



Impact of Technology Readiness in Digital Banking Adoption and Role of Mediating Effect of Behavioral Intention: A Study of Commercial Banking Customers of Sri Lanka

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ABSTRACT

The landscape of digital banking in Sri Lanka has rapidly changed in the last several years, with a wide range of financial institutions offering their clients online and mobile banking choices. Even though digital banking is becoming more popular, less is known about how it is used in underdeveloped nations like Sri Lanka. This study explores the influence of Technology Readiness (TR) and the mediating effect of Behavioral Intention (BI) on Actual Usage (AU) of digital banking services as it relates to Sri Lanka's adoption of digital banking. Online data collection from 172 users revealed that Sri Lankan commercial bank clients use digital banking at a medium level. Significantly, there is a positive relationship between Actual Usage and Technology Readiness. When Behavioral Intention moderates the association between Technology Readiness and Actual Usage, Technology Readiness is no longer a reliable indicator of Actual Usage. Moreover, the results of the Sobel test indicate that Behavioral Intention is not a substantial mediator of this association. Subsequent investigation, however, indicates that Behavioral Intention strongly moderates the link between Innovativeness (IN) and Actual Usage (AU) and Optimism (OP) and Actual Usage (AU) (i.e. Drivers). But Behavioral Intention is not a substantial mediator for Insecurity (IS) and Discomfort (DI), i.e., Inhibitors. This study adds by offering evidence in a novel situation, and its findings broaden the body of knowledge by illuminating the factors that influence consumers' intentions to use digital banking.

Keywords: Actual Usage, Behavioral Intention, Digital Banking, Technology Readiness, Sri Lanka.



INTRODUCTION

In the Sri Lankan context, the banking sector, encompassing both Licensed Commercial Banks (LCBs) and Licensed Specialized Banks (LSBs), holds a dominant position within the broader financial framework. The pivotal role of banks in the Sri Lankan financial ecosystem is underscored by their dual function of providing liquidity to the entire economy while concurrently effecting transformations in asset risk profiles.

The banking industry in Sri Lanka has undergone a profound transformation propelled by technological innovations. Notable examples of technology-enabled financial services encompass Internet banking (IB), mobile banking (MB), automated teller machines (ATMs), telephone banking, electronic fund transfers (EFT), electronic clearance services (ECS), and point-of-sale terminals, constituting a spectrum of IT-mediated banking services (referred to as Kiosk banking) (Refer Table 1). The adoption of alternative banking strategies is substantiated by their capacity to heighten operational efficiency, bestow tangible benefits upon customers, and facilitate diverse avenues for service delivery (Curran & Meuter, 2005). Given the evolving trajectory of service delivery mechanisms, the most recent technological innovations are anticipated to garner heightened acceptance and demand among consumers (Westjohn et al., 2009).

Sri Lankan banks have made substantial investments in various areas including infrastructure, training, knowledge enhancement, advanced cybersecurity protocols, and cutting-edge technologies such as Artificial Intelligence (AI), robotics, Customer Relationship Management (CRM), and Business Intelligence (BI) systems. (*Annual Report | Central Bank of Sri Lanka*, 2022). The adoption of novel technologies, such as online banking services, by banks is influenced, in part, by competitive dynamics, as posited

by Hernández-Murillo et al., (2010). Banks tend to embrace online banking services in markets where their competitors have already implemented such technologies, showcasing a response to competitive precedence. Additionally, evidence presented by Gandelman and Hernández-Murillo, (2015) further underscores banks' receptiveness to competition, particularly evident in the context of mobile banking adoption.

Research Problem and Objective

Considering the relative novelty of digital banking, its dynamic and evolving nature, banks are consistently exploring novel ways to leverage it for service delivery. As per the research done by the BCG on Digital Banking penetration of Sri Lankan consumers, Internet Banking (IB) adoption by 2022 is around 17% while Mobile Banking (MB) adoption is around 11% (BCG, 2022). Although the above numbers are in line with other developing countries, potential in Sri Lanka is much higher as some digital banking enablers such as mobile phone adoption in the country is very high. The number of mobile phones and mobile accounts in Sri Lanka currently exceeds the population due to the rapid expansion of wireless technology over the previous two decades (Perera & Wategama, 2019)

Therefore, the study aims to understand the influence of the constructs of Technology Readiness (TR) on actual usage (AU) of digital banking and Mediating effect of Behavioral intention (BI) of consumers in view of contributing the efforts that are being made on the subject by the commercial banks in Sri Lanka. Technology Readiness (TR), as defined by Parasuraman and Colby, (2014), pertains to individuals' inclination to accept and utilize new technologies to achieve their objectives in various aspects of life, including at home, in personal matters, and at work. The choice of the Technolo-

gy Readiness Index (TRI) as the foundation for this study stems from several key considerations.

