Factors Influencing the Adoption of Digital Banking Platforms among the Customers of BoBL in Thimphu Dzongkhag

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Abstract

This research study was conducted to investigate the factors influencing the adoption of digital banking platforms among Bank of Bhutan Limited (BoBL) customers, specifically in Thimphu Dzongkhag of Bhutan. The study has employed the Technology Acceptance Model (TAM) as a theoretical framework to assess how each independent variables influence the dependent variable toward the adoption of BoBL's digital banking platform. For this study, data from 408 valid respondents were collected for the analysis. The respondents for the study include only the users' of BoBL's digital banking platform residing in Thimphu Dzongkhag. The study found five factors affecting adoption: perceived security and digital trust, digital financial literacy, perceived ease of use, transaction speed and timesaving, and perceived usefulness. Three of these - perceived security and digital trust, digital financial literacy, and perceived usefulness – significantly influenced adoption, with digital financial literacy being the most important factor. Interestingly, the mobile app (mBoB) was used by 84% of respondents, while the BoBNET Retail platform had almost no users. Overall, 61% of respondents reported using BoBL's digital platforms for daily transactions.

Keywords: Digital banking, Adoption, Technology Acceptance Model (TAM), Principal Component Analysis (PCA), Bank of Bhutan Limited (BoBL), Thimphu Dzongkhag, mBoB, goBoB, BoBNET Retails

Introduction

Modern technology has modernized the various aspects of lives, and the banking sector is no exception. This shift from traditional banking to digital banking continues to evolve. In Malyshev's (2023) definition, "digital banking is the complete digitization of traditional banking. This means all products, procedures, and activities are offered electronically, allowing customers to bank entirely online". Digital banking is gaining popularity around the globe, especially after the COVID-19 pandemic. This global shift is visible as the recent statistics revealed that over 51% of US adults and nearly 97% of all Gen Z and Millennials use digital banking services (Jannik, 2023). One of the research findings by Pangarkar (2023) suggests that the digital banking user base around the globe is on the rise and is expected to reach 3.8 billion by the end of 2025. Over the years, as more people choose digital banking over traditional banking, banks can reduce operation costs in the form of a lesser number of branches. According to the 2023 report of the Federal Deposit Insurance Corporation of America, the country saw the closure of about 2,500 branches across the country due to the increase in customers' preference towards digital banking over traditional banking (Bennett, 2024).

Banks in Bhutan have also witnessed a significant development in adopting digital banking platforms in recent years. The introduction of digital banking began with ATMs, SMS banking, and POS (point of sales) by the Bank of Bhutan Limited (BoBL) in 2009 (Bank of Bhutan, 2024). Later, the Bank of Bhutan took further steps by introducing digital banking platforms like mBoB, goBoB, and BoBNET

Retail, and are the current digital banking platforms offered by the BoBL (Bank of Bhutan, 2023). These applications help in providing all the essential banking features like online banking and additional services like payment of electronic bills, insurance, creating a fixed deposit or recurring deposit accounts, and transferring money to another bank were brought to the fingertips of customers (Department of Payment and Settlement System, 2022).

With advancements in technology, the financial landscape is undergoing a significant transformation. As stated by Aisha and Rakesh (2022), the banking sector has undergone a dramatic transformation. The modern era is defined by a shift towards a paperless environment, where banks prioritize providing convenient, digitized services to their customers. This digital revolution allows customers to access their accounts, make payments, and manage finances anytime, anywhere, all from the comfort of their own devices with the help of the online network. Despite the many benefits of digital banking, some people are still unaware of these services and cannot use them in the small landlocked nation of Bhutan (Namgyel, 2024). Researchers like Venkatesh (2023), also pointed out that factors such as fraud, security risks, and illiteracy are major barriers to the uptake of digital banking in general. Besides, the literature on the factors influencing the adoption of digital banking among customers of BoBL is scanty in the nation.

Therefore, this quantitative study has explored the factors influencing the adoption of digital banking platforms by the customers of BoBL in Thimphu Dzongkhag. The inferences drawn from the study may be useful for various stakeholders. For the government, the study's findings can provide a foundation for creating effective rules and regulations for the banks that fosters the growth and expansion of digital banking platforms. On the other hand, researchers exploring similar study in the future can benefit from the findings of this study on the factors affecting the

adoption of digital banking platforms in Thimphu Dzongkhag. Also, the study results may highlight on the obstacles that prevent the widespread adoption of the digital banking platforms.

Research Objectives and Questions

1. To investigate the factors that influence the adoption of BoBL's digital banking platform by the customers of BoBL.
2. To assess which factors significantly influence the adoption of BoBL's digital banking platforms.

The following questions will assist the researchers towards achieving the above two objectives:

1. What are the factors that influence the adoption of BoBL's digital banking platform by the customers of Thimphu Dzongkhag?
2. To what extent do the identified factors influence the customers' adoption of BoBL's digital banking platform?
3. What is the relative significance of each factor in influencing the adoption of BoBL's digital banking platform?

