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RESEARCH PAPER

Roshan Digital Account: A Digital Innovation in Pakistan and its Impact on Customers' Satisfaction

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ABSTRACT

Digital innovation in banking is crucial to the economic development of a country. The implementation of new technologies enhances the customer experience. The Roshan Digital Account is an excellent setup for the country's economy and also provides access to investment opportunities. The purpose of this study is to examine the impact of service quality, system security, technology acceptance, and convenience on customer satisfaction while using Roshan Digital Account (RDA). Multiple non-probability sampling techniques were used to collect data from 403 RDA users. SMART PLS 3.0 was applied to analyze the research model based on data collected from respondents through the questionnaire. The results show that all the variables except technology acceptance have an impact on customers' satisfaction while using RDA. This study provides practitioners with more insights to find innovative ways for escalating the efficiency of RDA.

KEYWORDS Convenience, Customer Satisfaction, Digital Banking, Roshan Digital Account, Service Quality, System Security, Technology Acceptance

Introduction

Innovation in technology is transforming the lifestyles of human beings and ultimately has an impact on the affinity of customer retention. Everything now has the prefix "digital", and digital banking is not an exception. The term "going digital" refers to the process of implementing digital technologies to enhance and improve the efficiency of business operations. The digital banking revolution is the adoption of financial technology that brings flexibility to the banking industry (Wewege & Thomsett, 2019). The report by Barquin et al. (2021) demonstrates that digital innovation and adoption are expanding quickly in emerging markets. The worldwide adoption of the internet and mobile devices has contributed to the development of new methods of banking and financial payments (Alkhowaiter, 2020). Over the past few years, the world has been steadily heading towards the digital era of innovation. As a result, the revolution of this era has led to comprehensive product transparency among customers (Mbama & Ezepue, 2018). Digital technologies are proliferating all over the world (Ganguli & Roy, 2011). Integrating new technology is a critical factor for organizations striving for faster deliveries, lower costs, and a better customer experience. Banks are using cost-effective and technology-driven channels to provide better services to their customers (Moser, 2015).

Digital banking is the latest internet and mobile banking platform that enables customers to access banking products and services. Technological innovations and new mechanisms integrated into processes have significantly influenced the nature of the business environment, which results in better quality service and improved productivity (Zavolokina et al., 2016). The use of modern information technology for e-banking comprises all banking activities, which include all electronic services for interaction with customers (Blount et al., 2004).

Customer satisfaction is an essential instrument in marketing activities that the company evaluates in terms of consumers' long-term behavior. Customer satisfaction is defined as a customer's attitude or behavior towards the service provider (Gorondutse & Hilman, 2014). Customer acceptance of technological innovation is a precarious issue in the banking sector as the banking sector in Pakistan has deployed information technology for business operations (Rahi et al., 2019). In other words, a digital banking platform combines all banking activities through information and technology to offer all services in accordance with customers' needs (Blount et al., 2004).

Technology innovation in relation to automated teller machines (ATM), internet banking (IB), mobile banking (MB), and unified payment interface (UPI) has brought a new framework, which has improved the ability of the banking sector to effectively meet the needs of its customers (Glavee-Geo et al., 2019; Kaur et al., 2021). Customers feel more comfortable with various digital platforms while conducting online banking transactions (Nasri, 2011). Technological innovation has a direct influence on the efficiency and ease of use of financial transactions, as there is no need for a physical presence to perform banking transactions (Salihu et al., 2019). The growth of technology has led to the transformation of traditional banking into digital banking. Online banking has been implemented successfully throughout the world due to its convenience and ease of banking transactions. However, mobile banking in the financial market is gaining popularity quickly. As a result, consumers prefer to use m-banking due to its convenient services available anytime from anywhere (Laukkanen & Kiviniemi, 2010; Shankar & Jebarajakirthy, 2019). Digital banking enables customers to avail banking services like checking balances, transfer of funds, and investment in securities without physically visiting the banks (Alnemer, 2022). Digital innovation in banking provides cost-efficient services to perform financial transactions online.

The objectives of financial institutions are customer satisfaction, customer loyalty, and customer retention, which are determined by the services provided by financial institutions to their customers (Zairi, 2000). For appraising this phenomena, variables namely service quality, systems' security, technology acceptance, and convenience are adopted from prior literature. The current analysis is conducted in the context of RDA to examine the impact of digital innovation through service quality, system security, technology acceptance, and convenience on customer satisfaction.