The Technology Readiness (TR) construct can be seen as a holistic mindset formed through a blend of mental catalysts and impediments. Together, these factors establish an individual's inclination towards the adoption of new technologies, as outlined by Parasuraman in 2000. Consequently, it was deemed suitable to utilize this construct to assess the adoption of Digital Banking services in the context of this study. Furthermore, Behavioural intention is demarcated as a person's deliberateness to execute various actions (Ajzen & Fishbein, 1975). The prior studies have confirmed that intended behavior correlates with actual behavior (Al-Maghrabi et al., 2011; Venkatesh et al., 2012; Yiu et al., 2007). Hence, determining intention will provide adequate prediction for consumer behavior as such it is expected to test mediating impact of the same in the proposed model.

The outcome of the study would enable banks to enhance their understanding of

Table 1: IT-mediated banking services

1 Internet banking (IB)	Internet banking involves consumers to access their bank and account using the internet, to undertake banking transactions (Sathye, 1999)
2 Mobile banking (Mb)	Mobile banking (mBanking) refers to internet banking that occurs via app or browser of mobile phone rather than via a PC (online/internet banking) (Lee & Chung, 2009)
3 Automated teller machines	An interactive programmed machine intended to dispense cash, accept cash deposits, transfer money among bank accounts and enable other financial transactional services (ATM Services, n.d.)
4 Telephone banking	A service that helps customers execute many of the banking transactions through Contact centre over the phone. One of the basic requisite to avail the service is registration of

their existing banking model and marketing strategy, facilitating more adept management of evolving consumer behavior through digital banking.

LITERATURE REVIEW

Digital Banking adoption

According to Guriting and Ndubisi, (2006), digital banking adaptation is critical for cost reduction and improved competitiveness and the bank's capacity to retain existing clients and acquire new ones. As a result, digital banking has a strong position in the banking market (Raza et al., 2017). According to Hanafizadeh et al., (2014), mobile banking is the most preferred digital channel because most individuals aim to use their phones as computers. It also demonstrates that cell phones (smartphones) meet all digital channel requirements. It facilitates and expedites transactions

	mobile number with account.
5 Electronic fund transfers	National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS) and Immediate Payment Service (IMPS) are some of the payment systems which facilitate fund transfers (Government of India, n.d.)
6 Electronic clearance	An automated method of payment and receipt for dealings that are repetitive and cyclic in nature. ECS is utilised by organisations which make bulk payments
7 Point of sales terminal (Kiosk banking)	A point-of-sale (POS) terminal is an electronic replacement for a cash register which can process credit and debit cards. A customer needs to enter a card PIN to complete the transaction using the PoS terminal (Chen et al., 2015)

Technology Readiness (TR)

Parasuraman (2000) introduced the concept of technology readiness as a means to gauge individuals' preparedness to assimilate novel technological advancements. The inherent difficulty individuals experience in adapting to and embracing novel innovations is equally applicable to the domain of technology preparedness (Roy & Moorthi, 2017). Technology readiness has gained traction and has been extensively explored as a metric to evaluate individuals' readiness for technology adoption, with a particular emphasis on user acceptance (Sripalawat et al., 2011; Walczuch et al., 2007a)

The Technology Readiness (TR) 2 model, as posited by Parasuraman and Colby, (2015), represents the latest iteration of technology readiness framework. This model delineates two underlying triggers for Technology Readiness: motivational factors encompassing optimism and innovation, and threat factors involving feelings of insecurity and discomfort. Technology is perceived as a technological advancement by optimistic and innovative individuals, while those of a prag-

matic disposition view technology as inferior until a satisfactory level of confidence is attained within the group dynamic (Park et al., 2015). The readiness of an individual to assimilate novel technology is characterized as a cognitive state (Melas et al., 2014a, 2014b). This propensity to accept and effectively utilize emerging technology is termed technological readiness. Meanwhile, as elucidated by Liljander et al., (2006), Technology Readiness signifies a psychological state stemming from a confluence of affirmative attitudes and hindrances, collectively shaping an individual's inclination to engage with technology. In alignment with the aforementioned definition, Technology Readiness pertains to an individual's predisposition to adopt and apply e-banking technology in pursuit of objectives (Liljander et al., 2006).

The Technology Acceptance Model (TAM), widely used theoretical model to test technology adoption, as introduced by Davis in 1989, was initially conceptualized to gauge and prognosticate employees' willingness to embrace newly implemented technologies within organizational or workplace contexts.

This framework posits that the adoption of technology is contingent upon users' subjective evaluations concerning its utility and ease of use. In contemporary consumer-oriented marketing research, the potential applicability of TAM from a consumer standpoint has been subject to speculation, given its origin in an employee-centric context. This, in turn, underscores the existence of a noticeable void in research. Notably, the behavior of employees tends to be predominantly influenced by their company's objectives and requisites, while consumers tend to operate with greater autonomy within the marketplace (Lin & Hsieh, 2007).