Literature Review

According to Juwaheer et al. (2012), a study in Mauritius investigated the factors influencing the adoption of internet banking among customers. They used a combined model consisting of the technology acceptance model (TAM), theory of reasoned action, theory of planned behavior, and demographic profiling where 384 individuals across the country were surveyed. The study concluded that perceived ease of use, perceived usefulness, trust, and security were the main factors affecting the adoption of digital banking. Additionally, income and education levels were also found to be significant factors.

Another piece of literature by Alnemer (2022) investigated the influence of factors such as trust, perceived ease of use, perceived usefulness, and demographic characteristics on the adoption of digital banking in Saudi Arabia. The study employed the TAM serving as a valuable framework for understanding digital banking adoption behaviors with factor trust being added to the model. The study is based on cross-sectional data which captured the insight of a given period. The perceived ease of use and perceived usefulness have more impact on the adoption of digital banking. So, this leads the financial institutions to emphasize on security and privacy as trust emerged as an important factor that influences the customers to adopt digital banking in Saudi Arabia. Similarly, a study conducted by Tiong (2020), in Malaysia also revealed that there is a positive relationship between TAM factors (perceived ease of use and usefulness) which are key factors in adopting digital technology.

Pavithra (2021) explored why customers favor digital banking over conventional banking. In his research, primary data were collected with the help of well-structured questionnaires. The main finding of the study revealed that there was a significant preference and satisfaction among customers, particularly in the Millennial age group, towards digital banking services. Factors such as transaction speed, compatibility, connectivity, security, convenience, and benefits were identified as key influencers in the usage of digital banking. The study highlighted that customer perceived digital banking as beneficial, time-saving, cost-effective, and convenient compared to traditional banking methods.

Furthermore, Subramanian (2023) researched Coimbatore, Tamil Nadu to explore the factors influencing customer experience, satisfaction, and loyalty towards digital banking. The study identified significant positive impacts on customer experience from digital banking advances such as perceived usability, and

perceived value. Brand trust, convenience, service quality, and functional quality were not found to have a significant influence. Customer satisfaction was found to be a consequence of positive customer experience, while customer loyalty is affected by both satisfaction and experience. The research also emphasized the correlation between usage frequency and familiarity with digital innovations, suggesting the potential for increased adoption as users become more comfortable with the technology.

Similarly, Moham et al. (2021) also studied the factors influencing customers to use digital banking in the Twin Cities of Telangana State. The study surveyed 100 participants using factor analysis and found that the maximum users were millennials who prefer digital banking over traditional mainly due to its convenience and accessibility. The findings of the study suggests that the customers who are technologically less literate to be provided with educational programs through workshops.

Hossain's (2023) research study conducted in Bangladesh examines the factors affecting the customers' intention to use digital banking. With the use of the technology acceptance model (TAM) framework, 200 customers found that perceived usefulness, web capabilities, and awareness were the main factors that influenced the adoption of digital banking. Thus, the study's findings recommended emphasizing on creating user-friendly web features, promoting the benefits of digital banking, and creating awareness to the customers to increase the adoption rate.

In a recent study conducted by Musyaffi et al. (2024), factors like trust, security, and personal innovativeness, and their influence on the user acceptance of digital banking platforms were investigated using the TAM model which included Perceived Ease of Use, Perceived Usefulness, and Intention to Use. The findings

revealed a positive and statistically significant relationship between the user acceptance of digital banking platforms with personal innovation. This indicated that individuals have a greater propensity to learn and adopt technology.

A study on the factors influencing the adoption of Internet banking was carried out by Almaiah et al. (2022). The study applied an integration of the Information System Success Model (ISSM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) to analyze the satisfaction and behavioral intentions of Malaysian customers. The findings concluded that factors such as Information Quality (IQ), Service Quality (SEQ), and System Quality (SQ) affected the satisfaction level of customers toward their acceptance of internet banking. Correspondingly, the findings implied that Perceived risk (PR), Price value (PV), Facilitating conditions (FC) and Performance expectancy (PE) have also ultimately influenced the behavioral intention of customers to use Internet banking.

Neves et al. (2023) conducted a comprehensive study, examining overall adoption factors and those different services like management, digital banking, and wallets, and payment services. The results highlighted the importance of technology adoption factors such as perceived usefulness and ease of use, and also security and trust in shaping individual user behavior towards use of digital banking. Furthermore, the analysis emphasized that individuals within cultures which place higher importance to money are likely to adopt these services if they perceive them as user-friendly. Thus, the findings offer valuable insight for both financial service providers and researchers to look further into exploring this evolving landscape of digital services.

Literature Gap

A review of existing literature revealed the scarcity of research concerning the adoption of the digital banking platform of BoBL in the Bhutanese context in general, and Thimphu Dzongkhag in particular. The review revealed only one relevant literature by Tshering, et al. (2018) on digital banking services in Bhutan with a limited sample size of 150 respondents. This gives the present researchers the essence that the research is old and the outcomes of this research may not be applicable to the present digital landscape in Bhutan. Thus, this scarcity of recent literature in Bhutan and lack of regionally focused research on adoption of BoBL's digital banking platforms makes it difficult to understand the current state of digital banking adoption in the country, especially in Thimphu. Hence, this knowledge gap provides an opportunity for the present researcher to conduct the research and to contribute valuable insights by examining the factors influencing the adoption of digital banking platforms.

