Factors Affecting Customers' Attitude towards Digital Banking: A Case of Micro Entrepreneurs from Nepal

Sunanda Ale Sharma¹, Srawan Kumar KC School of Management, Kathmandu University, Lalitpur, Nepal

Abstract

This research examines the key determinants that shape the micro entrepreneurs attitude towards digital banking services in Nepal. The inquiry was conducted through the lens of the extended Technology Acceptance Model (TAM) by including trust and resistance to change as additional variables in the model. Since this study has been conducted for micro entrepreneurs (*Safa Tempo*² drivers, beauty parlor owners, and street vendors) who have low level of education, low technical proficiency, and limited exposure to digital products, understanding their trust levels and propensity for change regarding digital banking is deemed crucial. This study found a significant positive relation between resistance to change and attitude towards digital banking. However, perceived usefulness, perceived ease of use and trust were not found to be positively associated with attitude towards digital banking. The findings of this study will enable Nepalese banking institutions to develop awareness programs aimed at educating and motivating micro entrepreneurs to embrace digital banking, thereby clarifying the benefits, addressing issues of trust and convenience, and ultimately fostering favorable attitudes and enhancing adoption rates. The study outcomes will also contribute to the existing literature by providing nuanced insights about the micro entrepreneur's attitude towards digital banking services.

Keywords: Digital Banking, Attitude, Resistance to Change, Trust, Micro Entrepreneurs

Introduction

In recent years, financial institutions have invested a substantial amount of capital in technology to reduce their operating costs and improve customer experiences. In the contemporary landscape of technological innovation, the banking sector aligns itself with evolving technologies to provide enhanced products and services to its customers by consistently maintaining a leading position in the integration of technological advancements (Ahmed & Sur, 2021). The advancements in information technology and the widespread adoption of digitalization within the banking sector have led to a profound change in customers' interactions with financial services, altering their preferences and generating new demands on a global scale (Ahmed & Sur, 2021; Chauhan et al., 2022). The behavior of adopting new products holds essential significance for both marketing practitioners and researchers due to its pivotal role within the processes of new product diffusion (Rogers, 1995). It becomes important to study the adoption behavior amongst consumers since it allows organizations to comprehend customers' preferences which thus aids in

¹Corresponding Author

Email: sunanda@kusom.edu.np

² Electric Three-wheeler

undertaking informed decision-making promoting the success of new products in dynamic market environments. The recent growth in digital banking indicates a shift in customer's preference towards firms that provide digital banking options (Goyal, 2021; Ahmed & Sur, 2021). Digital banking services provide all banking activities online and serve as a virtual bank. The ongoing rapid pace of digital transformation has created new opportunities for micro enterprises to increase their productivity and growth. Micro, small, and medium enterprises (MSMEs) hold a significant position within a nation's economic progress, serving as a pivotal driver of expansion, innovation, and job creation (ITC, 2020). The ongoing rapid pace of digital transformation has created new opportunities for micro enterprises to increase their productivity and growth. Amidst intense competition in a highly dynamic environment, digitization provides a wider range of opportunities for the MSME owners (Chan et al., 2018; Cenamor et al., 2017). Digitalization helps businesses improve performance by enhancing customer experience, widening reach, increasing sales and promoting innovation. Since customers' preferences are shifting towards the digital banking system, there is a growing need for micro enterprises to adopt this platform in order to match the requirements of the consumers (Cheong et al., 2020). Digital banking assumes a pivotal role in fostering the advancement, effectiveness and competitiveness of the MSMEs. Notwithstanding the evident benefits that digital banking presents to customers, a comprehensive exploration into the determinants influencing the attitude towards digital banking among micro entrepreneurs in the Nepalese context is yet to be undertaken (Shrestha et al., 2020).

In the context of Nepal, according to Nepal Rastra Bank (NRB) Monthly Statistics, the usage of various payment methods has expanded along with improved access to the payment system. Following the outbreak of the Covid-19 pandemic, Internet Banking, Mobile Banking, e-Wallets, QR codes and debit and credit Cards have all witnessed a significant surge in their popularity. In 2020/21 and 2021/22, transaction volume of connect-IPS, an e-payment gateway in Nepal, increased by 109.3% and 127.1%, respectively. Whereas the most popular digital payment method in the nation is QR code-based payment. In the two fiscal years 2020/21 and 2021/22, QR-code facilitated payments saw an impressive rise of 382.8% and 366%, respectively (NRB, 2023). NRBs commitment to ensuring the seamless operation of the payment system stems from its initiative to promote the expanded adoption of digital payment mechanisms as alternatives to cash, which would thus result in having a greater impact on the Nepalese economy. Though the Nepalese government has adopted the strategy for retail payment (Retail Payments Strategy, 2019), there is still a lot more to be done in order to expand the market and increase the usage of this facility within micro enterprises.

Investigating the factors that affect the micro enterprise owners' attitude towards digital banking is significant since micro enterprises make up a considerable segment of the Nepalese economy and facilitating the digital banking adoption will give impetus to their business performance. Refraining from using digital banking could affect a business's ability to attract potential customers, limit accessibility and convenience, hamper customer satisfaction and reduce competitiveness in the market. The consequential effects of not using digital payments will vary significantly among different business categories, thus, necessitating a comprehensive sector-specific investigation. Therefore, comprehending the elements influencing the attitude of micro entrepreneurs in Nepal towards digital banking assumes paramount importance.