In contrast, the Technology Readiness Index (TRI), as formulated by Parasuraman (2000), represents an attitudinal metric that is tailored to the individual. This index was developed with the intent of gauging individuals' proclivity to embrace and utilize novel technologies for accomplishing objectives both in domestic and professional spheres. Parasuraman and Grewal (2000) defines the Technology Readiness (TR) construct as a structured amalgamation of perceptual catalysts and deterrents that collectively give rise to an overarching cognitive disposition, influencing an individual's orientation towards technologies (Refer Figure 1).

Constructs of Technology Readiness

Optimism, as defined by Parasuraman and Colby (2014), refers to a positive perspective on technology, believing that it can provide individuals with greater control, flexibility, and efficiency in their lives. Innovativeness of individual's plays a crucial role in shaping their attitude toward mobile services, as highlighted by Lee and Shin (2012). Insecurity, as

described by Parasuraman and Colby (2014), manifests itself as a lack of trust in technology, stemming from doubts about its reliability and concerns about potential adverse consequences. Discomfort is characterized as the perception of having insufficient control over technology and experiencing a sense of being overwhelmed by it, as outlined by Parasuraman and Colby (2014).

Applicability of TR over other technology acceptance models

First and foremost, the TRI offers a comprehensive framework that takes into account the individual differences that influence consumers' intentions to adopt novel technologies, as outlined by Parasuraman (2000). Unlike other models like the Technology Acceptance Model (TAM), which primarily focuses on system-specific factors, the TRI is specifically designed to address the unique traits and characteristics that vary among individuals. These individual traits play a pivotal role in shaping people's beliefs regarding various aspects of technology, and the varying strengths of these traits serve as indicators of an individual's receptiveness and willingness to embrace technology, as highlighted by (Walczuch et al., 2007b). Second, the TR index differentiates between the drivers and the inhibitors of technology adoption (Parasuraman, 2000), which is in line with the objectives of this study that is aimed to investigate the positive and negative factors influencing the actual usage of digital banking.

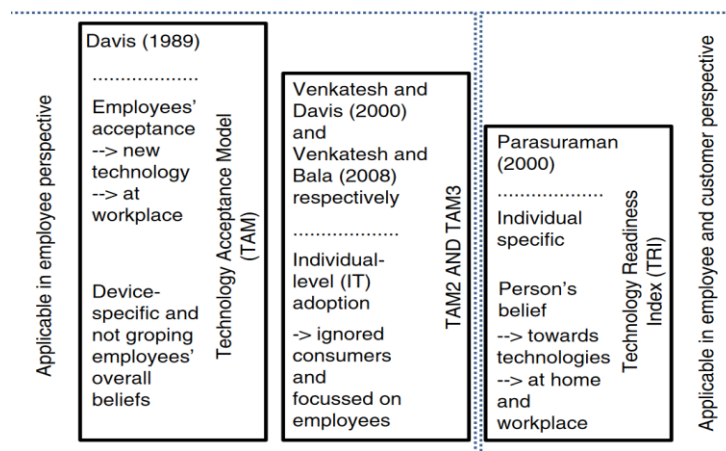


Figure 1: Technology Acceptance Model and Technology Readiness Index

Source: Nagdev et al., (2019)

Actual usage (AU)

Previous investigations into technology usage, as evidenced by studies conducted by Kim and Malhotra (2005) and Shih and Venkatesh (2004), elucidate the concept of personal technology usage as the effective utilization of technology-based products by individuals for personal purposes. Distinct applications of an innovation serve as a noteworthy predictor of consumer contentment (Shih & Venkatesh, 2004). It is noted, however, that these studies have predominantly relied on subjective metrics, thereby capturing substantial impacts but often disregarding more tangible aspects (Straub et al., 1995).

In the present study, we have adopted constructs and variables from established sources. The construct of "Actual Usage" is measured through a scale derived from Moon and Kim's work in 2001.

By adopting these constructs and variables, this study aims to provide a comprehensive assessment of individuals' actual utilization of various digital banking services (Nagdev et al., 2019).

Behavioral Intention (BI)

Behavioral intention (BI) is defined as an individual's deliberate inclination to engage in various actions, as conceptualized by Ajzen and Fishbein (1975). This construct, encompassing the notion of Behavioral Intention (BI), was initially formulated within the framework of the Theory of Planned Behavior (TPB), and subsequently, it has been widely integrated into successive models pertaining to the acceptance of technology. Within the TPB, BI assumes a paramount role as a salient predictor of actual behavior. Notably, extant research has consistently corroborated the correlation between intended behavior and realized behavior (Maghrabi et al., 2011; Venkatesh et al., 2012; Yiu et al., 2007). Thus, the determination of behavioral intention serves as an efficacious tool for predicting consumer behavior.