Conceptual Framework

TAM-Technology Acceptance Model

This research framework explores the factors influencing the adoption of digital banking services. It is based on an extended version of the Technology Acceptance Model, tailored specifically to the context of digital banking. The model proposes five key variables that directly impact the adoption of digital banking:

Figure 1: *TAM Model*
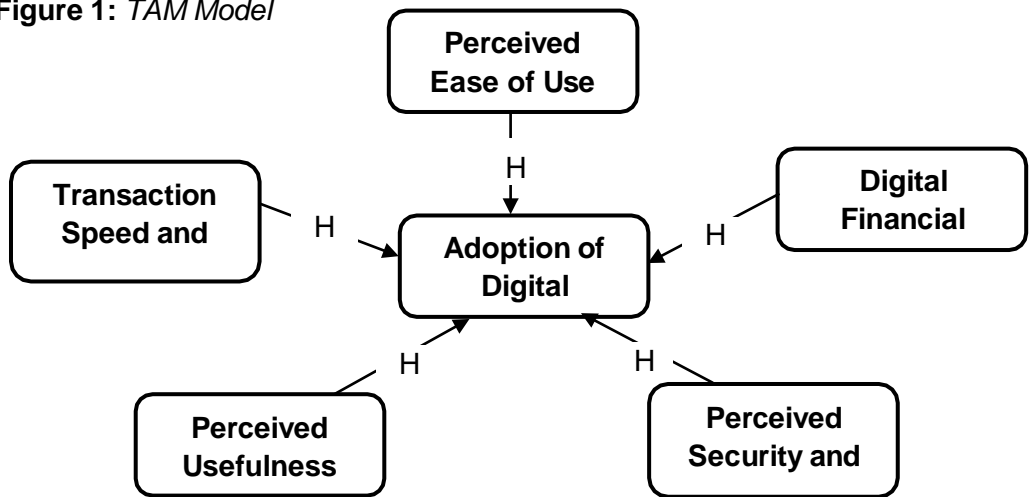
The model proposes five key determinants i.e., Perceived Security and Digital Trust (H_1), Digital Financial Literacy (H_2), Perceived Ease of Use (H_3), Transaction speed and time-saving (H_4), and Perceived usefulness (H_5) that directly impact the dependent variable of adoption of digital banking platforms. The arrows in the framework indicate hypothesized relationships, labeled H_1 through H_5, between each of these factors and the central construct of "Adoption of Digital Banking". These hypotheses suggest that each factor has a direct and positive influence on the likelihood of adopting digital banking services.

Research Methodology

Research Design

The research employed a quantitative research approach to guide the researchers throughout the study to make an informed investigation.

Quantitative Research Approach

This type of research approach helps in testing the relationships between variables, making predictions, and generalizing results to wider populations. Thus, a survey research approach was used in this research study to gather data from a

set of respondents on the factors influencing the adoption of digital banking platforms, specifically in Thimphu Dzongkhag. The survey includes closed-ended questions with predetermined response options (such as multiple choice and likert scales). This made it possible to gather standardized data from a sizable sample size, which enabled robust analysis of consumer opinions, usage habits, and issues with digital banking services.

Population

The study primarily focused on the adoption of digital banking platforms by the customers of BoBL residing in Thimphu Dzongkhag. However, the exact population of BoBL's digital banking customers residing in Thimphu Dzongkhag could not be determined due to the non-availability of information (mBoB, goBoB, and BoBNET Retails users) in the annual report of BoBL.

Sample Size

Given the unknown population size, Cochran's (1997) formula was used to determine the sample size.

$$n = \frac{z^2\ (pq)}{e^2}$$

Where;

n = sample size   p = estimated proportion of the population (0.5)

e = Margin of error (0.05)   q = 1-p (1 − 0.5)

z = z- score

$$n = \frac{1.96^2\ (0.5 \times 0.5)}{0.05^2} \approx 384$$

Therefore, the total number of samples for the study is approximately 384.

Sampling techniques

Convenience sampling, one of the non-random sampling techniques, was used to gather the necessary data. The dispersed nature of the population, together with time and resource constraints made the data collection procedure through the use of random sampling complicated. Thus, convenience sampling was used.

Study area

The study focuses on the BoBL customers residing in Thimphu Dzongkhag only because as per the Royal Monetary Authority report (2017) on the Kingdom of Bhutan's Financial Inclusion Journey, the highest number of customers availing digital banking services are from Thimphu Dzongkhag. And also, the report from the Population & Housing Census of Bhutan (2017), stated that Thimphu has the highest population in the country, which is also aligned with the maximum number of digital banking users. Thus, to gain a deeper understanding of the factors influencing the adoption of digital banking, the study has specifically targeted the users of BoBL residing in Thimphu Dzongkhag.

Data Collection/procedures

Data for the research was collected using the structured questionnaire. Considering the nature of the study, the primary data was collected from the respondents to achieve the desired research objectives. Both online and offline modes were used to collect the data from the respondents.

Data analysis techniques

Descriptive Analysis

In this research, descriptive analysis was used to gain a snapshot of the respondents' demographic profiles like gender, age, education attainment and income level. Further, to summarize the general information like types of digital

banking platforms customers use and the frequency of usage, the descriptive analysis techniques were employed.