Literature Review

The Innovation Diffusion Theory (IDT), the Theory of Reasoned Action (TRA), the Theory of Planned Behavior (TPB), and the Technology Acceptance Model (TAM) are various behavioral models used in digital banking adoption that provide theoretical support to our study. In this study, operationalized variables and sub-dimensions of these variables are supported by earlier theories such as IDT, TRA, TPB, and TAM. The innovation diffusion theory is a pioneering theory that explains the pattern and the rate at which new concepts, behaviors, or products circulate among the people (Rogers, 1962). For the adoption of internet banking (IB), an arrangement of interdependent technologies, expertise with computers, internet adeptness, and assignation with computer-mediated infrastructures are prerequisites. The previous implementation framework of attendant technologies and a higher level of compatibility influenced the execution of new technologies (Lee et al., 2005). According to Rogers (1962), acceptance of an innovation depends on its benefits. Furthermore, Black et al. (2001) point out that innovation diffusion theory has an imperative influence in explaining IB but the perceived risk of innovation is not ascertained in IDT. TRA provides an association between attitude and behavior in human activity. Shih and Fang (2006) extend the TRA by including network quality features such as security, user-friendliness, transaction speed, and information quality. The addition of extra variables increases the explanatory power of attitude and behavioral intention of the TRA. Researchers recommend that a user's attitude toward technology, ability to perform IB, and managerial support all have a positive impact on IB behavior. TPB is more effective than TRA

at forecasting IB behavior (Yousafzai et al., 2010). TAM is the first research model that examines one's views of technology's usefulness, ease of use, and attitude towards using it. TRA-based TAM is based on techniques for accepting and utilizing technology (Davis, 1989). According to Davis, a user's attitude and perception toward technology are key factors in determining the success of a technology. These factors are in turn influenced by how easy or difficult a user finds it to use the technology in question. The original TAM contains only three main factors, such as perceived usefulness, perceived user-friendliness, and use of the computer. Perceived usefulness is a perception of a person that using IB would enhance their performance, whereas perceived ease of use is classified as the perception that using IB involves less effort.

In today's fast-driven digital world, banks should adopt technological innovation to enhance customer satisfaction and loyalty. The digitalization of banking is providing an easier way to conduct financial transactions online through mobile devices or other technological gadgets (Ozili, 2018). An investigation by Cuesta et al. (2015) shows that digital banking is a procedure of virtual distribution networks for financial activities. It is an innovation to comprehend customers' needs swiftly and appropriately. Due to the accessibility and user-friendliness of the technology, digital banking offers services from any place with a variety of benefits (Martins et al., 2014; Yiu et al., 2007).

Sharma and Sharma (2019) study demonstrates that satisfaction and intention to use are vital antecedents, while satisfaction is a mediator between service quality and information quality. The findings of this study suggest that a higher degree of trust and service quality will assist in retaining existing customers as well as attracting potential consumers. Iqbal et al. (2018) examines the influence of digital services on consumer satisfaction, loyalty, and behavior intentions. This investigation is supported by 238 users of the service sector in Pakistan. The findings of this investigation assert that technological innovation is the need of the hour. Oni et al. (2016) study indicates that high service quality is a key determinant in improving customer satisfaction and customer attitude towards e-banking.

Despite the numerous advantages of internet banking, many people still refuse to use internet banking because of security concerns (Kuisma et al., 2007). The most important issue with internet banking is security, because inadequate security in online banking may result in financial losses and poor feedback (Auta, 2010). One of the key elements that customers would take seriously is security. Customers' privacy and information should remain confidential when doing business with any bank. The study by Agarwal et al. (2009) reveals that security, precision, speed, ease of use, and customer satisfaction are the most vital elements for conducting online transactions. Online security is a vital element of an organization's website. Data privacy and the use of customer information by companies are two key components of online security (Brun et al., 2016). Digital payments and banking are the new ways to conduct financial transactions conveniently. The best indicators are trust, perceived security, and perceived usefulness, which play a key role in the adoption of digital payments and banking in Gulf countries (Alkhowaiter, 2020). The study by Jamil and Khan (2016) investigates customer satisfaction with online banking in Oman. The results demonstrate that accessibility, convenience, efficiency, responsiveness, security and privacy, and reliability significantly influence customer satisfaction.

Customers who used online banking are more concerned with the convenience of banking transactions (Sulaiman et al., 2005). According to Ahmad and Al-Zu'bi (2011), customers can access the bank portal any time from any place, which results in more convenience for online banking users. Customers use online banking due to convenience, and customer satisfaction is strongly influenced by convenience (Brun et al., 2016). The key priority for the customer is convenience because they prefer to select a service provider who would be able to deliver well-organized services that encompass a minimum amount of time and effort (Ismail & Alawamleh, 2017). Duarte et al. (2018) measure the impact of convenience on customer satisfaction through a cross-sectional survey. The result indicates

that convenience has a significant impact on online customer satisfaction. "Convenience" is a crucial factor in the online banking industry. The study by Jebarajakirthy and Shankar (2021) investigates the factors that impact the intention of mobile-banking users. This research applies systematic sampling to collect data from 446 Indian banking users. The findings indicate that convenience dimensions such as access, transaction, benefit, and post-benefit convenience have a significant influence on the people who use mobile banking. The research of Baabdullah et al. (2019) highlight the primary aspects that influence the adoption of mobile banking. In addition, this study also examines the factors that influence customer satisfaction as well as customer loyalty. The results of this study show that there is a close relationship between the convenience of online banking and customer satisfaction. This study asserts that customer satisfaction can be enhanced by increasing the level of convenience for online customers.

