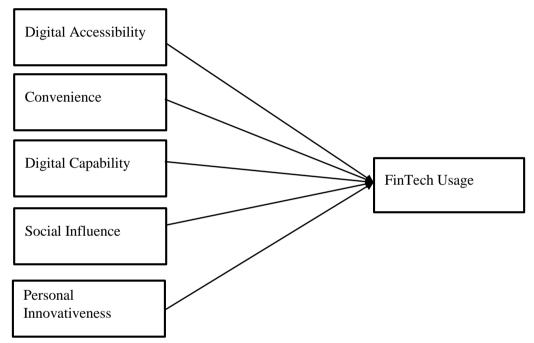


Figure 01: Conceptual Framework

3.2 Research Approach

Two fundamental research methodologies are commonly employed in social science-related research. A research approach refers to a study plan or a set of methods that range from broad theories to specific tactics for collecting, analyzing, and interpreting data. The deductive and inductive research approaches are commonly used, differing based on the research objectives. In this study, researchers utilize the deductive research technique to investigate the social phenomena under consideration. The deductive approach typically starts with a theory, hypothesis, or generalization, which is then tested through observations and data collection. Researchers employ a top-down approach, beginning with a broad hypothesis and evaluating it with detailed evidence. By employing a deductive research approach, researchers aim to examine phenomena more accurately and comprehensively. The study aims to explain how undergraduates of the University of Sri Jayewardenepura adapt to the usage of FinTech, considering factors such as Digital Accessibility, Convenience, Digital Capability, Social Influence, and Personal Innovativeness, while analyzing the magnitude of influence exerted by each independent variable on the dependent variable.

3.3 Population, Sample and Sampling

The population under study comprises final-year undergraduates at the University of Sri Jayewardenepura. Three primary faculties of the university, namely the Faculty of Humanities and Social Sciences, the Faculty of Management Studies and Commerce, and the Faculty of Applied Sciences, were chosen as they represent the main faculties in terms of student enrollment. The sample for the study was selected using the simple random sampling technique, encompassing a total of 305 undergraduates from all three faculties.

3.4 Data Sources, Data Collection Methods, and Analytical Tools

The researchers developed a questionnaire to gather precise data from the undergraduates of the University of Sri Jayewardenepura. This questionnaire employed a five-point Likert scale, with 1 representing strongly disagree and 5 representing strongly agree. Short response questions were also included to gather socio-demographic information. The questionnaire comprised approximately 35 questions. The study examines the dependent variable, FinTech user adoption among undergraduates, based on factors such as Digital Accessibility, Convenience, Digital Capability, Social Influence, and Personal Innovativeness. Primary data sources were exclusively relied upon for the study. Structural Equation Modeling was employed to elucidate the relationships among the variables. Smart PLS software was utilized to analyze the phenomenon and ascertain the extent of the relationship among the variables.

4. Results and Discussion

4.1 Assessment of Reliability

Table 01: Reliability and Validity of the data

	Cronbach's	Composite reliability	Composite	Average variance
	alpha	(rho_a)	reliability (rho_c)	extracted (AVE)
С	0.802	0.868	0.861	0.563
DA	0.892	0.736	0.818	0.542
DC	0.825	0.828	0.877	0.590
FT	0.838	0.781	0.729	0.606
PI	0.840	0.877	0.895	0.685
SI	0.916	0.925	0.938	0.752

Source: Field Survey, 2023

The internal consistency reliability criterion has been determined using Cronbach's alpha, which represents the lower bound or provides a low reliability score, and Composite Reliability, which represents the upper bound or yields a higher reliability number. Both measures' dependability scales from 0 to 1, with higher values indicating more reliability. According to Nunnally and Bernstein (1994), composite dependability ratings of 0.6 to 0.7 are considered acceptable, while values of 0.7 to 0.9 are considered to be good. Low composite dependability indicates a lack of internal consistency reliability. Based on the given data, it is possible to infer that the variables under investigation are sufficiently dependable and reliable.

4.2 Assessment of Convergent Validity

Hair et al. (2022) underlined that indicators with a loading of 0.4 to 0.7 can be kept in a reflection measurement model as long as their removal does not result in an increase in the extracted average variance. The average variance that a construct captures in proportion to the amount of measurement error is used to determine its convergence validity. The composite reliability is calculated by adding the squared factors of the indicator loadings. An AVE of 0.5, as a rule of thumb, suggests that the construct accounts for more than 50% of the variability of its indicators.