Inferential Analysis

As an inferential analysis technique, the study used regression analysis to assess the influence of each independent variables on the dependent variable.

Factor Analysis

Beside the above mentioned descriptive and inferential analysis technique, the study also employed Principal Component Analysis (PCA). PCA was used for the purpose of variable summarization and dimension reduction

Analysis and Interpretation of Data

Introduction

SPSS software was used to analyze the primary data. Descriptive statistics such as frequency and percentages were used to describe the basic features of data in the study. Besides that, factor analysis technique was used for the purpose of data reduction and summarization. Furthermore, multiple regression analysis was run in order to assess the influence of factors (perceived security and digital trust, digital financial literacy, perceived ease of use, transaction speed and time saving, and perceived usefulness) on the overall adoption of digital banking platforms of BoBL by the customers to get a relevant answer of the research questions.
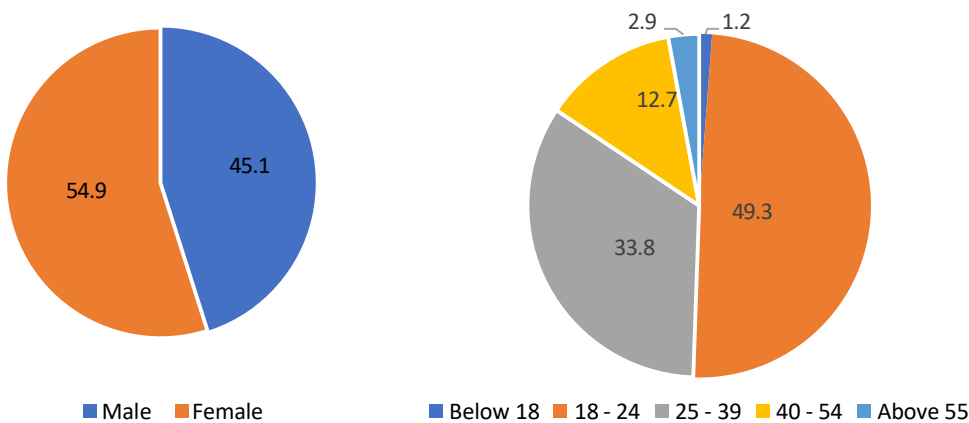
Demographic analysis of the respondents

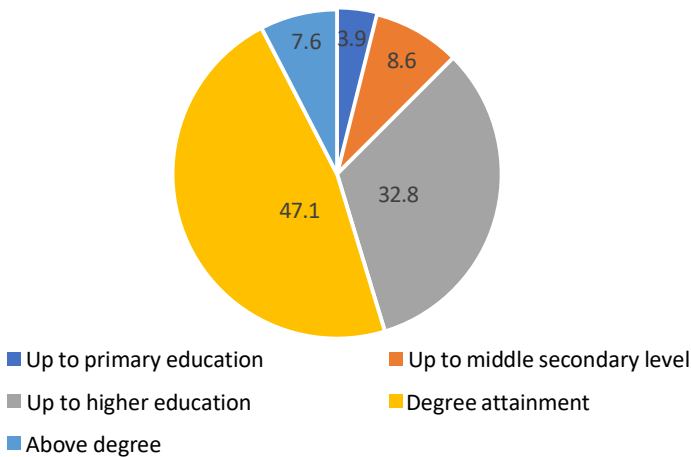**Figure 2**   **Figure 3**

Gender of respondents in Thimphu Dzongkhags   *Age of the respondents*
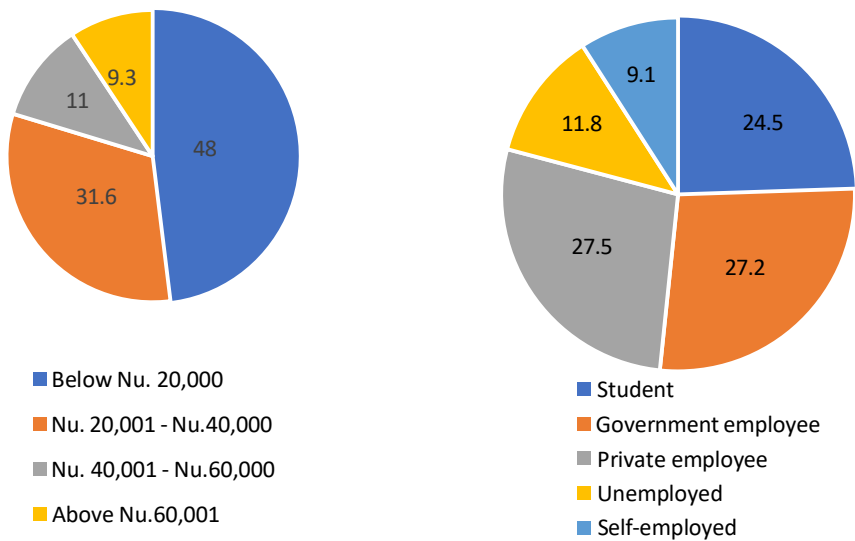
Figure 4*: Education attainment of the respondents*

Figure 5

Income level of the respondents

respondents

Figure 6

Occupation of the

This study analyzed the total data collected from 408 respondents residing in Thimphu Dzongkhag. As per the findings, the ratio of male and female respondents consisted of 45:55. The highest number of respondents (49.3%; 201 respondents) fell under the age bracket of 18 - 24 years and the lowest (1.2%; 5 respondents) was from the below 18 years age group (Figure 3). In terms of education attainment, the maximum number of respondents have degree attainment (47.1%; 192 respondents) followed by those with higher education attainment (32.8%; 134 respondents), and primary education attainment represents the smallest group (3.9%; 16 respondents) (Figure 4).