The research of Ameme and Wireko (2016) reveals a positive relationship between technology and customer satisfaction as technology plays a vital role in a competitive environment. The investigation also asserts that in a competitive environment, banks must adopt an innovative approach to become market leaders. In addition, there is a close association between innovation and cost because when innovation increases, cost also rises. Customer satisfaction and loyalty depend on four factors, such as customer service, technology security and information technology, technology convenience, and technology easiness and reliability (Ganguli & Roy, 2011). Ananda et al. (2020) conceptualize the relationship between digital banking adoption factors using an extended technology acceptance model. Primary data is collected from 200 customers through a questionnaire survey. Multiple linear regression analyzes the relationship of six independent factors. The result of this study suggests that perceived usefulness, awareness, and web features have a significant positive impact on digital banking adoption in Oman. A study by Yoon (2010) investigates the antecedents of customer satisfaction toward online banking in China. The findings of this study show that design, security, speed, information, content, and customer support service have a significant impact on customer satisfaction, but the ease of use has no such impact on customer satisfaction.

Li et al. (2021) scrutinize the factors that have an impact on customer satisfaction. This study determines that four variables: cloud services, security, e-learning, and service quality can derive customer satisfaction. The SEM technique utilizes to analyze the data. The findings evaluate that cloud service, security, e-learning, and service quality significantly impact customer satisfaction extent of internet banking.

Research framework and hypotheses

Figure 1, based on the conceptual framework of research, represents the independent variables that have an impact on the dependent variable.

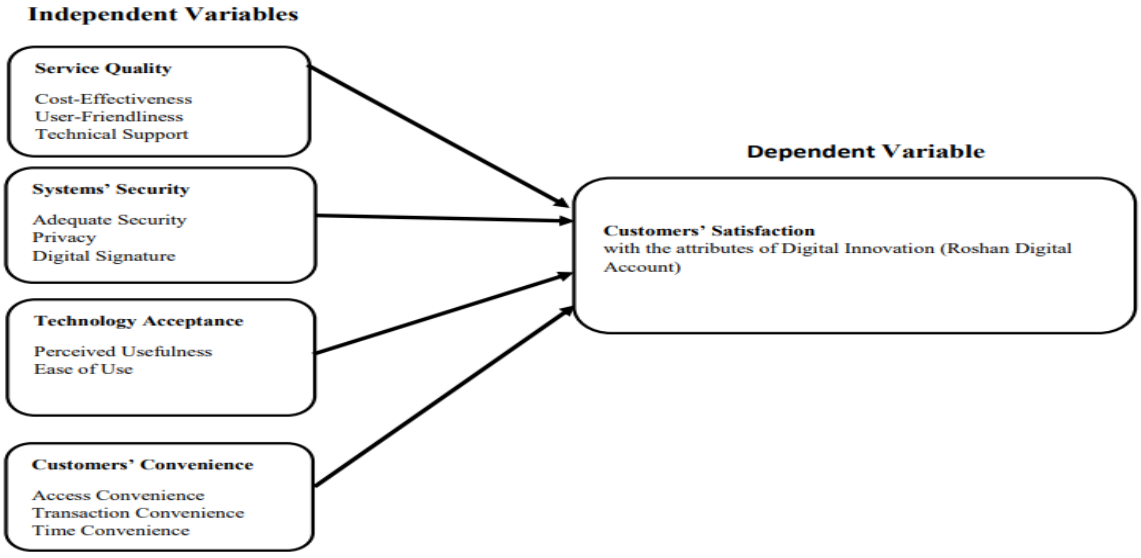

Figure 1: Conceptual Framework

Service Quality

Service quality refers to the measurement of how well an organization meets the expectations of its customers. Customer satisfaction appears when performance exceeds the predicted degree and the perceived quality will be greater than the satisfaction rate. The evidence has been provided by Parasuraman and Grewal (2000) that there is an indistinguishable relationship between customer satisfaction and service quality. Customer satisfaction is an instantaneous reaction to consumption, whereas service quality is defined as the decision, the customer makes about the service provided (Bitner & Hubbert, 1994; Culiberg & Rojšek, 2010).