Table 02: Outer loading of the latent variables

Convenience	Digital	Digital	FinTech	Personal	Social
0.017	Accessibility	Capability	Usage	Innovativeness	Influence
0.974					
	0.798				
	0.861				
	0.772				
		0.791			
		0.733			
		0.739			
		0.882			
		0.679			
			0.305		
			0.836		
			0.852		
				0.626	
				0.889	
				0.919	
				0.845	
					0.761
					0.906
					0.823
					0.915
					0.918
	0.817 0.777 0.919 0.496 0.974	Accessibility 0.817 0.777 0.919 0.496 0.974 0.439 0.798 0.861	Accessibility Capability 0.817 0.777 0.919 0.496 0.974 0.439 0.798 0.861 0.772 0.791 0.733 0.739 0.882	Accessibility Capability Usage 0.817 0.777 0.919 0.496 0.974 0.439 0.798 0.861 0.772 0.791 0.733 0.739 0.882 0.679 0.305 0.836	Accessibility Capability Usage Innovativeness 0.817 0.777 0.919 0.496 0.974 0.439 0.798 0.861 0.772 0.791 0.733 0.733 0.739 0.882 0.6679 0.836 0.852 0.626 0.889 0.919

Source: Field Survey, 2023

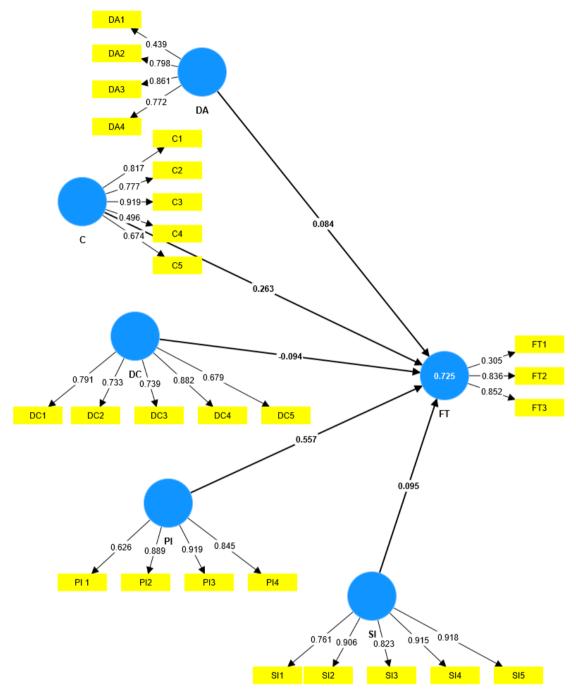


Figure 02: Outer loading and path model

Source: Field Survey, 2023

4.3 Assessment of Discriminant Validity

Table 03: Values of Square root of AVE and inter-construct correlation

	С	DA	DC	FT	PI	SI
С						
DA	0.708					
DC	0.789	0.982				
FT	1.181	1.297	0.81			
PI	0.925	1.109	1.056	1.329)	
SI	0.667	1.108	0.924	1.170	6 0.9	199

Source: Field Survey, 2023

The degree to which the concept is empirically distinct from other constructs in the structural equation model is characterized as discriminant validity. There are three techniques to assess reflective construct discrimination: Cross-loadings are comparisons of the factor loadings for each indicator with their own construct and with other constructs (Hair et al., 2021). The Fornell and Larker criterion, which compares the square root of AVE (average variance extracted) of each construct with correlations between constructs (Fornell and Larker, 1981). The HTMT method analyzes correlations between indicators of different constructions against correlations between indicators of the same construct. By examining the Variance Inflation Factor (VIF), Full Collinearity test for formative constructs may be utilized to test the discriminant validity (Hair et al., 2021).

4.4 Assessment of Multicollinearity

Table 04: Variance Inflation Factor values of the Variables

VIF						
2.536	DC5	1.863				
3.092	FT1	1.017				
4.171	FT2	1.412				
1.563	FT3	1.398				
2.33	PI 1	1.268				
1.186	PI2	2.963				
1.528	PI3	3.616				
2.509	PI4	2.27				
2.284	SI1	2.409				
1.682	SI2	4.178				
1.852	SI3	3.616				
2.435	SI4	7.197				
3.34	SI5	7.72				
	2.536 3.092 4.171 1.563 2.33 1.186 1.528 2.509 2.284 1.682 1.852 2.435	2.536 DC5 3.092 FT1 4.171 FT2 1.563 FT3 2.33 PI 1 1.186 PI2 1.528 PI3 2.509 PI4 2.284 SI1 1.682 SI2 1.852 SI3 2.435 SI4				

Source: Field Survey, 2023

The degree of multicollinearity among predictor variables in a regression model is measured by VIF. Table 4 displays the construct variable collinearity statistics. VIF measures how much multicollinearity has increased the variance of a coefficient estimate (Statistics by Jim, 2021). To minimize multicollinearity difficulties, VIF values should be smaller than 5 (Statology, 2019). As a result, we may infer that collinearity is not an issue for the model because all VIF values are less than this limit. HTMT is an alternate approach for testing discriminant validity in structural equation models (INSEAD, 2014), notwithstanding its ineffectiveness in detecting multicollinearity among predictor variables.