In the context of Nepal, studies have been conducted to investigate the prospects and challenges of ebanking (Banstola, 2007; Khatri & Dhungel, 2013; Mastran, 2021), to explore the customers attitude towards internet banking (Shrestha et al., 2020), to determine the effect of digital finance service on customer satisfaction (, 2023), and to determine the factors that affect customers' adoption of digital banking (Nepal & Nepal, 2023). However, there has been no study that has focused on exploring the factors that affect customers' attitude towards digital banking by considering the effect of trust and resistance to change, for the micro entrepreneurs, specifically the street vendors, saloon/parlor owners and Safa Tempo (electric three-wheeler) drivers. Most of the studies investigating the adoption of digital banking in Nepal, have focused on students, teachers and bank customers (Mastran, 2021; Nepal & Nepal, 2023; Pradhan et al., 2021; Rahman, 2023; Shrestha & Agrawal, 2023; Shrestha et al., 2020). Thus, the perspective of micro entrepreneurs towards digital banking remains unknown.

Since perceived trust refers to the extent to which a user believes that a particular technology is reliable, secure and trustworthy (Ilieva et al., 2023), it becomes pertinent to investigate customers' perceived trust in order to be able to understand their attitude towards digital banking, which ultimately will affect their adoption. Numerous studies have investigated the effect of perceived trust on customers' intention to use e-wallet services (Kinis & Tanova, 2022; Yang et al., 2021) and its role in the adoption of digital banking services (Alalwan et al., 2018; Afshan & Sharif, 2016). But there have been no studies conducted so far to investigate the effect of trust on customers' attitude towards digital banking. Hence, this study has included perceived trust as one of the behavioral beliefs to understand its effect on micro entrepreneurs' attitude towards digital banking. Studies conducted in the past have used the extended TAM model and investigated resistance to change and its effect on adoption (Claudy et al., 2013), acceptance (Al-Somali et al., 2009) and continuance usage of technology adoption in varied contexts. However, the findings of these studies are contradictory in nature. Moreover, despite the heightened interest amongst researchers to investigate digitalization from various perspectives, there has been a dearth of study conducted to understand the relationship between resistance to change and customer's attitude towards digital banking. Hence, this study will adopt resistance to change as an additional variable in TAM and will investigate its effect on Nepalese micro entrepreneurs' attitude towards digital banking.

Since a lot of technological progress has been made in the past decade, banks need to carefully launch new digital products in the market by understanding customer's attitude and acceptance towards these new products. It becomes extremely pertinent to comprehend customer's perception towards different digital banking products. Therefore, this study aims at investigating the factors that influence the micro entrepreneurs' attitude towards digital banking using the extended TAM model by incorporating trust and resistance to change. The outcomes of this study will allow banks and financial institutions to alter their services, marketing efforts and organize digital literacy programs that will help in augmenting awareness about the benefits of using the service as well as enhance digital knowledge and skills, which will thus encourage higher adoption and engagement of the digital platforms.

Literature Review

Digital Banking

Digital banking is a contemporary banking operational framework that functions through the complete digitization of all banking operations and functions (Nguyen & Dang, 2018; Leong et al., 2020). Its introduction was driven by the objective of furnishing customers with enhanced convenience, heightened efficiency, and easily accessible avenues for engaging in banking transactions (Leong et al., 2020). Digital banking enables the utilization of technology to carry out banking transactions with enhanced efficiency (Alkhowaiter, 2020). However, certain obstacles persist that discourage customers to adopt this technique (Widjaja, 2016). Internet banking, m-commerce through banks application or from other financial institutions, digital wallets, and ATM services are the different forms of digital banking services (Ahmed & Sur, 2021). Digital banking allows the customers to enjoy the services of accessing and performing all traditional banking activities online at their convenience and comfort (Ahmed & Sur, 2021).

Customer Attitude

According to Ajzen and Fishbein (1980), attitude can be characterized as an individual's favorable and unfavorable emotions concerning the execution of the intended behavior. According to Ajzen (1985), "attitudes are influenced by beliefs concerning a behavior's likely outcomes and evaluations of those outcomes" (p. 18). The attitude theory suggests that a customer's intention to use or purchase a brand depends on whether they are positive or negative towards that brand. Davis (1989) suggests that the success of technology adoption largely depends on the attitude consumers have about it, which is further dependent on the ease or difficulty faced by a user while using the technology. Adoption of technology related products such as the internet and mobile phones is said to be highly influenced by customer attitude (Mort & Drennan, 2005).

While society and culture are the external factors that affect the consumer's behavior, psychological and personal factors are the internal ones that affect the same. In consumer behavior, learning, which is a process of acquiring information and gaining knowledge, plays a very essential role in affecting and influencing consumer's belief, attitude, and behavior. The overall attitude towards an object is expected to be related to behaviors towards that object (Ajzen & Fishbein, 1980). Hence, the investigation of consumer attitudes has gained substantial significance, serving as the fundamental groundwork not only for comprehending consumer conduct but also for foretelling and shaping it (Howcroft et al., 2002).

Technology Acceptance Model

TAM, initially formulated by Davis (1989) and subsequently enhanced by Davis et al. (1989), delves into the factors influencing users' perceptions and attitudes toward technology. TAM is the most commonly and extensively used model for predicting consumers' attitude and adoption of digital banking since it has been found to be valid and reliable in different situations and with diverse samples (Davis, 1989). The model, employed to elucidate users' conduct in relation to technology, is rooted in psychological theories like the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980) and the Theory of Planned Behavior (TPB) (Ajzen, 1985). TAM, an adaptation of TRA, has emerged as a powerful tool to set the precedent for technology use. TAM introduces two fundamental constructs, namely perceived usefulness (PU) and perceived ease of use (PEOU) as the foundational elements shaping user disposition toward technology, but several other constructs such as trust, social influences, demographic factors etc. have also been included by researchers in recent studies under this model.

Venkatesh and Davis (2000) have suggested that though TAM has aided in predicting acceptance, it does not always allow researchers to understand and explain users' acceptance of technology beyond the characteristics of perceived ease of use and perceived usefulness. TAM is not a descriptive model and does not have the ability for finding flaws in the implementation of technology and hence, there is a need to expand the model to find the reasons for technology resistance (Siegel et al., 2017).