The sub-dimensions of service quality are cost-effectiveness, user-friendliness, and technical support.

a) **Cost-effectiveness:** Cost-effectiveness means "anything of good value where the benefit and utility are worth at least as much as the price paid for it." From a cost-effectiveness point of view, without any doubt, the digital banking system is more efficient because digital banking reduces the costs incurred by banks and customers.

b) **User-friendliness:** User-friendliness denotes a system that is friendly to use, which means that it is not difficult to understand or learn. User-friendliness will have a direct impact on user satisfaction with the online system (Malik & Mubeen, 2009).

c) **Technical support:** Technical support is an advisory service provided by an organisation, mostly over the phone, to assist people who have problems while using a service. Technical support enables users to give feedback about the services provided by the organization (Rubin et al., 2013).

In the context of RDA, customer satisfaction will be influenced by service quality. So we developed the following hypothesis:

H1: There is a significant relationship between service quality and customer satisfaction.

System Security

Security can simply be defined as a technique of protecting and preventing hackers from gaining access to customers' information and privacy. Customers' financial and

personal information can be protected by banks using secure electronic systems (Ling et al., 2016). The sub-dimensions for system security are adequate security, privacy, and digital signature.

a) **Adequate security:** Adequate security refers to protective measures that are commensurate to the risks and repercussions of data loss, misuse, or unauthorized access or alteration.

b) **Privacy:** The banks place a high focus on keeping customers' personal information private and only using it for operations related to the bank as well as evading any misappropriation. The bank has initiated a privacy policy to safeguard personal information entrusted to and provided by customers.

c) **Digital Signatur**e: A digital signature offers more inherent security as it is comparable to a handwritten signature. Encryption-based digital signatures recognize electronic information so that document creators may be identified and the document's information integrity can be managed (Tsai et al., 2014).

System security can also increase customer satisfaction. Consequently, we suggest the following hypothesis:

H2: There is a significant relationship between system security and customer satisfaction.

Technology Acceptance

Technology acceptance refers to how users come to accept and use technology. User technology acceptance is also known as the adaptation process of new technology or innovation. Fred Davis defines technology acceptance as "the user's willingness to use the technology for the purpose it is intended to design." The sub-dimensions of this variable, perceived usefulness and ease of use, have been derived from the TAM model.

a) **Perceived Usefulness:** Perceived usefulness can be described as the degree to which a user relies on using a particular technology to increase their work performance.

b) **Ease of Use:** Ease of use is a core concept that describes how easily customers utilize the product. Customers are more enthusiastic about adopting digital banking if their operations are easy to use.

Research by (Kassim & Abdullah, 2010) expositive association between customer satisfaction and ease of use. Therefore, this study attempts to examine the following hypothesis:

H3: There is a significant relationship between users' acceptance of technology and customers' satisfaction.

Customer Convenience

Convenience is referred to as the comfort of online users that saves customers time and effort. Customers' preference for online banking for performing their transactions is mostly based on convenience (Kaura, 2013; Shankar & Rishi, 2020). Customers avail online banking as it is more convenient and the convenience factor plays a significant role in determining customer satisfaction (Brun et al., 2016).

Access convenience, transaction convenience, and time convenience are sub-dimensions of convenience.

a) **Access Convenience:** Access convenience refers to obtaining online services from any location. Therefore, website affability is considered an access dimension of online convenience (Duarte et al., 2018; Roy et al., 2018).

b) **Transaction convenience:** Transaction convenience is described as "the speed and ease with which consumers can reach a retailer" (Benoit et al., 2017). Therefore, the key feature of transaction convenience is reducing the time and effort to complete the transaction (Jiang et al., 2013).

c) **Time convenience:** Time-saving can be referred to "customers can search for banking information using online banking platforms with minimal time and effort" (Verhoef et al., 2007; Wang et al., 2003). Customers execute banking transactions through the internet, which is less time-consuming as customers do not need to visit any bank physically to conduct banking transactions.

Convenience dimensions will also have an impact on customer satisfaction in relation to the RDA. So, we hypothesized:

H4: There is a significant relationship between customer convenience dimensions and customer satisfaction.

Material and Methods

Sampling and Data Collection Procedure

Sampling is the process of selecting a small part of the population to represent the whole population. A population is a group of people that can participate in research. This study aims to investigate the impact of digital innovation on customer satisfaction. Multiple non-probability sampling techniques have been used to choose the study sample. Firstly, data has been obtained for this study from a snowball sampling method. Usually, in the snowball sampling technique, a researcher selects one or two people to participate in their study, but then they rely on those initial participants to assist them in choosing further study participants. However, in order to enhance the sample size, the researcher also used convenience sampling, because convenience sampling selects individuals based on their availability and accessibility. Through convenience sampling, each customer of RDA has an equal opportunity to be selected as a respondent in this study. A non-probability convenience sampling technique can help the researcher to obtain an adequate sample size (Davis, 1985). The following section explains the demographic profile of 403 respondents. As it is evident from table 1, the majority of the population were males, with a rate of 80.1%, and 19.9% were females. The majority of respondents are living outside Pakistan for 1-3 years with a 35.5% rate, whereas the lowest level of people living less than or equal to 1 year has a rate of 2.7%. The majority of respondents have a Master's (18 years of education) with a 37.2% rate. The majority of respondents used between 6–9 months at a rate of 33.5%. The lowest level related to those respondents using RDA between 12–15 months and above 15 months is with a rate of 6.7% and 2.5%, respectively. The majority of respondents have a Foreign Currency Value Account with a rate of 56.3%, and the respondents have a NRP Rupee Value Account (NRV) with a percentage of 43.7.