The maximum number of respondents (48%; 196 respondents) earn a monthly income of below Nu. 20,000, followed by a monthly income ranging between Nu. 20,001 - Nu.40,000 with (31.6%; 129 respondents) of them whereas about (9.3%) of the respondents earn a monthly income of above Nu.60,000 (Figure 5).

Regarding occupation, most of the respondents were private employees (27.5%; 112 respondents), followed by government employees (27.2%; 111 respondents) and the least fell under the category of self-employed with 9.1% (37 respondents) (Figure 6).

Table 4.1 shows the frequency and percentage of respondents who uses various digital banking platforms offered by Bank of Bhutan Limited. It was found that mBoB is the most dominant platform of BoBL, with a total percentage of 84.3% and a frequency of 344 respondents relying on it. Also, respondents using both goBoB and mBoB have a noticeable user base of 11% with a smaller percentage of 2% using goBoB. Moreover, the least used platform was found to be BoBNET Retail with only 0.5% of total respondents using it.

Table 4.1

Digital Banking platforms of BoBL

	FREQUENCY	**PERCENT**
mBoB	344	84.3
mBoB; goBoB	45	11.0
goBoB	8	2.0
mBoB; goBoB; BobNET Retail	6	1.5
mBoB; BoBNET Retail	3	.7
BoBNET Retail	2	.5
Total	408	100.0

Source: Compiled from Primary data

Table 4.2 shows that about 60% of the respondents access their bank accounts electronically on daily basis, followed by 18.6% of the respondents who access

their accounts weekly. A small percentage of 8.3% and 11% of respondents access their account monthly and less frequently respectively.

Table 4.2

Frequency of performing banking functions digitally

	Frequency	**Percent**
Daily	248	60.8
Weekly	76	18.6
Monthly	34	8.3
Less frequently	48	11.8
Never	2	.5
Total	408	100.0

Source: Compiled from Primary data

Factor Analysis determining primary factors for influencing the adoption of BoBL's digital banking platforms

The first objective of the study is to identify the factors that influence the adoption of BoBL's digital banking platforms. The respondents targeted were the customers of BoBL residing in Thimphu Dzongkhag. In order to identify the factors, the factor analysis technique was employed. This type of analysis is used for the purpose of data reduction and summarization. Factor analysis is a statistical technique that is used to determine the underlying structure of a significant number of variables and explain these variables in terms of a smaller number of common underlying factors (Hassan, 2024). Therefore, to categorize the variables that influence the adoption of BoBL's digital banking platforms into separate factors and variance explained by each factor, exploratory factor analysis (EFA) was conducted. EFA results in simplification of data structure or dimensionality reduction.

i.   Multicollinearity, Data Appropriateness and Sample Adequacy

Multicollinearity, data appropriateness, and sample adequacy tests are some of the important considerations for running factor analysis. The determinant value in Table 4.3 shows that it is much lower than the common cut-off value of 0.00001, indicating that there is no multicollinearity.

Table 4.3

Correlation matrix

a. Determinant = 3.865E-012

Source: Compiled from primary data

Additionally, the KMO (Kaiser-Meyer-Olkin) value of 0.91 (Table 4.4) shows that there is a strong correlation between the variables used in the study. Generally, a KMO value of more than 0.5 indicates that it is suitable to do factor analysis and a value below 0.5 indicates that factor analysis may not be suitable because of sampling inadequacy. Bartlett's test of sphericity is a statistical test used to check if variables in a given dataset are correlated (Bobbitt, 2019). Bartlett's test of sphericity is 0.000 in our test (Table 4.4) which indicates a good support for the validity of data thus factor analysis is suitable for the research study.

Table 4.4

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.91
Bartlett's Test of Sphericity	Approx. Chi-Square	10253.17

df	1128
Sig.	.000

Source: Compiled from primary data

i. Factor Analysis to identify the factors influencing the adoption of digital banking among the customers of BoBL

Principal component analysis method was used to analyze the data of 48 variables. These variables can be categorized and identified into specific factors. For this, firstly the Eigenvalue must be greater than 1. Next, the factor loading should be greater than 0.5 for each variable. Third is simplicity of factor structure (rotated), and fourth is exclusion of single item variables. Eleven factors were identified in total with Eigen values greater than one which altogether explained a total variance of 64.36 percent. Scree plot shows the diagrammatic representation of the number of factors that can be obtained for further analysis. It achieves this by identifying the slope of the curve that is clearly leveling off indicating the number of factors generated by the analysis. Furthermore, the VARIMAX Rotation Method has been used to group the items into meaningful categories. This method helps to extract clearer underlying factors by rearranging the initial results. The decision to include which factors is based on their factor loadings showing how much a specific variable is influenced by the underlying factors.