When contextualized within prior experiences, behavioral intention encapsulates the positive and negative dispositions individuals associate with similar or akin activities (Liao & Cheung, 2002). For instance, if consumers have previously encountered favorable interactions with

comparable systems, such as e-commerce platforms or even electronic banking systems of competing financial institutions, there exists a substantial likelihood that they will embrace digital banking solutions. Conversely, if clients have confronted unfavorable encounters in the past, a contrary inclination is anticipated. As expounded by Mbama and Ezepue (2018) the enduring consistency of service inherent in prior interactions within the banking sector becomes discernible.

This interplay between behavioral intention and past experiences not only augments our comprehension of technology adoption but also underscores the role of cumulative service encounters in shaping individuals' proclivity towards novel

technological offerings in the banking industry.

Conceptualization and Hypotheses Development

The Technology Acceptance Model (TAM) widely used theoretical model to test employees' technology adoption, and willingness to embrace newly implemented technologies within organizational or workplace contexts. In contrast, the Technology Readiness Index (TRI), as formulated by Parasuraman (2000) represents an attitudinal metric that is tailored to the individuals' tendency to embrace and utilize novel technologies for accomplishing objectives both in domestic and professional spheres.

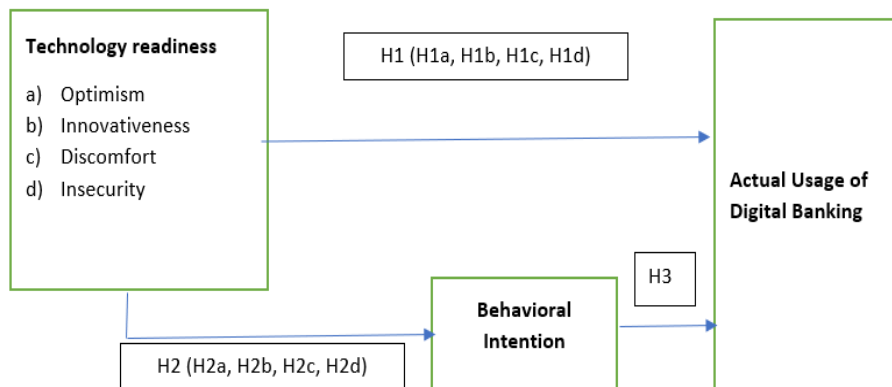


Figure 2: Conceptual Framework

Operationalization of the variables are depicted in Table 2.

In the present study, the TR construct is posited as the independent variable, while the dependent variable is framed as the AU of Digital banking (Figure 2). Thus, the first hypothesis of the study is as follows:

H1. TR has a significant impact on AU of Digital banking.

Behavioral intention (BI) is defined as an individual's deliberate inclination to engage in various actions, as conceptualized by Ajzen & Fishbein, (1975). Previous research has consistently shown a connection between intended behavior and actual behavior, as evidenced by studies conducted by (Al-Maghrabi et al., 2011; Venkatesh et al., 2012; Yiu et al., 2007). Consequently, assessing intention is a reliable means of predicting consumer

behavior accurately. Within the realm of prior experiences, behavioral intention encompasses the positive and negative attitudes that individuals associate with comparable or related activities, as described by Liao and Cheung, (2002).

If consumers have had positive experiences with similar systems like e-commerce platforms or digital banking services from other financial institutions, they are more likely to adopt digital banking solutions. Conversely, if clients have had negative experiences in the past, they are expected to have a different inclination. As explained by Mbama and Ezepue (2018), the lasting quality of service from past interactions in the banking sector becomes evident in this context.

This leads to the formulation of the following hypotheses:

H2: There is a significant impact between TR and BI

H3: There is a significant impact between BI and AU

The other hypothesizes are proposed as follows:

H2(a) Optimism (OP) has a significant relationship with Behavioral Intention, H2(b) Innovativeness (IN) has a significant relationship with Behavioral Intention, H2(c) Discomfort (DI) has a significant relationship with Behavioral Intention, H2(d) Insecurity (IS) has a significant relationship with Behavioral Intention

Optimism, as defined by Parasuraman and Colby (2014), is the belief that technology can enhance individuals' lives by providing greater control, flexibility, and efficiency. Optimistic individuals tend to approach Technology with a Positive mindset, employ proactive coping strategies, and are less likely to dwell on negative events. Previous research consistently shows that optimism correlates with positive attitudes toward technology (Lin et al., 2007; Walczuch et al., 2007b).

H4: BI significantly mediates the relationship between TR and AU of Digital banking.