4.5 Goodness of the Fit of the model

Table 05: Goodness of the Fit of the Model Statistics

	Saturated model	Estimated model
SRMR	0.057	0.057
d_ULS	0.76	0.76
d_G	0.283	0.283
Chi-square	459.424	459.424
NFI	0.867	0.867

Source: Field Survey, 2023

The estimated model and the saturated model exhibit identical fit indices, per Table 5, findings from the partial least squares structural equation modeling (PLS-SEM) analysis. The fit indices for both models are as follows: The normed fit index (NFI) is equal to 0.681, the unweighted least squares (d_ULS) d-value is equal to 1.182, the geodesic distance d-value is equal to 0.37, the chi-square value is equal to 742.558, and the standardized root mean square residual (SRMR) is equal to 0.106. The goodness of fit of the models is described by these fit indices. In this instance, all fit indices for both models have the same values, indicating a comparable degree of fit. However, additional elements and theoretical concerns must be taken into account before making a final determination regarding model fit.

Table 06: The effect of the independent variables on Financial Behavior

Path	Path coefficients	P values	Decision
Digital Accessibility → FinTech Usage	0.084	0.039	Supportive
Convenience → FinTech Usage	0.263	0.000	Supportive
Digital Capability → FinTech Usage	-0.094	0.067	Not Supportive
Personal Innovativeness → FinTech Usage	0.557	0.000	Supportive
Social Influence → FinTech Usage	0.095	0.143	Not Supportive

Source: Field Survey, 2023

According to Table 6, digital accessibility is a crucial factor in influencing the adoption of FinTech among undergraduates in Sri Lanka. As internet access and smartphone usage increase, undergraduates show a greater inclination towards FinTech solutions that offer convenient access to financial services. Convenience emerges as a significant determinant

of FinTech adoption among undergraduates in Sri Lanka, reflecting their preference for hassle-free and time-efficient financial solutions as digital natives. Personal innovativeness acts as a driving force behind FinTech adoption among undergraduates in Sri Lanka, with individuals inclined towards innovation and open to trying new technologies being more likely to embrace FinTech solutions. Surprisingly, digital capability does not significantly influence FinTech usage among undergraduates in Sri Lanka. While proficiency in digital skills is important for navigating FinTech platforms, it may not directly translate into increased adoption among this demographic. Similarly, social influence does not emerge as a significant determinant of FinTech adoption among undergraduates in Sri Lanka. Unlike other demographics where peer recommendations and social networks play a crucial role, undergraduates in Sri Lanka exhibit a more individualistic approach to FinTech adoption.

5. Implications of the Study

The study confirms that digital accessibility, financial convenience, and personal innovativeness are significant variables influencing FinTech adoption among undergraduates at the University of Sri Jayewardenepura, Sri Lanka. By establishing these meaningful associations between these factors and FinTech acceptance, the study enhances the theoretical understanding of technology adoption within this specific demographic context. These findings can inform the development of targeted marketing strategies aimed at encouraging Sri Lankan undergraduates to embrace FinTech. By emphasizing the benefits of digital accessibility, financial convenience, and personal innovativeness in relation to FinTech services, this demographic can be effectively engaged. Moreover, the recognition of the impact of personal innovativeness on FinTech adoption prompts considerations regarding the potential effectiveness of educational initiatives aimed at fostering innovative and entrepreneurial mindsets among undergraduate students. Higher education institutions and government agencies could facilitate students' acceptance of FinTech solutions as tools for financial empowerment and inclusion by promoting a receptive attitude towards cutting-edge technologies and innovative ideas.

6. Conclusion

This study addresses the dearth of research on FinTech adoption among Sri Lankan undergraduates by focusing on the factors influencing FinTech usage adoption at the University of Sri Jayewardenepura. Employing deductive research techniques, the study explores the relationship between FinTech adoption and attributes such as digital accessibility, convenience, and personal innovativeness. Data from 340 undergraduates collected via surveys and analyzed using Structural Equation Modeling confirm the reliability and validity of the constructs. The results indicate favorable associations between digital accessibility, convenience, and personal innovativeness with FinTech adoption, underscoring the significance of user experience and individual traits. However, limited relationships between digital capability, social influence, and FinTech usage suggest areas for further exploration. These findings enhance understanding of FinTech adoption patterns and inform strategies to enhance FinTech usage among Sri Lankan

students, offering insights for financial institutions in the country. Based on the study's outcomes, the researchers recommend empowering undergraduates to embrace financial technologies for academic and related purposes. Future research should consider a diverse population to yield varied results and conduct cross-analytical studies between undergraduates at public and private universities to identify disparities in financial technology acceptance and adoption. Policymakers and educators could benefit from such investigations by understanding the unique needs and challenges undergraduates face in different academic settings, potentially necessitating measures to improve financial service accessibility and establish financial counseling services within academic institutions.

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