For a specific user group, such as the micro entrepreneurs, attitude towards digital banking cannot be sufficiently explained by a few variables only. TAM lacks the social and behavioral variables that can aid in explaining the behaviors of users. Hence, it becomes important to add trust and resistance to change, which are social and behavioral in nature, within the TAM framework to have a better understanding of consumers' attitude towards digital banking. Suh and Han (2002) suggested that trust is more important to be investigated in digital banking due to the security issues and presence of sensitive information and they found a significant positive relation between trust and digital banking adoption. Kamal et al. (2020) have highlighted the fact that social and behavioral factors can significantly change the user's behavior towards acceptance of technology. Micro entrepreneurs, in the Nepalese context, come from different backgrounds in terms of education and technological skills, hence there could be social as well as behavioral factors that might influence their attitude towards digital banking. In micro-enterprises the decision to adopt is an

individual cognitive decision which is usually affected by the micro entrepreneur's level of education, technical skills and know-how. Therefore, this study has included variables such as resistance to change and trust towards technology to gain a better insight into the user's attitude towards digital banking.

Perceived Usefulness

PU is characterized as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis et al., 1989, p. 320). It is one of the main constructs of TAM that strongly influences user behavior. The notion of PU has been employed in diverse research endeavors spanning organizational contexts and the realm of online banking adoption, mobile banking acceptance and customer satisfaction in online banking (Agha & Saeed, 2015). Ezzi (2014) suggests that PU is an important factor that affects attitude towards information technology. Notably, empirical studies such as the work by Agha and Saeed (2015) suggest that PU holds a more substantial influence compared to perceived ease of use. Customers tend to have a positive attitude towards digital banking when they perceive the service to be useful (Fortes & Rita, 2016). Nguyen (2020) and Safari et al., (2022) found PU to positively influence attitudes towards digital banking. Drawing from the preceding elucidation, it can be deduced that PU encapsulates customer's confidence and belief that digital banking will be more beneficial than the traditional mode of banking. Hence, it is hypothesized that:

H1: There is a significant positive relation between perceived usefulness and attitude towards digital banking.

Perceived Ease of Use

PEOU refers to "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). It is characterized by the degree to which the anticipated user envisions the prospective system to be devoid of complexities or effort (Pikkarainen et al., 2004). Nguyen (2020) suggests that digital banking services make it easier for customers to access and use banking services than traditional banking. As postulated by the TAM, PEOU stands as a pivotal factor affecting the attitude towards information systems (Davis et al., 1989). Numerous studies have found a positive significant association between PEOU and attitude towards digital banking (Maduku, 2013; Siegel et al., 2017; Yang et al., 2021). Therefore, if an application is convenient to be used, it has more likelihood of drawing a positive attitude towards.

H2: There is a significant positive relation between perceived ease of use and attitude towards digital banking.

Resistance to Change

Resistance to change refers to the effort required to do something new or the emotional stress that an individual has to go through while facing changes (Guo et al., 2013). Resistance to change also encompasses affective, cognitive, and behavioral elements that give rise to psychological opposition toward making changes in specific situations (Forsell & Astrom, 2012). It is about an individual's hesitancy to use new technology in daily life. (Claudy et al., 2013) suggests that resistance to change amongst the consumers will be greater when the innovation demands a higher degree of change in them. For a customer to accept the change and have reduced resistance to change, the innovation has to fulfill their needs and wants (Al-Somali et al., 2009). Elhajjar and Ouaida (2019) found a significant negative relation between resistance to change and PEOU and PU. Study conducted by Chatzoglau et al., (2014) suggests that resistance to change discourages users from using internet banking. Past studies (e.g., Alagheband, 2006); Agarwal & Karahanna, 2000; Al-Somali et al., 2009) have found a significant positive relationship between resistance to change and attitude towards digital banking. Based on the above discussion, the study postulates the following hypotheses:

H3: There is a significant positive relationship between resistance to change and attitude towards digital banking.

Trust

McKnight and Chervany (2002) defined online trust as "a willingness to believe or as beliefs regarding various attributes of the other party" (p. 37). Suh and Han (2002) postulated that PEOU and PU of TAM might not be able to explain consumer behavior fully in an ever evolving digital banking environment, hence they first introduced trust as an additional variable that influences the adoption of internet banking. The study also stressed on the fact that trust was more critical in a digital banking study since internet banking is more risky due to the presence of sensitive information and security issues. A lot of studies have found trust to have a significant positive association with the adoption of digital banking (Al-Somali et al., 2009; Bashir & Madhavaiah, 2015). Gefen et al. (2003) found a significant influence of trust on adoption of online technology. On the other hand, Alnemer (2022) found a significant negative relationship between trust and adoption of digital banking. Numerous studies investigating the adoption of digital banking have suggested contradictory findings for the association between trust and adoption, but there has been a lack of studies related to investigating the attitude of consumers towards digital banking that has employed trust. Hence, this study employs trust as an additional construct of TAM to be able to understand if trust has a similar effect on consumers' attitude towards digital banking. Based on the above discussion, the study postulates the following hypothesis:

H4: There is a significant positive relation between trust and attitude towards digital banking.

Conceptual Framework

Based on the evidence of preliminary studies, and the theoretical background developed from the above literature, the conceptual underpinning for this investigation may be represented as follows. The framework illustrates the influence of Perceived Usefulness, Resistance to change, and trust on attitude towards Digital Banking.

Methods

Sample and Research Procedure

Sample of this study consisted of proprietors of beauty parlors/salons, *Safa Tempo* drivers, and street vendors in the Kathmandu Valley. Convenience sampling method was employed to select the sample of study. Convenience sampling allowed a practical and accessible way to gather data from individuals belonging to the specified groups within the study area. While this method may limit the generalizability of the findings to the larger population, it provided valuable insights into the attitudes and behaviors of the selected individuals in relation to the research objectives. The questionnaires encompass demographic details of the respondents, inquiries aimed at assessing their familiarity with digital banking technology, and their perceptions regarding both independent and dependent variables, using a five-point Likert scale.