In essence, this study seeks to unravel the intricate interplay between Technology Readiness, Behavioral Intention, and the Actual Usage of Digital banking, thereby contributing to a more comprehensive understanding of the factors driving consumer engagement with digital banking services.

Given insights above, the following hypotheses can be formulated.

H1(a) Optimism (OP) has a significant relationship with Actual usage of Digital banking, H1(b) Innovativeness (IN) has a significant relationship with Actual usage of Digital banking, H1(c) Discomfort (DI) has a significant relationship with Actual usage of Digital banking, H1(d) Insecurity (IS) has a significant relationship with Actual usage of Digital banking.

Personal innovativeness, described by Lee and Shin (2012), refers to the eagerness to adopt new information systems. It has a significant positive impact on mobile payment services, as indicated by Kim et al., (2010). This trait remains stable across different situations and influences individuals' intentions to use innovative technologies (Liébana-Cabanillas et al., 2017).

Insecurity, according to Parasuraman and Colby (2014), arises from doubts about technology's reliability and concerns about adverse consequences. Establishing robust security systems for mobile payments is crucial to enhance customer trust and improve attitudes toward new technology (Liébana-Cabanillas et al., 2015). Security breaches, such as hacking and malware infiltration, contribute to insecurity and hinder technology adoption (Liu et al., 2015).

Discomfort, as outlined by Parasuraman and Colby (2014), results from a perceived lack of control over technology and feeling overwhelmed by it. Individuals experiencing discomfort with technology tend to perceive it as more complex and often hold unfavorable attitudes toward it (Walczuch et al., 2007a).

METHODOLOGY

The research study employed the quantitative technique, and a field survey was carried out among the chosen group of bank account holders. Using popular models for the variables of Technology Readiness, Actual usage of Digital Banking, and Behavioral Intention, they were questioned about their predisposition toward certain personality traits. The majority of the questionnaire's questions focused on technology readiness and actual digital banking usage, with a few pertinent demographic questions being included.

The research population consisted of individuals who are using Digital banking services, those with ongoing banking ties, and those with the ability to do online transactions. It is noteworthy that these individuals are capable of doing online transactions, as evidenced by the data gathered through the distribution of an online survey. The survey questionnaire that was disseminated digitally was used to gather the data. As a result, it is believed that the participants were competent with technology and could complete an online purchase.

The researcher would not be able to obtain information or data from the banks because these are clients with banking relationships. Since the study is conducted among all local bank branches that have implemented digital banking channels, a non-probability convenient sampling method was chosen as the sample mechanism.

The entire Western Province of the Island was the focus of the inquiry. As of 2021, the province will have 5,822,508 residents overall. (Western Province Government Population Data, Health Department). The Western Province is thought to be the island's main center for business and technology. As a result, the sample may include the whole island. The investigator made contact with 321 individuals in the nearby community who have any kind of digital banking tie. Of these, 172 participants completed the online survey and sent the researcher their online responses. There were no rejected or incomplete questionnaires discovered.

After analyzing the information gathered from this survey, the researcher was able to draw conclusions from the study.

All the scales were scored on a five-point likert scale ranging from 1 (strongly disagree) to 5 (Strongly agree). Data analyzing was done using the SPSS 19 package and 100 percent accuracy checked when feeding the data to the SPSS format. As the descriptive statistics the mean and standard deviation were presented. The model summary was derived by running a multiple regression analysis. The mediator analysis was done through a Sobel test.

Sobel Test

This is a straightforward test statistic that Sobel, (1982) suggested. The Sobel test is used to investigate the hypothesis that X and Y have an indirect relationship, or that the relationship between the independent (X) and dependent (Y) variables is mediated or influenced by a third variable (Y). Stated differently, the Sobel test investigates whether the effects of the independent variable (X) on the dependent variable (Y) are significantly lessened when a mediator (M) is included in the regression analysis. If a significant test statistic is obtained, then total or partial mediation can be supported. The hypoth-

esis is tested that there is no statistically significant difference between the total effect and the direct effect after accounting for the mediator (Allen, 2017). The Sobel test is simple to utilize. It requires three steps:

1. Run a simple linear regression analysis for the effect of the independent variable
2. (X) on the mediator (M). This step computes both unstandardized regression coefficient (a) and the standard error of "a" (Sa).
2. Run a multiple linear regression analysis for the effect of the independent (X), and mediating (M) variables on the dependent variable (Y). This step computes both unstandardized regression

coefficient (b) and the standard error of b (Sb). 3. Use a Sobel test computer calculator (<http://quantpsy.org/sobel/sobel.htm>) to calculate the test statistic, standard error, and the level of significance (p value).