Table 1
Demographic profiles of the respondents (N=403)

Category	N	%
Gender		
Male	323	80.1
Female	80	19.9
Years living outside the Pakistan		
Less than or equal to 1 year	11	2.7
1-3 years	143	35.5

3-5 years	140	34.7
5-10 years	79	19.6
Above 10 years	30	7.4
Education		
High School (10 years of education)	1	0.2
Bachelor (14 years of education)	77	19.1
Bachelor (16 years of education)	141	35.0
Masters (18 years of education)	150	37.2
Ph.D. (Doctor of Philosophy)	34	8.4
Duration of using RDA		
Between 0-3 months	61	15.1
Between 3-6 months	101	25.1
Between 6-9 months	135	33.5
Between 9-12 months	69	17.1
Between 12-15 months	27	6.7
Above 15 months	10	2.5
Types of Accounts		
Foreign Currency Value Account (FCVA)	227	56.3
NRP Rupee Value Account (NRV)	176	43.7

Instrumental Development

A cross-sectional design was used in this study to collect primary data through a structured questionnaire as a research instrument. The questions take the form of closed-ended questions using a seven-point Likert scale. A seven-point Likert scale questionnaire tends to be precise, easy to use, and more representative of a respondent's true evaluation (Finstad, 2010). Every single Likert denotes its value. The Likert scale 1, 2, 3, 4, 5, 6, and 7 are respectively for strongly disagree, disagree, somewhat agree, neutral, somewhat agree, agree, and strongly agree. Google Forms were mainly used to gather online data from overseas customers of the RDA. According to Finstad (2006), the seven-point Likert scale appears to be preferable for the electronic distribution of questionnaires that maintain the validity and reliability of research instruments.

Data analysis and findings

SMART-PLS 3.0 software was used in this investigation to analyse the data gathered from respondents. SMART-PLS can be used to measure validity, reliability, and associations between dependent and independent variables (Cheng & Yang, 2014).

Construct Reliability and Validity

Reliability refers to the consistency of an instrument to measure something. To improve reliability and validity, questionnaires were tested among 10 customers. In order to ensure the reliability and validity of this study, SMART-PLS has been used to conduct Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE). Cronbach's alpha is the standard measurement of reliability, and values greater than 0.7 denote admissible reliability. Composite reliability demonstrates good internal consistency of the model if the values of Composite Reliability are greater than 0.7 (Thorndike, 1995). Average Variance Extracted (AVE) indicates the mean variance shared among variables with their indices. The minimum value for AVE is 0.5. However, the value of AVE above 0.5 indicates a good Average Variance Extracted (Fornell & Larcker, 1981).

As shown in table 1, Cronbach's alpha for independent variables service quality, system security, technology acceptance, and convenience dimensions are 0.77, 0.818, 0.841, 0.874, and 0.838 for the dependent variable customer satisfaction, which is above 0.7 for all

variables, indicating good reliability. Moreover, composite reliability for all variables is also above 0.7. AVE for all variables is also above 0.5, which demonstrates good Average Variance Extracted. Due to the criteria introduced, the proposed model is considered admissible at the standard level.

Validity refers to the ability of an instrument to accurately measure a concept in a quantitative study. The discriminant validity test in table 2 shows all constructs used in this study, such as convenience dimensions, customer satisfaction, service quality, system security, and technology acceptance are unique and different from one another and are unrelated. The outcomes of discriminant validity in table 2 are accepted at the standard level.

Table 2
Reliability and validity of the measurement model

Variables	Cronbach's Alpha	Composite Reliability	AVE
Service quality	0.77	0.867	0.686
System security	0.818	0.892	0.733
Technology acceptance	0.841	0.904	0.759
Convenience dimensions	0.874	0.905	0.613
Customer satisfaction	0.838	0.903	0.756

Table 3
Discriminant Validity

Variables	Convenience Dimensions	Customer Satisfaction	Service Quality	System Security	Technology Acceptance
Convenience dimensions	0.783				
Customer satisfaction	0.760	0.869			
Service quality	0.683	0.734	0.828		
System security	0.699	0.741	0.715	0.856	
Technology acceptance	0.745	0.703	0.679	0.719	0.871

Coefficient of Determination R-Square

The R-Square (coefficient of determination) measures the variation in the dependent variable that is explained by the regression model (independent variables). R-square evaluates the goodness of fit of a regression model. While adjusted R-square compares the goodness of fit for regression models with various proportions of independent variables. In table 3, the R-square value is 0.69, which explains that the independent variables of this study cause a 69% change in the dependent variable and the rest is due to an error, indicating a high fit model.