To ensure the effectiveness of the questionnaires and the clarity of the questions, a pilot survey was conducted involving 20 respondents. The pilot survey indicated that the respondents were able to understand the questionnaire items and provided responses in accordance with the questions. According to Hair et al., (2016) the recommended sample size should range from 5 to 10 times the quantity of survey items. Hence, a collective of 200 questionnaires were circulated among the target population. Out of the questionnaires that were distributed, 132 were returned, yielding a response rate of 66 percent. Incomplete

and unanswered responses from the demographic and technological information section were retained, while those from the Likert scale were excluded. Finally, 109 valid responses were recorded. Regarding the distribution of respondents from different groups, street vendors had the highest percentage with 38 respondents, accounting for 34.86 percent of the total sample. Beauty parlors/salons had 37 respondents, representing 33.95 percent, and the remaining 34 respondents were Safa Tempo drivers, comprising 31.19 percent of the total sample.

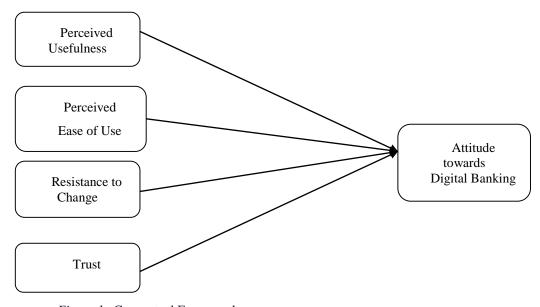


Figure 1. Conceptual Framework

Measures

The study used already validated scales for measuring study constructs with minor adjustments. PU was assessed by using a four item scale developed by Davis (1989). PEOU was measured using a five item scale developed by Davis (1989). Resistance to change was assessed using three items, trust was evaluated with four items, and attitude towards digital banking included four items. The scales for resistance to change, trust, and attitude towards digital banking were adopted from Al-Somali et al., (2009). All scales demonstrated good internal consistency reliability with Chronbach alpha ranging from .77 to .86. Responses on scale items were captured on a 5-point Likert scale, anchors spanning from strongly disagree (1) to strongly agree (5).

Results

Descriptive Analysis

Majority of the respondents (50.5%) of this study were of the age category of 31-40 years, followed by 28.4 percent in the age bracket of 20-30 year, and 5.6 percent in the age bracket of 41-50 year. 72.5 percent of the respondents were female. Occupational status displayed a balanced distribution, with a proportional representation of transport workers (31.2%), street vendors (34.9%), and salon/parlor owners (33.9%).

Regarding monthly earnings, 48.6% of respondents earned above NRs. 25,000.00 whereas 51.4% earned less than NRs. 25,000.00

Though 73.4 percent of all occupational categories were using smartphones in their day-to-day life, mobile usage for banking purposes was very low due to more than 61 percent of the respondents not having internet access outside their home and business with almost no knowledge of digital banking. Almost 75 percent of the respondents expressed their willingness to learn about digital banking services too. Approximately 41.8 percent of the respondents perceive that the reduction in transaction time is a significant motivator for adopting digital technology, with cost-effectiveness and ease of use being the subsequent influential factors.

57.7 percent of the respondents were using Debit cards. In contrast, Internet Banking and QR Codes have relatively low adoption rates, each being utilized by only 4.1 percent of the respondents. 15.5 percent respondents used mobile banking and 18.6 percent respondents used digital wallets. Transport workers and street vendors did not use QR code at all. Respondents from all categories predominantly relied on cash for their preferred payment method. Among salon/parlor owners, 23.2 percent preferred digital wallets, digital wallets and 12.5 percent preferred mobile banking. Mobile banking is the most favored digital technology for 17.8% of street vendors, followed by digital wallets for 6.7 percent. 12.5 percent of transport workers preferred digital wallets and 8.9 preferred mobile banking for payments.

Reliability and validity analysis

Internal consistency reliability of the scales used were assessed by Cronbach's alpha. In the case of attitude towards digital banking, the initial value of Cronbach's alpha was 0.69, which was below the accepted criterion of 0.70 (Taherdoost, 2016), indicating a lack of internal consistency among the scale's elements. However, through the removal of one item with an outer loading of 0.42, below the permissible level, the Cronbach's alpha value for ADB improved significantly to 0.76.

Finally, as shown in Table 1, the scales assessing PU, PEOU, RC, and TR demonstrated excellent internal consistency, with Composite Reliability (CR) as well as Cronbach's alpha values surpass the suggested threshold of .70 by a considerable margin (Ringle et al., 2015), as an indicator for adequate internal consistency.

In order to attain sufficient convergent validity, it is necessary for the outer loadings and Average Variance Extracted (AVE) values to surpass .70 and .50, respectively (Hair et al., 2016). As indicated in Table 1, the outer loadings for all constructs and the corresponding AVE values exceeded the thresholds of .70 and .50, respectively. It suggests that the measurement model used to assess the constructs in the study demonstrates good convergent validity.

To evaluate discriminant validity, the research applied the Fornell and Larcker's criterion. As depicted in Table 2, the values along the diagonal (square root of AVEs) exceed the correlation coefficients, indicating satisfactory discriminant validity. This suggests that the measured constructs are distinct from one another.

The study aimed to explore the relationship between variables, analyzing their correlation coefficients. Typically, a correlation above .70 is considered strong. Our findings from Table 3 indicate that the correlation between the dependent variable, attitude towards digital banking, and the independent variables, perceived usefulness and perceived ease of use, has values of .59 and .61, respectively, both below .70. On the other hand, resistance to change and trust exhibit values of .74 and .70, hovering around the borderline. The mean and standard deviation value was also presented in Table 3. Thus, we can conclude that the independent variables display a moderate correlation with the dependent variable.