Table 2: Operationalization of variables

Construct Name	Code	Statement	Reference
Optimism	OP1	Digital Banking simplifies my work, contributing to a better quality of life.	Technology Readiness Index 2.0 Parasuraman and Colby (2015)
	OP2	Digital Banking enables me to do anywhere banking, giving me more freedom of mobility	
	OP3	Digital banking gives people more control over their daily lives without any intervention of others	
	OP4	Digital banking makes me more productive in my personal life	
Innovativeness	IN1	Other people come to me for advice on new technologies	Nagdev, Kritika, Anupama Rajesh, and Richa Misra (January 1, 2019)
	IN2	In general, I am among the first in my circle of friends to acquire new technology when it is introduced	
	IN3	I can usually figure out new high-tech products and services without help from others	
	IN4	I keep up with the latest technological developments in my areas of interest	
Discomfort	DI1	I do not wish to take support from any bank staff, as I feel that because of my ignorance they may exploit me	(Cronin Jr et al., 2000)

	DI2	Technical support systems are not helpful because they don't explain things in terms, I understand	
	DI3	Sometimes, I think that Digital Banking are not designed to be used by ordinary people	
	DI4	There is no such thing as a manual for the Digital banking that's written in plain language	
Insecurity	IS1	People are too dependent on Digital Banking to do their things	
	IS2	Too much use of Digital banking distracts people to a point that is risky	
	IS3	Digital banking lowers the quality of relationships by reducing personal interaction with bank staff	
	IS4	I do not feel confident doing business with a place that can only be reached online	
Behavioral Intention	BI1	I intend to conduct banking transactions by using Digital platforms in the future	Davis (1989) Nagdev, Kritika, Anupama Rajesh, and Richa Misra (January 1, 2019)
	BI2	I intend to learn how to use digital Banking in the future	
	BI3	I will highly recommend Digital banking to others	
Actual Usage	AU1	I always Apply new cheque book using mobile and internet banking	Lam et al. (2008); Scale for measuring Actual Usage - Moon and Kim (2001)
	AU2	I usually using auto bill payment services	
	AU3	Credit card payments done through digital channels	
	AU4	Fund transfers through digital Channels	
	AU5	I Open Fixed Deposit using Mobile Banking app	
	AU6	I make Income tax payment using digital channels	
	AU7	I Recharge for mobile bills online	
	AU8	Digital channels use for Stop payment requests for cheques issued	
	AU9	I Upload import-export documents on online portal for customs approval	

	AU1 0	I make Utility bill payments online	
	AU1 1	Withdrawn amount from ATM	

Data collected through questionnaire surveys is fed into the SPSS. The data was cleaned up by looking for outliers and missing values. The sample profile of the respondents was examined using frequency distributions, and the

Cronbach's alpha test was used to confirm the constructs' dependability. Factor analysis was performed to ensure the measures' convergent and discriminant validity (*Discovering Statistics Using IBM SPSS Statistics - Andy Field - Google Books*, n.d.) (Field, 2013). SPSS 19 package had been used and 100 percent accuracy checked when feeding the data to the SPSS format. As the descriptive statistics the mean and standard deviation were presented. The model summary was derived by running a multiple regression analysis. The mediator analysis was done through a sober test. Next section presents the findings of the analysis.

FINDINGS AND DISCUSSION

A reliability analysis was conducted to evaluate the internal consistency of total scores for each scale using Cronbach's Alpha Coefficient. The resultant Cronbach's Alpha coefficients indicated satisfactory reliability for all variables, surpassing the threshold of 0.7. As such, the data pertaining to the main three variables including 4 construct of TR is deemed reliable and consistent as per reliability statistics presented in Appendix 1.

The descriptive statistics for each statement within the scales were computed, encompassing mean values and standard deviations (Refer Appendix 2). The data

reveals an average mean value of 3.6126 (within the range of 2.33 to 3.67) and a standard deviation of 0.38382 for Technology Readiness. These statistics indicate a moderate level of Technology Readiness among Commercial Banking customers in Sri Lanka. However, once the sub-construct of TR is considered, it was observed Optimism (OP) and Innovativeness (IN) have strong influence on actual usage (AU) of Digital banking with mean values of 4.5 and 3.7. This would further indicate that inhibitors such as discomfort and insecurity have moderate influence. (Mean value 2.9 and 3.1 respectively)

Moving to the Behavioral Intention trait, the descriptive statistics presented in Appendix 3, indicate an average mean value of 4.3798 (within the range of 2.33 to 3.67). This underscores a high level of Behavioral Intention within the context of Sri Lanka, indicating a strong influence on Actual Usage of Digital banking.

Elucidating the Actual Usage of Digital Banking scale, Appendix 4 reveals its descriptive statistics, portraying an average mean value of 3.5349 (within the range of 2.33 to 3.67). These figures denote a mid-level engagement with the utilization of Digital Banking in the Sri Lankan setting.