Table 4
Measurement for predictive R-Square

Dependent Variable	R Square	Adjusted R-Square
Customer satisfaction	0.699	0.696

Outer Loadings

The outer loadings of a model evaluate the path from a factor to its representative indicator variables in a reflective model. According to Henseler and Sarstedt (2013), if path loadings are above 0.7, then the model is a well-fitting reflective model. Table 4 demonstrates that the measurement model is reliable and well-fitting as all values are above 0.7, which means loadings are significant. Figure 2 illustrates the outcomes of the outer loadings of the structured model.

Table 5
Measurements of Outer Loadings

Variables	Service Quality	System Security	Technology Acceptance	Convenience Dimensions	Customer Satisfaction
SQ1	0.76				
SQ2	0.88				
SQ3	0.83				
SS1		0.86			
SS2		0.89			
SS3		0.82			
TA1			0.85		
TA2			0.90		
TA3			0.87		
CD1				0.79	
CD2				0.81	
CD3				0.80	
CD4				0.74	
CD5				0.80	
CD6				0.77	
CS1					0.87
CS2					0.91
CS3					0.83

Note: SQ1, SQ2, SQ3= Service Quality sub- dimensions (Cost-effectiveness, user-friendliness, technical support) SS1, SS2, SS3=System Security sub- dimensions (Adequate security, privacy, Digital signature), TA1, TA2, TA3, = Technology Acceptance sub-dimensions (Perceived usefulness, ease of use), CD1. CD2, CD3, CD4, CD5= Convenience Dimensions (Access convenience, transaction convenience, Time convenience) CS1, CS2, CS3= Customer Satisfaction 1, 2, 3