Similarly, when examining the correlation between the independent variables, all four of them demonstrate values below .70, reinforcing the notion of moderate correlations among the independent variables.

Table 1. Assessment of Reliability and Validity of Study Variables

Variables	Notations	Outer loadings	CA	CR	AVE
D : 111 (1	PU1	.86			.68
	PU2	.82	.84	.90	
Perceived Usefulness	PU3	.84		.90	
	PU4	.78			
	PEOU1	.80			
	PEOU2	.80			
Perceived Ease of Use	PEOU3	.87	.89	.91	.68
	PEOU4	.81			
	PEOU5	.84			
	RC1	.83	.70	.83	.63
Resistance to Change	RC2	.74			
	RC3	.81			
	TR1	.90			
T	TR2	.85	.88	0.1	.74
Trust	TR3	.78		.91	
	TR4	.90			
Attitude Towards Digital Banking	ADB1	.88			
	ADB2	.78	.78	.87	.69
	ADB4	.83			

Note: CA - Cronbach's Alpha, CR - Composite Reliability, AVE - Average Variance Extracted

Table 2.

Discriminant Validity - Fornell-Lacker Criterion

	ADB	PEOU	PU	RC	TR
ADB	.83				
PEOU	.64	.83			
PU	.60	.61	.83		
RC	.76	.69	.60	.79	
TR	.68	.65	.58	.69	.86

Note: RC - resistance to change; TR - trust

Table 3. *Correlation Matrix*

Constructs	Mean	SD	PU	PEOU	RC	TR
PU	3.59	.78				
PEOU	3.06	.97	.61**			
RC	3.47	.83	.59**	.68**		
TR	3.42	.84	.57**	.64**	.68**	
ADB	3.50	.72	.59**	.61**	.74**	.70**

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

PU - Perceived Usefulness, PEOU - Perceived Ease of Use, RC - Resistance to Change, TR - Trust, ADB - attitude towards Digital Banking.

Multicollinearity Test

To examine the possibility of multicollinearity in the model, we checked the Variance Inflation Factor (VIF) of the study constructs. Since the VIF values for all independent variables (PEOU, PU resistance to change and trust) were below the threshold of 10, (2.32, 1.84, 2.45, 2.21 respectively), multicollinearity was not the issue with this model.

Structural Analysis

The results obtained from the correlation analysis indicate that the hypothesized relationships among the study variables are not only statistically significant but also consistent with our initial hypotheses. Nonetheless, we acknowledge that various research studies suggest that relying solely on correlation analysis may not provide the most robust test for our hypotheses. As a result, we took a comprehensive

approach by conducting further structure analysis, employing PLS-SEM (Partial Least Squares Structural Equation Modeling), to further explore the intricate influence of independent variables on the dependent variables. This path analysis will offer us valuable insights into the intricate interplay among the variables, contributing to a richer understanding of our research objectives.

The path analysis has unveiled an R^2 value amounting to .65, signifying that the combined impact of the independent variables - perceived usefulness, perceived ease of use, resistance to change, and trust - accounts for 64.65 percent of the variability observed in the dependent variable, i.e., attitude towards digital banking. R^2 value typically signifies a more favorable fit for the model. In Figure 2, we can observe that the R^2 value falls below .70 but remains above .60, demonstrating that our model was statistically fit within the acceptable range. The path analysis results presented in Table 4.

Hypothesis Testing

The research proposed four hypotheses. It posited that perceived usefulness (PU), perceived ease of use (PEOU), resistance to change (RC), and trust (TR) exert a significant positive relationship on attitude towards digital banking (ADB). Hypothesis 1 was postulated to explore the potential presence of a statistically significant positive relation between perceived usefulness (PU) and attitude towards digital banking (ADB). However, the results from the structural (path) analysis indicated that the relationship between PU and ADB ($\beta = .15$, t = 1.46, p = ns) did not reach statistical significance. Consequently, H1 was not supported. Likewise, Hypothesis 2 aimed to explore the potential significant positive relation between perceived ease of use (PEOU) and attitude towards digital banking (ADB). Nonetheless, the structural analysis revealed that the relationship between PEOU and ADB ($\beta = .08$, t = .85, p = ns) lacked statistical significance. As a result, H2 was not supported. On the other hand, Hypothesis 3 put forth the expectation of a significant positive relation between resistance to change and attitude towards digital banking. The structural analysis findings revealed a significant statistical relationship between resistance to change and attitude towards digital banking ($\beta = .47$, t = 4.17, p < .05), thereby supporting H3. Lastly, Hypothesis 4 postulated that trust would have a significant positive relation on attitude towards digital banking. However, the structural analysis outcome showed that the relationship between trust and attitude towards digital banking ($\beta = .21$, t = 1.49, p = ns) did not achieve statistical significance. Thus, H4 did not receive empirical support based on the analysis results.

Table 4. *Path Analysis Results*

	Original sample (O)	Standard deviation (STDEV)	t statistics (O/STDEV)	p values
PEOU -> ADB	.08	.10	0.85	.40
PU -> ADB	.15	.10	1.46	.15
RC -> ADB	.47	.11	4.17	.00
TR -> ADB	.21	.14	1.49	.14

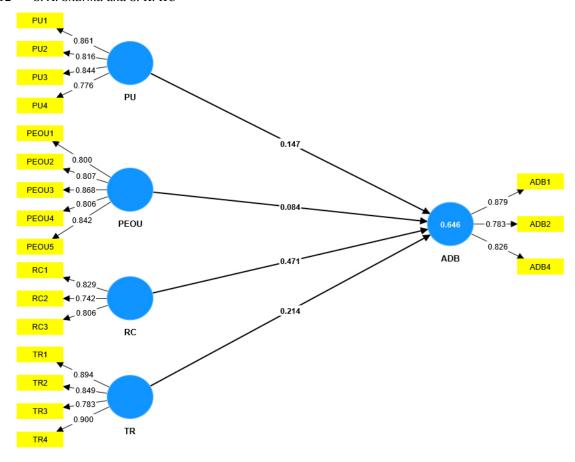


Figure 2. Structural model with outer loadings, path coefficient and R^2

Discussion

This paper examines the various factors affecting consumer attitude towards digital banking. The study examined the association between the dimensions of PU, PEOU, resistance to change, and trust, and their impact on attitude towards digital banking. The findings indicated resistance to change has a significant positive relationship with attitude towards digital banking. Whereas there is no statistically significant positive relationship between PU, PEOU, and trust, with the attitude towards digital banking.