A comprehensive understanding of the interrelationships between variables is derived from the Correlation Summary presented in Appendix 5. A moderate positive correlation of 0.398 is observed between Technology Readiness and Actual Usage (H1) of Digital Banking, notwithstanding not exhibiting a particularly strong relationship. However, at a 99

percent confidence level, this correlation remains statistically significant.

Further analysis noted significant at the 99% confidence level, OP and IN correlation remains statistically significant while DI and IS are not.

In contrast, the Mediating variable, BI, exhibits a robust positive relationship of 0.523 with Actual Usage, (H3) demonstrating high significance at a 99 percent confidence level. Notably, the relationship between TR and BI (H2), as indicated by the F-value, is not deemed significant. However, relationship between OP and BI as well as IN and BI (H2(a) and H2(b)) are statistically significant whereas DI and IS with BI is not.

The Sobel test was utilized to examine if BI mediated the relationship between TR and AU (H4). First, results of simple linear regression show that TR was a statistically significant predictor of AU ($b = .56$, $\beta = -.39$, $t = 3.98$, $p < .01$). Next, when the mediator, BI, was entered in the regression analysis, TR was no longer a significant predictor of AU ($b = .24$, $\beta = .16$, $t = 1.5$, $p > .05$). On the other hand, the mediator, BI, emerged as a significant predictor of AU ($b = .46$, $\beta = .47$, $t = 5.36$, $p < .001$). To further investigate the mediator, the Sobel test was utilized to examine if BI significantly mediated the relationship between TR and AU. The results indicated that BI not significantly mediates the relationship between TR and AU ($Z = 1.45$, $p > .05$).

Further analysis has been carried out to explore the mediating impact of BI between sub constructs of TR and AU. As per the Sobel test results, BI significantly mediates the relationship between OP and AU as well as IN and AU. ($p < .05$). However, when analyzing the other two sub constructs of TR, DI and IS, Sobel test result indicates BI not significantly mediates the relationship between DI and AU as well as IS and AU. ($p > .05$).

CONCLUSION

In this study, a comprehensive analysis of Technology Readiness (TR), Behavioral Intention (BI), and Actual Usage (AU) of Digital banking in the Sri Lankan context was conducted, yielding valuable insights into the relationships and mediating effects among these variables.

Firstly, the reliability analysis using Cronbach's Alpha Coefficient demonstrated the robustness and internal consistency of the data, with all variables exceeding the threshold of 0.7, indicating the reliability of the measurements.

Descriptive statistics provided further insights into the sample's characteristics. Technology Readiness among Commercial Banking customers in Sri Lanka was found to be at a moderate level, with a mean value of 3.6126. However, when analyzing the sub-variables of TR, Optimism (OP) and Innovativeness (IN) emerged as strong influencers of Actual Usage (AU) of Digital banking, with mean values of 4.5 and 3.7, respectively. In contrast, inhibitors such as Discomfort (DI) and Insecurity (IS) exhibited a moderate influence on AU, with mean values of 2.9 and 3.1, respectively.

Behavioral Intention (BI) within the Sri Lankan context was notably high, with an average mean value of 4.3798. This suggests that customers in Sri Lanka have a strong inclination towards adopting and using Digital banking services, highlighting the importance of understanding factors influencing BI.

Elucidating the Actual Usage of Digital Banking, the mean value was 3.5349, denoting a mid-level engagement with Digital Banking among Sri Lankan customers.

Correlation analysis revealed a moderate positive correlation of 0.398 between Technology Readiness (TR) and Actual Usage (AU) of Digital Banking, indicating a statistically significant relationship,

albeit not particularly strong. However, Optimism (OP) and Innovativeness (IN) showed statistically significant positive correlations with AU, while Discomfort (DI) and Insecurity (IS) did not exhibit significant correlations.

Interestingly, Behavioral Intention (BI) demonstrated a robust positive relationship of 0.523 with AU, indicating high significance at a 99 percent confidence level. This underscores the strong influence of BI on the actual usage of Digital banking services.

The study also explored the mediating role of BI in the relationship between TR and AU. While TR was a statistically significant predictor of AU, introducing BI as a mediator rendered TR no longer significant, indicating that BI indeed mediates the relationship. Further, the Sobel test results indicated that BI does not significantly mediate the relationship between TR and AU.

Further analysis delved into the mediating impact of BI between the sub-constructs of TR and AU. The results revealed that BI significantly mediates the relationship between Optimism (OP) and AU, as well as Innovativeness (IN) and AU. However, for the sub-constructs Discomfort (DI) and Insecurity (IS), BI was not found to significantly mediate the relationship with AU.