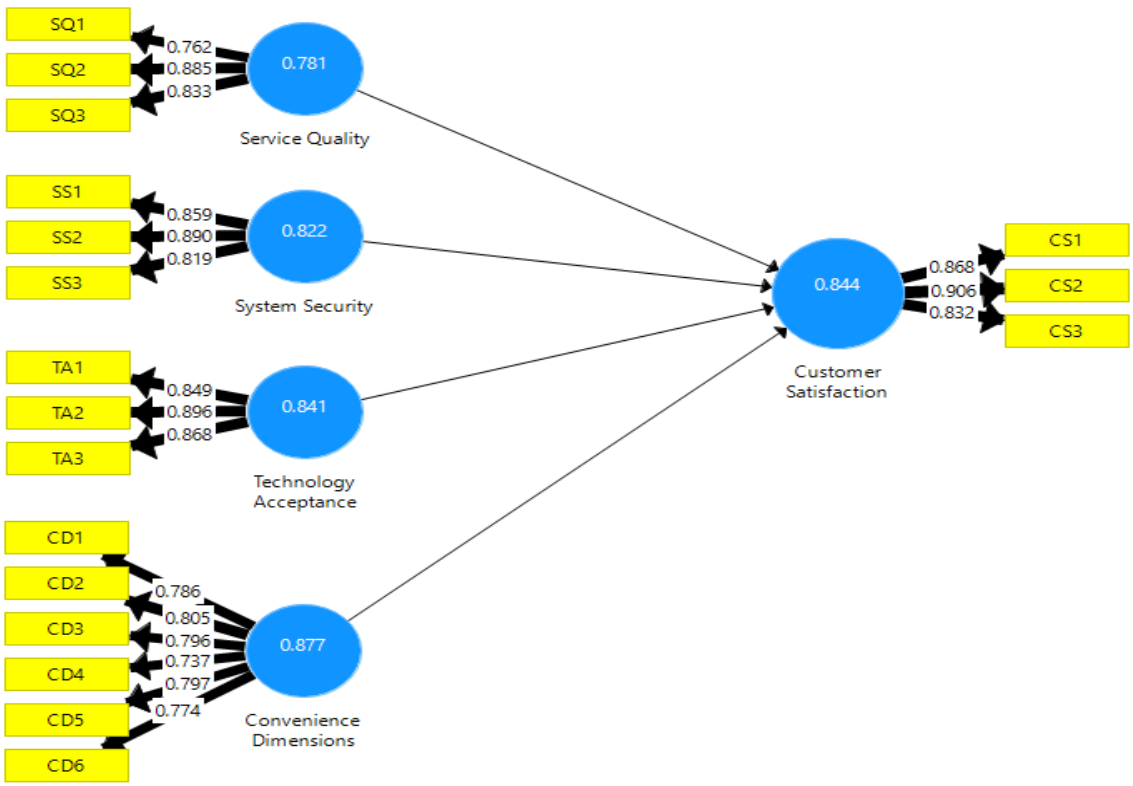

Figure 2Measurement for outer- loadings

Table 6
Results of the Structural Model

Hypotheses	Standard Deviation (STDEV)	T-Statistics (|O/STDEV|)	P-Values	Decision
Service Quality -> Customer Satisfaction_	0.052	5.049	0	Confirmed
System Security_ -> Customer Satisfaction_	0.059	4.311	0	Confirmed
Technology Acceptance -> Customer Satisfaction_	0.067	1.419	0.157	Rejected
Convenience Dimensions -> Customer Satisfaction_	0.061	5.501	0	Confirmed

Hypotheses testing

To test hypotheses, t values are typically used in SMART-PLS. The bootstrapping method is utilized in SMART-PLS because the PLS algorithm does not have a p-value and t-test. To have significant values, t-values must be above 1.96. To examine the factors influencing customer satisfaction with RDA, the hypotheses have been analyzed using t-values. The t-test outcomes and path coefficients are shown in figure 3.

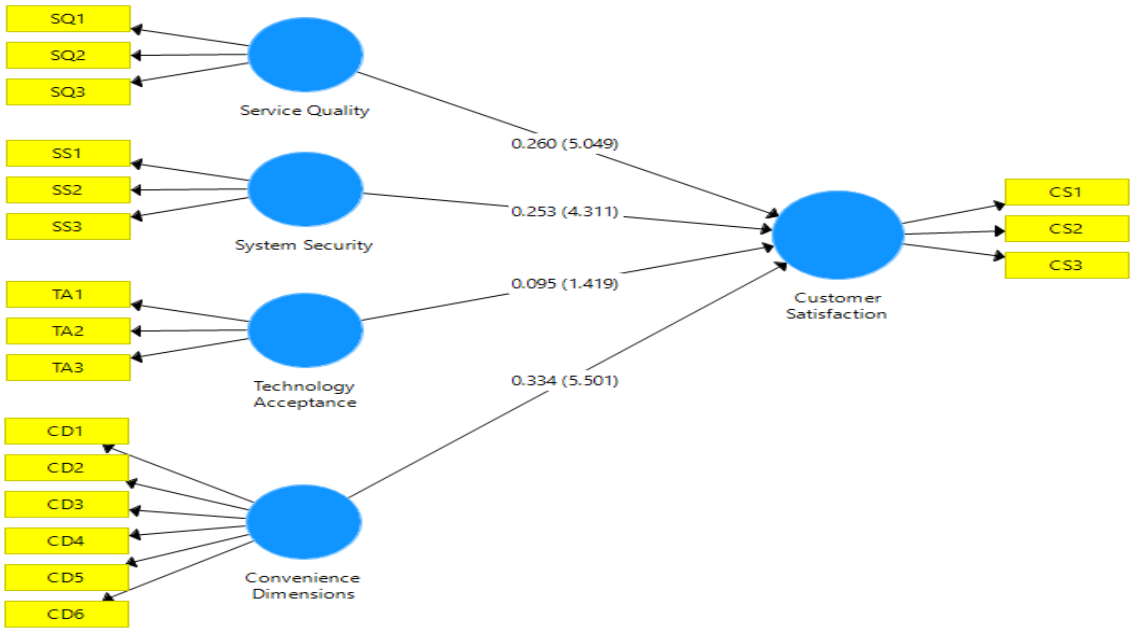

Figure 3 The Test of T-Value

Discussion and Implication

Table 5 indicates the hypotheses results. The results show that service quality has a significant impact on customer satisfaction as it has a significant p-value and a t-value of 5.049, which is above 1.96, so H1 is confirmed at the 99.9% significance level. The findings demonstrate that high service quality levels increase customer satisfaction. The investigation by Sureshchandar et al. (2002) indicates that customer satisfaction and service

quality are highly associated with each other as an increase in one leads to an increase in the other. The t-value of system security is 4.311 and has a p-value of 0, which indicates a positive and significant relationship between system security and customer satisfaction. H2 of this study is also confirmed at the 99.9% significance level. The idea behind security is to ensure the privacy and security of information provided by customers. The results indicate that the more efficient the security of RDA, the more overseas customers RDA will attract because customers are more concerned about the protection of data and information. The examination of Yoon (2010) demonstrates that security is a vital factor in customer satisfaction while using online banking. This study indicates that the system security of the RDA has an impact on customer satisfaction. The information remains secure with the RDA and the presence of a digital signature enhances the level of security. The success of RDA depends on innovative security measures.