Almost 75 percent of the respondents expressed their willingness to learn about digital banking services and the study also found that mobile banking and digital wallets are the most preferred digital banking tools among the respondents. None of the *Safa Tempo* drivers and street vendors were using QR codes whereas 7.80 percent of salons/parlors owners were using QR code for digital banking purposes. There has been a significant increment in QR based payment in the last six months from July 2022 - Feb 2023 (Current Macroeconomic and Financial Situation of Nepal, 2023). Despite this increment and formulation of (Retail Payments Strategy, 2019) and (Nepal QR Standardization Framework and Guidelines, 2020) the above-mentioned transport workers and street vendors were not using QR based payment systems. Thus,

the study indicates that there is a necessity of accessibility of an internet most of the time to use QR based payment. As well as a proper digital literacy program along with product, explanation and know-how should be delivered up to the concerned stakeholders to bring them out from the comfort zone of trust, perceived usefulness and perceived ease of use, since they are positive to change towards digital banking. Also, the financial institutions should focus on promoting mobile banking and digital wallets as well as QR based payments with product promotion and digital literacy programs due to these payment methods being most favorable in those categories for the attitude towards digital banking.

Al-Somali et al., (2009) study conducted in Saudi Arabian context suggested internet connection along with the level of consciousness regarding online banking and its associated advantages exerted a substantial influence in developing the attitude towards online banking. This study also postulated the similar findings in Nepalese context within the above-mentioned group of micro-entrepreneurs. However, this study found that respondents did not perceive digital banking useful. They did not perceive using digital banking simple and did not trust the digital banking systems developed by financial institutions. On the other hand, they were positive towards resistance to change. Consistent with these results, Nisar and Prabhakar (2017) underscored that the nature of factors influencing the adoption of online banking depends upon multiple factors not only a single factor. Several prior studies, including Al-Somali et al., (2009), Bashir and Madhavaiah (2015), and Gefen et al., (2003), have consistently reported a substantial impact of trust on the adoption of online technology. However, in contrast to this established body of research, the present study's findings indicated that trust does not exert a significant influence on the development of a positive attitude towards digital banking. This unexpected outcome appears to be linked to a limited awareness among respondents regarding digital banking products and their associated benefits, which, in turn, contributes to their lack of trust in such products.

This study presents contradictory results, as it indicates that perceived usefulness and ease of use do not yield significant effects on attitudes toward digital banking. This contradicts previous research conducted by Agha and Saeed (2015), Fortes and Rita (2016), Nguyen (2020), and Safari et al., (2022), which collectively suggest that perceived usefulness exerts a positive influence on attitudes. Likewise, studies by Nguyen (2020), Maduku (2013), Siegel et al., (2017), and Yang et al., (2021) have found a significant positive association between perceived ease of use and attitudes. Notably, the limited use of digital banking among respondents, such as only 15.50 percent using Mobile Banking and merely 18.60 percent using digital wallets, emerges as a prominent factor contributing to the aforementioned contradictory findings in our study. Hence, internet accessibility, knowledge and awareness about the product, and its benefits play a vital role to perceive usefulness and ease of use as well as to develop trust in digital banking ultimately increasing attitude towards digital banking due to their nature of being not resistant to change.

Implications

This study holds practical significance for banking and financial institutions, particularly in the realm of new product development. It offers insights that can aid in enhancing internet accessibility among transport workers. This research highlights the significance of giving priority to QR-based payment solutions from financial institutions, being less preferred by the respondents and advancing the development of mobile banking and digital wallet services, which were most favorable among the respondents. These actions are instrumental in strengthening and promoting their digital banking technologies. This study provides insight into the perception of digital banking products among transport workers, street vendors, and salon/parlor owners, revealing that they do not currently possess a strong perception of the digital banking products'

usefulness, ease of use, and trustworthiness. Therefore, institutions intending to introduce or enhance existing digital banking products should focus on comprehensive efforts to furnish product information and highlight its benefits. Henceforth, when consumers possess a clear comprehension of the product and its associated benefits, they are more inclined to have a positive perception towards the system.

Limitations and Future Research

The study possesses several limitations. The study was conducted with the sample from Kathmandu Valley, therefore, the findings may not be generalizable to the micro entrepreneurs operating on the rural part of the country. Another mojor limitation of this study is its sample size. Nevertheless, the study successfully encompassed three distinct categories of Micro SMEs within the Kathmandu valley, although this could potentially influence the degree to which the findings can be extrapolated. In future research endeavors, it would be prudent to consider a wider category of Micro SME across diverse regions in future studies to enhance the generalizability. As posited by Venkatesh and Davis (2000), subjective norms exert an influence on both perceived usefulness and intentions. Consequently, forthcoming research endeavors could consider augmenting their study by incorporating an additional facet of subjective norms within the framework of the TAM model and the theory of planned behavior.

Acknowledgments

This research was made possible through the generous support of Prabhu Bank Ltd., for which the authors are sincerely grateful. The opinions expressed herein are those of the authors and do not necessarily reflect the views of Prabhu Bank Ltd.