Varimax orthogonal rotation was used in the analysis. Higher the variable's loading on a factor, the more likely it is to represent that factor. The component structure represents each factor contributing to the adoption of the digital banking platform of BoBL. Out of 48 items, 5 items with the factor loadings less than the standard norm of 0.5 were excluded from the analysis. Further, from the remaining 43 items, 4 items were not taken for the analysis as each of these four individual items were

loaded under individual factor and also the 6 items which together composed two separate factors were also removed from the analysis, as the similar items falls in the identified dimensions like *"Transaction speed"* and *"digital trust".* After removal of unnecessary items, 33 items were taken for the further analysis of the study.

Discussion

The study is aimed at identifying the potential factors that have influence on the adoption of BoBL's digital banking platform by the customers of BoBL. In fact, the data used to run the factor analysis includes from only those customers residing in Thimphu Dzongkhag. Five potential factors were identified in the study which are titled as follows;

Table 4.5

Rotated Component Matrix for the Factors Influencing the Adoption of Digital Banking among the Customers of BoBL

Factors	Variables	Factor loading for variables
Perceived Security and Digital Trust (PS)	BoBL will not share my data with third parties without my consent.	0.79
	BoBL respects my privacy and abides by personal data protection laws.	0.79
	The security features offered by BoBL's digital banking platform (like two-factor authentication) are sufficient to prevent fraud.	0.77

I am confident that BoBL will take appropriate measures to safeguard my data while accessing its digital banking platform.	0.76
BoBL only collects necessary user data to use its digital banking platform	0.75
When I send data to BoBL's digital platform, I am sure that they will not be intercepted by unauthorized third parties.	0.73
I feel secure from fraud and scams when using BoBL's digital banking platform.	0.72
In case I encounter any scams during the digital banking process, I am confident that BoBL will help me recover the money that is lost through scams.	0.62
The information I shared with BoBL to use its digital banking platforms is exchanged only between BoBL and me.	0.61
I trust that BoBL's digital banking platforms are secure and reliable for conducting my financial transactions.	0.60
I am not concerned about the risk of unauthorized access to my account through BoBL's digital banking platform.	0.54
I feel safe when I share my data with BoBL to use its digital banking platforms.	0.53

	BoBL provides educational resources to help customers understand online banking security best practices.	0.50
Digital Financial Literacy (DFL)	BoBL provides helpful resources and information on the usage of its digital banking platform to educate users about how to use it.	0.74
	I know how to create strong and secure passwords for my BoBL digital banking account using the features available.	0.71
	I am aware of the steps I can take to protect myself from fraud and scams while using BoBL's digital banking platform.	0.69
	I can easily locate the features I need on BoBL's digital platform (mobile app or website).	0.67
	I am fully aware of the digital banking platform of BoBL.	0.58
	I feel confident in my ability to securely access my BoBL's digital banking account	0.53
Perceived Ease of Use (PE)	Learning how to use BoBL digital banking is easy for me.	0.96
	It is easy for me to become skillful at using BoBL digital banking platforms.	0.91
	I can easily learn about the new features available on BoBL's digital banking platform.	0.88

	The instructions provided by the BoBL's digital platform while operating are clear and understandable.	0.74
	Navigating and using BoBL's digital platform (mobile app or website) is easy.	0.74
	BoBL's digital banking services are quicker when compared to traditional methods.	0.74
Transacti	Digital banking saves time as it is available 24x7	0.69
on Speed	BoBL's digital banking enables me to save time as there is no need to visit the bank's branch personally.	0.69
and Time		
Saving	Within a few minutes, even high-value transfers can be made using BoBL's digital banking platform.	0.68
(TS)		
	The speed of transactions meets my expectations when using BoBL's digital banking platforms.	0.62
	Compared to traditional banking practices, I find BoBL's digital banking more useful and convenient for checking my account balances	0.89
Perceive	There is no need for me to carry a large amount of cash with BoBL's digital banking platform.	0.84
d		
Usefulne	I find BoBL's digital banking more convenient for transferring funds between accounts.	0.66
ss (PU)		
	Using Mobile banking increases my chances of achieving tasks that are important to me more quickly.	0.65

Source: Compiled from SPSS

The first factor, titled **'Perceived security and digital trust'**, is composed of thirteen variables. This factor talks about how respondents perceive BoBL's digital

banking platform to be secured from scams and fraudulent practices and it also covers the digital trust of the respondents. Among several factors that influence customers' decision to adopt digital banking platforms, studies conducted by Nwaiwu et al. (2020) have shown that the perception users attached to "security" and "trust " have a significant influence on their willingness to adopt digital banking platforms. Thus, the positive perception of the BoBL customers in all these variables represents the adoption of the BoBL's digital banking platform.

The second factor **'Digital financial literacy',** is composed of six variables. This factor focuses on the digital financial literacy level of respondents. It covers various aspects like whether the respondents are aware of the digital banking platforms of the BoBL and whether they know how to properly use it. It also talks about the respondents' ability to safeguard their data through the creation of strong and secure passwords and also the efforts by the BoBL to enhance the digital financial literacy level of customers. Studies conducted by Moam et. al (2021) and Namgyel (2024) also focuses on the importance of financial literacy in the adoption of digital banking platforms. Overall, this factor also influences the adoption of BoBL's digital banking platforms.