While technology acceptance has an insignificant impact on customer satisfaction as it has a t-value of 1.419, which is less than 1.96 and an insignificant p-value of 0.157, hypothesis H3 is not supported. Technology acceptance by the user refers to the extent of perceived usefulness and ease of use. The findings reveal that ease of use does not have a significant impact on customer satisfaction (Devaraj et al., 2002; Liao & Cheung, 2008). Moreover, Chau and Lai (2003) argue that indicators of the technology acceptance model are insufficient to explain the adoption of digital banking because the technology environment for digital banking is entirely different from other conventional businesses. The complexity of digital technology and consumers' lack of financial literacy are two potential issues that may affect customer satisfaction. Hence, the study by Castaneda et al. (2007) reveals that the effects of ease of use will be lower if the users get accustomed to new technologies. If people felt comfortable using technology, then customer satisfaction could increase.

The last hypotheses of this study, H4 assume that there is a strong significant relationship between customer convenience dimensions and customer satisfaction. And it is also supported at the 99.9% significance level as it has a significant p-value of 0 and a t-value of 5.50. The findings support the results of previous studies, Kaura (2013) demonstrates that convenience dimensions have a positive impact on customer satisfaction with banking. The results indicate that the higher the convenience dimensions, the higher the customer satisfaction. RDA facilitates overseas customers to get banking services without any visit to the bank branch or embassy.

Conclusion

Digital innovation has become an essential element of daily life around the world. Application of new technologies enhances the customers' experience as innovation plays a vital role in the future well-being of society and driving economic growth. Digital innovation in banking contributes significantly to the economic development of the country with its effective financial services and products. A conceptual framework for the study was drawn after reviewing the theoretical and empirical literature. Data was collected from 403 RDA users. The results of the analysis show that all variables related to service quality, system security, and convenience dimensions have a significant impact on customer satisfaction, except for technology acceptance. The results showed that the service quality of RDA plays an important role in enhancing customer satisfaction. Cost-effectiveness, user-friendliness, and technical support are the sub indicators of service quality. Banks should provide 24/7 customer support to their RDA users through email, phone calls, and SMS. The customer technical support team should provide effective and efficient services in resolving issues as service quality is a strategic tool for customer satisfaction. Moreover, a well-organized system for managing complaints should be implemented because it will help overseas customers monitor the status of online complaints. The results also demonstrate that the security of RDA also has a significant impact on customer satisfaction. System security is divided into three sub-dimensions: privacy, adequate security, and digital signature. The

banks should implement multi-layered firewalls, 128-bit encryption, and a team of technical specialists to monitor the website of RDA and provide up-to-date information on any security risk to guarantee security measures. Convenience is an important element in RDA. The result suggests that convenience dimensions are the major influencing factor of customer satisfaction in this study. Its sub-dimensions include access convenience, transaction convenience, and time convenience. Banks should be enabled to provide uninterrupted RDA services 24/7 to overseas customers. New technology should be introduced in which customers can access financial services in case of a shortage of internet facilities. Transaction convenience can be improved by removing any restrictions on the number of transactions that can be made in a day. In addition, a robust mechanism should also be introduced to reduce the frequency of failed transactions.

The findings of this study show that the technology acceptance of users has no significant impact on customer satisfaction with RDA. Its sub-indicators are perceived usefulness and ease of use. For informational help, numerous signs, symbols, and pictures can be used to assist less educated people. As a result, customers will find it easier to complete transactions over the RDA. Perceived usefulness is the countable part of RDA. The RDA should introduce the option of outward transfer of funds as they currently only allow inward remittance. Investment opportunities should be easy and smooth in order to reduce the difficulties for customers. Additionally, the interest rate should be increased to attract more overseas to the investment opportunity of RDA.

This study provides practitioners with more incentives to find innovative ways to escalate the efficiency of the RDA. This study contributes to parties, individuals, or institutions, as this is the first study conducted on RDA that can be a reference for research in the future.

Recommendations

This study has some limitations, which may be resolved by future researchers. The data collected for this study was a cross-sectional research design. However, more time is required to test our model for improving the findings of this investigation, so a longitudinal research design may be used by future researchers. Moreover, customer satisfaction is a psychological element because each respondent's response is based on their feelings and emotions, which are expected to increase or decrease with time. It is recommended for future researchers to conduct more studies about customer satisfaction in the context of RDA and attempt to measure more variables that influence customer satisfaction by including mediating and moderating factors. Future researchers could use other dependent variables such as customer loyalty, customer trust, and user adoption. The lack of cooperation of the population is another limitation of this study.

Moreover, this study suggests that the model can also be applied in the field of digital banking by prospective researchers. Besides, overseas Pakistanis, who do not have RDA right now, can also be included in the future research, they can be motivated to avail the services of RDA platform.

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