ORCID iD

Sunanda Ale Sharma https://orcid.org/0000-0002-8079-0932

Srawan Kumar KC https://orcid.org/0000-0002-7629-7635

References

- Afshan, S., & Sharif, A. (2016). Acceptance of mobile banking framework in Pakistan. *Telematics and Informatics*, 33(2), 370-387. doi:10.1016/j.tele.2015.09.005
- Agha, S., & Saeed, M. (2015). Factors influencing customer acceptance of online banking in Pakistan and the moderating effect of technophobia. *Technology*, 12, 55-66.
- Ahmed, S., & Sur, S. (2021). Change in the uses pattern of digital banking services by Indian rural MSMEs during demonetization and Covid-19 pandemic-related restrictions. *Vilakshan-XIMB Journal of Management*, 20(1), 166-192. doi:10.1108/XJM-09-2020-0138
- Alalwan, A. A., Dwivedi, Y. K., Rana, N. P., & Algharabat, R. (2018). Examining factors influencing Jordanian customers' intentions and adoption of internet banking: Extending UTAUT2 with risk. *Journal of Retailing and Consumer Services*, 40, 125-138. doi:10.1016/j.jretconser.2017.08.026

- Alkhowaiter, W. A. (2020). Digital payment and banking adoption research in Gulf countries: A systematic International Journal ofInformation literature review. Management, 102102. doi:10.1016/j.ijinfomgt.2020.102102
- Alnemer, H. A. (2022). Determinants of digital banking adoption in the Kingdom of Saudi Arabia: A technology acceptance model approach. Digital Business, 100037. 2(2),doi:10.1016/j.digbus.2022.100037
- Al-Somali, S. A., Gholami, R., & Clegg, B. (2009). An investigation into the acceptance of online banking in Saudi Arabia. Technovation (29), 130 - 141. doi:10.1016/j.technovation.2008.07.004
- Ajzen, I. & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.). Action-control: From cognition to behavior (pp. 11-39). Heidelberg, Germany: Springer.
- Banstola, A. (2007). Prospects and Challenges of E-banking in Nepal. Journal of Nepalese Business Studies, 4(1), 96-104.
- Bashir, I., & Madhavaiah, C. (2015). Trust, social influence, self-efficacy, perceived risk and internet banking acceptance: An extension of technology acceptance model in Indian context. Metamorphosis, 14(1), 25-38. doi:10.1177/097262252015010
- Cenamor, J., Rönnberg Sjödin, D., & Parida, V. (2017), "Adopting a platform approach in servitization: Leveraging the value of digitalization", International Journal of Production Economics, 192, 54–65. doi:10.1016/j.ijpe.2016.12.033
- Chan, C. M. L., Teoh, S. Y., Yeow, A., & Pan, G. (2018), "Agility in responding to disruptive digital innovation: Case study of an SME", Information Systems Journal, doi:10.1111/isj.12215
- Chauhan, S., Akhtar, A., & Gupta, A. (2022). Customer experience in digital banking: A review and future research directions. International Journal of Quality and Service Sciences, 14(2), 311-348. doi:10.1108/IJQSS-02-2021-0027
- Cheong, J. O., Lee, N. F. C., Fadzlee, M., & Mansur, K. H. M. (2020). A systematic literature review of COVID-19 impact to sme's adoption of e-commerce. Journal of BIMP-EAGA Regional Development, 6(1), 19-33. doi:10.51200/jbimpeagard.v6i1.3118
- Claudy, M. C., Peterson, M., & O'driscoll, A. (2013). Understanding the attitude-behavior gap for renewable energy systems using behavioral reasoning theory. Journal of Macromarketing, 33(4), 273-287. doi:10.1177/027614671348160
- Current Macroeconomic and Financial Situation of Nepal (2023). Kathmandu: Nepal Rastra Bank.
- Davis, F. D. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioral impacts. International Journal of Man - Machine Studies, 38, 475 - 487. doi:10.1006/imms.1993.1022
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13, 319 – 340. doi:10.2307/249008
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. Management science, 35(8), doi:10.1287/mnsc.35.8.982
- Ezzi, S. W. (2014). A theoretical Model for Internet banking: beyond perceived usefulness and ease of use. Archives of business research, 2(2), 31-46. doi:10.14738/abr.22.184
- Forsell, L. M., & Aström, J. A. (2012). An analysis of resistance to change exposed in individuals' thoughts and behaviors. Comprehensive Psychology, 1, 09-02. doi.org/10.2466/09.02.10.CP.1.1
- Fortes, N., & Rita, P. (2016). Privacy concerns and online purchasing behavior: Towards an integrated model. European Research on Management and Business Economics, 22(3), 167-176. doi:10.1016/j.iedeen.2016.04.002

- Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS quarterly*, 51-90. doi:10.2307/30036519
- Goyal, R.B. (2021), "After GST, demonetisation, Covid, here's what India truly needs to enable digital payments among MSMEs", *The Financial Express*, available at: www.financialexpress.com/industry/sme/cafe-sme/msme-tech-after-gst-demonetisation-covid-heres-what-india-truly-needsto-enable-digital-payments-among-msmes/2163705/ (accessed on 20th January 2023).
- Guo, X., Sun, Y., Wang, N., Peng, Z., & Yan, Z. (2013). The dark side of elderly acceptance of preventive mobile health services in China. *Electronic Markets*, 23, 49-61. doi:10.1007/s12525-012-0112-4
- Hair, J. F., Hult, G. T. M., Ringle, C. M. and Sarstedt, M., (2016) (2nd ed.). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks, CA: Sage. doi:10.1080/1743727X.2015.1005806
- Howcroft, B., Hamilton, R., & Hewer, P. (2002). Consumer attitude and the usage and adoption of home-based banking in the United Kingdom. *International journal of bank marketing*. doi:10.1108/02652320210424205
- Ilieva, G., Yankova, T., Klisarova-Belcheva, S., Dimitrov, A., Bratkov, M., & Angelov, D. (2023). Effects of generative chatbots in higher education. *Information*, 14(9), 492. doi:10.3390/info14090492
- ITC. (2020). Reports and Accounts. ITC Limited.
- Kamal, S. A., Shafiq, M., & Kakria, P. (2020). Investigating acceptance of telemedicine services through an extended technology acceptance model (TAM). *Technology in Society*, 60, 101212. doi:10.1016/j.techsoc.2019.101212
- Khatri, J. R., & Upadhyaya-Dhungel, K. (2013). Internet banking in Nepal: Use and challenges. *Banking journal*, 3(2), 57-77.
- Kınıs, F., & Tanova, C. (2022). Can I trust my phone to replace My wallet? The determinants of E-wallet adoption in North Cyprus. *Journal of Theoretical and Applied Electronic Commerce Research*, *17*(4), 1696-1715. doi:10.3390/jtaer17040086Leong, L. Y., Hew, T. S., Ooi, K. B., & Wei, J. (2020). Predicting mobile wallet resistance: A two-staged structural equation modeling-artificial neural network approach. *International Journal of Information Management*, 51, 102047. doi:10.1016/j.ijinfomgt.2019.102047
- Maduku, D. K. (2013). Predicting retail banking customers' attitude towards Internet banking services in South Africa. *Southern African Business Review*, 17(3), 76-100.
- Mastran, S. (2021). Opportunities and challenges of online banking in Nepal. The Batuk, 7(2), 37-51.
- McKnight, D. H., & Chervany, N. L. (2002). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International journal of electronic commerce*, 6(2), 35-59. doi:10.1080/10864415.2001.11044235
- Mort, G.S. & Drennan, J. (2005) Marketing m-services: establishing a usage benefit typology related to mobile user characteristics. *Database Marketing & Customer Strategy Management*, 12(4), pp. 327–341. doi:10.1057/palgrave.dbm.3240269
- Nepal QR Standardization Framework and Guidelines (2020). Kathmandu: Nepal Rastra Bank, Payment Systems Department.Nepal, S., & Nepal, B. (2023). Adoption of Digital Banking: Insights from a UTAUT Model. *Journal of Business and Social Sciences Research*, 8(1), 17-34. doi:10.3126/jbssr.v8i1.56580
- Nisar, T. M., & Prabhakar, G. (2017). Exploring the key drivers behind the adoption of mobile banking services. *Journal of Marketing Analytics*, 5, 153-162. Doi:10.1057/s41270-017-0023-5
- NRB. (2023). PAYMENT SYSTEMS OVERSIGHT REPORT, 2078/79 (2021/2022). Kathmandu: Nepal Rastra Bank, Payment Systems Department.

- Nguyen, T. P., & Dang, T. L. P. (2018). Digital banking in Vietnam current situation and recommendations. International Journal of Innovation and Research in Educational Sciences, 5(4), 418-420.
- Nguyen, O. T. (2020). Factors affecting the intention to use digital banking in Vietnam. The Journal of Asian Finance, Economics and Business, 7(3), 303-310. doi:10.13106/jafeb.2020.vol 7.no 3.303
- Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnila, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. Internet doi:10.1108/10662240410542652
- Pradhan, P., Shyam, R., & Dahal, P. (2021). Effect of E-Banking on Financial Inclusion in Nepal. International Journal of Finance, Entrepreneurship & Sustainability (IJFES), 1.
- Rahman, A. (2023). Digital Finance as a Tool for Financial Inclusion in Nepal Madhesh Province. JOURNAL OF MANAGEMENT & ENTREPRENEURSHIP, UGC Care Group, 1.
- Retail Payments Strategy (2019). Kathmandu: Nepal Rastra Bank, Payment Systems Department.
- Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modeling with the SmartPLS.
- Rogers, E. M. (1995). Diffusion of Innovations: modifications of a model for telecommunications. In Die diffusion von innovationen in der telekommunikation (pp. 25-38). Springer, Berlin, Heidelberg.
- Safari, K., Bisimwa, A., & Buzera Armel, M. (2022). Attitudes and intentions toward internet banking in an under developed financial sector. PSU Research Review, 6(1), 39-58. doi:10.1108/PRR-03-2020-0009
- Siegel, D., Acharya, P., & Sivo, S. (2017). Extending the technology acceptance model to improve usage & decrease resistance toward a new technology by faculty in higher education. Journal of Technology Studies, 43(2), 58-69. doi:10.21061/jots.v43i2.a.1
- Shrestha, D., Wenan, T., Rajkarnikar, N., & Jeong, S. R. (2020). Consumers attitude towards Internet banking services in an underdeveloped country: A case of Pokhara, Nepal. Journal of Internet Computing and Services, 21(5), 75-85. doi:10.7472/jksii.2020.21.5.75
- Shrestha, B., & Agrawal, N. (2023). Influence of digital finance service worth on customer satisfaction in Nepal. Journal of Commerce, Management, and Tourism Studies, 2(3), 192-198.
- Suh, B., & Han, I. (2002). Effect of trust on customer acceptance of Internet banking. Electronic Commerce research and applications, 1(3-4), 247-263. doi:10.1016/S1567-4223(02)00017-0
- Taherdoost, H. (2016). Validity and reliability of the research instrument; How to test the validation of a questionnaire/survey in a research. International Journal of Academic Research in Management, 5, 28– 36. doi:10.2139/ssrn.3205040
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management science, 46(2), 186-204. doi:10.1287/mnsc.46.2.186.11926
- Widjaja, E. P. O. (2016). Non-cash payment options in Malaysia. Journal of Southeast Asian Economies, 398-412. doi:10.1355/ae33-3g
- Yang, K., Choi, J. G., & Chung, J. (2021). Extending the Technology Acceptance Model (TAM) to explore customer's behavioral intention to use Self-Service Technologies (SSTs) in Chinese budget hotels. Global Business & Finance Review (GBFR), 26(1), 79-94. doi:10.17549/gbfr.2021.26.1.79