The third factor **'Perceived Ease of Use'** is composed of five variables. This factor refers to the respondent's perception of how simple and easy it is to navigate and use BoBL's digital banking platforms. It includes how easy it is to learn to navigate digital platforms and whether the customers can comprehend the instructions provided while using the digital banking platform. This factor, ease of use is very important in the adoption of any technology as it indicates the ability of customers to use the technology. Moreover, importance of this factor has also been mentioned in some of the existing literature such as Juwaheer et al. (2012),

Alnemer (2022), and Al-Smadi (2012), where they have identified it as one of the factors that affect the adoption of digital banking.

'Transaction speed and time saving' is the fourth factor with five variables. The respondents' perception regarding the speed of transactions carried out through BoBL's digital banking platforms and the 24-hour availability of banking services through the BoBL's digital banking platform is captured under these factors. This is crucial for determining the respondents' intention towards the adoption of digital banking platforms as the customers prefer flexibility in performing their banking functions. Study conducted by Pavithra (2021), also highlighted the importance of transaction speed and time-saving in influencing the adoption of digital banking.

'Perceived usefulness' of the digital banking platforms by the customers of BoBL is the fifth factor and contains four variables. Some studies such as Juwaheer et al. (2012) conducted in Mauritius have found that customers' perceived usefulness to be a key factor in influencing the adoption of digital banking platforms. This factor is focused on respondents' perception regarding the level of benefits and convenience they generate through the adoption of BoBL's digital banking platforms. This even takes into account how the adoption of digital banking platforms has increased the banking efficiency of the respondents. This is an important component in determining the customers' intention towards the adoption of digital banking platforms for conducting banking functions.

The overall analysis of the items reveals five primary factors that have influenced the adoption of BoBL's digital banking platforms. Hence, the analysis met the first objective of the study *"To investigate the factors that influence the adoption of BoBL's digital banking platform by the customers of BoBL".*

Reliability

In this research study, the reliability and internal consistency was assessed using the Cronbach's alpha. An alpha value of 0.7 or more is considered to have good internal consistency and is reliable (Frost, 2022). The alpha value of all the factors was found to be greater than 0.7 which shows that there is consistency and dependability for the whole 33 sets of questionnaires (after factor loading) with an alpha value of 0.92.

Table 4.6

Reliability Analysis

Variable	No. of Items	Cronbach's alpha
Perceived Ease of Use	5	0.88
Digital Financial Literacy	6	0.88
Perceived Usefulness	4	0.72
Perceived security and Digital trust	13	0.93
Transaction speed and Time-saving	5	0.77
Final Reliability	33	0.92

Source: Compiled from primary data

Influence of Independent Factors on the adoption of BoBL's digital banking among the customers of BoBL

Besides the Factor Analysis, multiple regression analysis was conducted using the enter method to see if the identified independent variables (Table 4.5) significantly predicted the dependent variable of adoption of BoBL's digital banking platform.

The R-value of the model represents the multiple correlation coefficient which indicates the strength of the linear relationship between the dependent variables and the combined predictors (independent variables). The R-value of 0.74 in Table

4.7 is an indication of the existence of a strong positive correlation between the dependent variable and the independent variables. Further, the R square value of 0.54 shows that the independent variables explain 54% of the variations in the dependent variables.

Table 4.7

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.74[a]	0.54	0.54	0.49

a. Predictors: (Constant), Transaction Speed, Digital Financial Literacy, Perceived Ease of Use, Perceived Usefulness, Perceived Security and Digital Trust

Source: Compiled from SPSS

The statistical significance of the regression model and the variations caused by the independent variables on the dependent variables are explained by the ANOVA (Table 4.8) the F$(5, 402) = 95.55$, $p < .05$) of the model shows that 54% of the variation (Table 4.7) in the dependent variable being accounted by the independent variables is statistically significant.

Table 4.8

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	117.21	5	23.44	95.55	.000[b]
1	Residual	99.68	402	0.25		

Total	216.89	407

a. Dependent Variable: Digital Banking Platform Adoption

b. Predictors: (Constant), Transaction Speed and Time saving, Digital Financial Literacy, Perceived Ease of Use, Perceived Usefulness, Perceived Security and Digital Trust

Source: Compiled from Primary data

Multiple regression analysis was also conducted to assess the significant influence of each independent variable on the dependent variable. From the five identified independent variables, three variables (Table 4.9) were found to have significant influence on the dependent variable (adoption of BoBL's digital banking platform).