In summary, this study provides insights into the dynamics of Technology Readiness, Behavioral Intention, and Actual Usage of Digital banking in the Sri Lankan banking sector. Understanding these relationships and mediating effects is crucial for banks and financial institutions in tailoring their strategies to meet the evolving needs and preferences of customers in the digital banking landscape. These investigative pathways hold promise in furnishing marketers and financial institutions with invaluable insights to enhance their branding efforts and judiciously allocate resources to-

wards the advancement of Digital Banking services.

Limitation of the study

However, it is important to acknowledge certain limitations inherent in this study. The survey was confined in scope, particularly omitting rural areas within the country. Sample has been selected using non-probability convenient sampling method. Moreover, the analysis focused exclusively on the impact of TR trait mediated by BI, without considering other external market factors or internal stimuli influencing consumers' behaviors and decisions.

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Appendix

Appendix 1 Reliability Statistics

Scale	Cronbach's Alpha	No of Items
Technology Readiness	0.717	16
Behavioral Intention	0.755	03
Actual Usage	0.767	11

Source: Survey Data

Appendix 2 Descriptive Statistics – Technology Readiness

Construct Name	Code	Statement	N	Mean	St,Div
Optimism	OP1	Digital Banking simplifies my work, contributing to a better quality of life.	172	4.779	.4703
	OP2	Digital Banking enables me to do anywhere banking, giving me more freedom of mobility	172	4.698	.4868
	OP3	Digital banking gives people more control over their daily lives without any intervention of others	172	4.407	.6576
	OP4	Digital banking makes me more produc-	172	4.535	.5881

		tive in my personal life			
		Avg		4.6047	.45287
Innovativeness	IN1	Other people come to me for advice on new technologies	172	3.605	.8012
	IN2	In general, I am among the first in my circle of friends to acquire new technology when it is introduced	172	3.674	.8463
	IN3	I can usually figure out new high-tech products and services without help from others	172	3.942	.8311
	IN4	I keep up with the latest technological developments in my areas of interest	172	3.930	.8086
		Avg		3.7878	.60818
Discomfort	DI1	I do not wish to take support from any bank staff, as I feel that because of my ignorance they may exploit me	172	2.628	1.1066
	DI2	Technical support systems are not helpful because they don't explain things in terms, I understand	172	2.837	1.0274
	DI3	Sometimes, I think that Digital Banking are not designed to be used by ordinary people	172	2.849	1.1010
	DI4	There is no such thing as a manual for the Digital banking that's written in plain language	172	3.500	.9172
		Avg		2.9535	.72204

Insecurity	IS1	People are too dependent on Digital Banking to do their things	172	3.337	.9407
	IS2	Too much use of Digital banking distracts people to a point that is risky	172	2.953	1.0048
	IS3	Digital banking lowers the quality of relationships by reducing personal interaction with bank staff	172	3.151	1.0002
	IS4	I do not feel confident doing business with a place that can only be reached online	172	2.977	1.0952
		Avg		3.1047	.66140
		Techno Readiness – Overall Avg		3.6126	.38382

Source: Survey Data

Appendix 3 Descriptive Statistics – Behavioral Intention

Construct Name	Code	Statement	N	Mean	St,Div
Behavioral Intention	BI1	I intend to conduct banking transactions by using Digital platforms in the future	172	4.488	.6641
	BI2	I intend to learn how to use digital Banking in the future	172	4.174	.7699
	BI3	I will highly recommend Digital banking to others	172	4.477	.5887
		Avg		4.3798	.55581

Source: Survey Data

Appendix 4 Descriptive Statistics – Actual Usage of Digital Banking

Construct	Code	Statement	N	Mean	St,Div
Actual Usage	AU1	I always Apply new chequebook using mobile and internet banking	172	2.837	.9562
	AU2	I usually using auto bill payment services	172	3.186	1.0902
	AU3	Credit card payments done through digital channels	172	4.221	1.0221
	AU4	Fund transfers through digital Channels	172	4.442	.7130
	AU5	I Open Fixed Deposit using Mobile Banking app	172	3.163	1.1465
	AU6	I make Income tax payment using digital channels	172	2.826	1.0867
	AU7	I Recharge for mobile bills online	172	4.209	.9345
	AU8	Digital channels use for Stop payment requests for cheques issued	172	2.802	.9181
	AU9	I Upload import-export documents on online portal for customs approval	172	2.674	1.0453
	AU10	I make Utility bill payments online	172	4.105	1.0519
	AU11	Withdrawn amount from ATM	172	4.419	.8326
		Avg		3.5349	.54159

Source: Survey Data

Appendix 5 Correlations

Relationship	Value	Significant
TECHREAD With Actual Usage	.398**	.000
TBI With Actual Usage	.523**	.000.
Tech Ready with BI	0.162	0.135

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

* . Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data