Table 4.9

Coefficients Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig	Decision on Hypothesis
	B	Std. Error	Beta			
(Constant)	0.99	0.42		2.34	0.2	
Perceived Security and Digital trust	0.13	0.04	0.14	2.95	.00**	H_1: Supported (Sig. value<0.05)

Digital Financial Literacy	0.50	0.04	0.58	11.79	.00**	H_2: Supported (Sig. value<0.05)
Perceived ease of use	0.00	0.05	0.00	0.06	0.96	H_3: Not supported (Sig. value>0.05)
Transaction Speed	0.04	0.07	0.02	0.56	0.58	H_4: Not supported (Sig. value>0.05)
Perceived Usefulness	0.10	0.04	0.08	2.16	.03*	H_5: Supported (Sig. value<0.05)

a. Dependent Variable: Digital Banking Platform Adoption

Source: Compiled from primary data

*Note: ** & * indicates significant levels at 1% and 5% respectively.*

The statistics value of perceived security and digital trust, digital financial literacy and the perceived usefulness as shown in Table 4.0 suffice this fact. Out of these three independent variables, digital financial literacy was found to have a greater influence on the adoption of the BoBL digital banking platform followed by the perceived security and digital trust and perceived usefulness. The conclusion drawn from the analysis reveals the most significant factors influencing the adoption of BoBL's digital banking platforms.

Major Findings of the Study

i. A majority, about 84% of the respondents have adopted mBoB, with the least adoption rate falling at the BoBNET retail digital banking platform.

ii.   Only about 61% of the respondents were found using the BoBL's digital banking platforms daily for carrying out their banking transactions.

iii.   Five primary factors were found to have influenced the adoption of BoBL's digital banking platform by the respondents.

iv.   The digital financial literacy of the respondents is found to have the most significant influence on the adoption of BoBL's digital banking platforms.

Conclusions and Recommendations

Conclusion

This study focused on exploring the factors that influence the adoption of the digital banking platforms of BoBL, based on the data collected from the customers of BoBL residing in Thimphu Dzongkhag with the help of the TAM model. The data was analyzed using the SPSS software. Both the descriptive and inferential analysis techniques were employed for different purposes and additionally, Principal Component Analysis (PCA) was conducted to identify the primary factors influencing the adoption of BoBL's digital banking platforms. The study identified five key factors influencing the adoption of BoBL digital banking platforms by customers in Thimphu Dzongkhag such as perceived security and digital trust, Digital financial literacy, Perceived ease of use, Transaction speed and time-saving, and Perceived usefulness. The analysis also revealed an R-square value of 0.54, indicating that 54% of the variation in adoption is explained by the five identified factors, and other factors not included in the study also play an important role in influencing the adoption of BoBL's digital banking platforms. Therefore, it can be concluded that from the identified factors, digital financial literacy has the strongest influence (Beta= 0.50, p=0.00) followed by security and digital trust (Beat= 0.13, p= 0.00), and perceived usefulness (Beta= 0.10, p= 0.03) on digital banking platform adoption.

Recommendations

a) Recommendations to the BoBL

i. Given the fact that digital financial literacy emerged as a factor having a strong influence on the adoption of digital banking platforms of BoBL, the researchers recommend BoBL to organize initiatives and programs to further amplify customers' understanding and comfort while using their digital banking platforms. One of such can be to begin with a series of digital financial literacy workshops which could aim to target different segments of customers, ensuring that this workshop addresses the different needs and knowledge gaps of each customer segment. By providing customers with the required skills and knowledge, BoBL can equip them to completely accept digital banking platforms, further driving the bank's digitization efforts.

ii. The negligible rate of adoption of BoBL's digital banking platforms like goBoB and BoBNET Retail in comparison to the adoption rate of mBoB might be because of a lack of customers' awareness of the benefits of such platforms. Thus, the researchers recommend BoBL to target marketing and communication campaigns to create greater awareness about the features and benefits of adopting such platforms.

iii. The security and digital trust of the respondents influence the adoption of digital banking platforms of BoBL, as it shows a positive correlation between the two. To further improve the security features of digital platforms, BoBL can invest in robust security technologies like AI-powered fraud detection and real-time fraud monitoring. Also, BoBL can proactively communicate about its security features and how to utilize them which can help contributing to building and gaining the trust and confidence of the customers in digital banking platforms.

b) Recommendations/scope to the future researchers

i. Expand the geographical scope: The current study takes into account the concerns of customers of BoBL residing in Thimphu Dzongkhag only. The future researchers willing to explore on the similar topic can expand the geographical scope and include the customers of BoBL residing in other Dzongkhags as well.

ii. Role of demographic factor analysis: The current study is more focused on the investigation of the factors that have influence on the adoption of BoBL's digital banking platforms by the customers. To gain a comprehensive understanding of the topic, future researchers can consider the role of demographic factors in the adoption of BoBL's digital banking platforms.

iii. Regulatory and policy factors: Country's regulation and policy also plays a vital role in the promotion of digital banking platforms. The present study does not specifically examine the role of country's regulations and policy in shaping the digital banking platforms' adoption. Future researchers can explore the role of regulatory and policy factors in shaping the digital banking adoption landscape in the country, to gain a deeper understanding of the factors influencing the adoption of BoBL's digital banking platforms

Limitations of the Research

This study has certain limitations as follows, which might hamper the accuracy of the findings:

i. The sample for the data collection was focused only on the customers of BoBL residing in Thimphu Dzongkhag, which might have failed to take into consideration the concerns of customers residing in other Dzongkhags.

ii. Since the samples were collected from the respondents residing in Thimphu only, they may not be the true representative of the sample size

iii.   The current study focused on customer-centric factors influencing the adoption
         of digital banking platforms only and does not take into consideration other factors
         like regulatory and policy factors which might be having a significant influence on
         the digital banking adoption landscape at large.

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