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DETERMINANTS OF DIGITAL BANKING ADOPTION AND CUSTOMER LOYALTY: AN EMPIRICAL STUDY IN AN EMERGING ECONOMY

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ABSTRACT:

The purpose of the current study is to identify the main factors that determine whether people in an emerging economy adopt digital banking by using the Technology Acceptance Model (TAM). The current study specifically evaluated the effect of both Perceived Usefulness (PU), as well as Perceived Ease of Use (PEOU), on digital banking adoption (DBA). The researcher collected primary data from a sample of 450 respondents using a structured survey and analyzed the data using SPSS, specifically, the researcher used reliability testing, descriptive statistics, exploratory factor analysis, correlation, and multiple linear regression to examine the data. The reliability of the data collection instrument was confirmed using a Cronbach's alpha statistic of 0.950 which reflects an excellent level of internal consistency. Construct validity of the instrument was confirmed using both a KMO of .828 and a significant Bartlett's Test of Sphericity ($p < 0.001$). Correlation analyses showed that both PU ($r = 0.585$, $p < 0.001$) and PEOU ($r = 0.594$, $p < 0.001$) were positively correlated with digital banking adoption. The regression analysis indicated that the overall model was statistically significant ($F = 192.108$, $p < 0.001$) and explained 46.2% of the variance in digital banking adoption ($R^2 = 0.462$). In addition, PEOU was identified as the stronger of the two predictors of DBA, although both PU and PEOU demonstrated a statistically significant positive impact on DBA. These findings provide support for the relevance of TAM and have important practical implications for banks as they attempt to increase DBA.

KEYWORDS: Digital Banking Adoption; Technology Acceptance Model (TAM); Perceived Usefulness; Perceived Ease of Use; Emerging Economy.

1. INTRODUCTION

Digital Transformation in the Banking Sector is Expected to have an impact on the Global Economy, currently, there are numerous technological developments and changes in business practices taking place as financial institutions adapt to digitalization and to meet customer expectations. Digital banking includes the use of mobile application technology, internet-based banking web-pages or portals, and, increasingly, digital payment systems. All of these tools allow customers to conduct electronic transactions from virtually anywhere based on their internet connected device or computer **(Rahi et al; 2021)**. The Advancement of Technologies and the Digital Economy have created a New Opportunity in Many Emerging Markets with Rising Smartphone Ownership, Emerging Digital Infrastructure and Supportive Regulatory Framework (McKinsey 2021). The Shift Away from Traditional Banking Models to Digital Platforms Provides an Opportunity for Banks to Create a Competitive Advantage Over Other Financial Institutions and Create New Relationships with Their Customers Based on a New Approach to Providing Customer Service.

The adoption of digital banking in emerging economies is an unusual phenomenon due to the rapidly changing nature of the market, the wide range of different demographic groups, and varying levels of financial literacy and technological capability **(Aziz et al., 2021)**. Digital banking usage has increased significantly in these markets; by 2021, the number of people in emerging Asia-Pacific markets actively using digital banking services reached 88%, an increase of 33 percentage points compared to 54% in 2017 **(McKinsey, 2021)**. This high adoption rate is due in large part to a number of factors: convenience, ease of access, affordability, and the growing influence of digital financial services on people's daily economic lives. However, there are a number of differences between the factors resulting in the adoption of digital banking in these economies as opposed to those found in developed economies, so it is important for researchers examining these issues in emerging economies to conduct research that is contextually appropriate and takes into consideration the particular cultural, technological, economic, and infrastructural factors affecting these markets.

In the modern banking sector, Customer loyalty is a very high priority for Financial Institutions. The way of doing business is changing because of the introduction of technology to the banking industry; therefore, Customer Relationships have changed too. As Financial Institutions become digital, they will likely lose the traditional methods of how Customers

would normally communicate with them, which would include Phone or In Person. Digital native competitors are growing, and therefore retaining Customers has become more difficult for Financial Institutions. Research shows that 61% of Generation Z Customers have switched their bank in the past 2 years. This shows how fast the Financial Industry is evolving; therefore, it is vital for Financial Institutions to understand why Customers adopt and stay loyal to their brand(s). In the Digital Banking Industry, Customer Loyalty does not just mean that they use the Company's product(s) over and over, but it also includes the emotional connection and advocacy behaviors that will generate Long-Term Profitability and a Sustainable Competitive Advantage.

TAM **(Technology Acceptance Model) Davis (1989)** identified two key factors that positively affect user intentions to use a technology: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Since its inception, TAM has been used across several different domains to study technology adoption behaviors - such as digital banking, e-commerce and mobile applications. An integrated framework has been created using TAM's constructs of PU, PEOU and other construct-based predictors of customer satisfaction and loyalty.

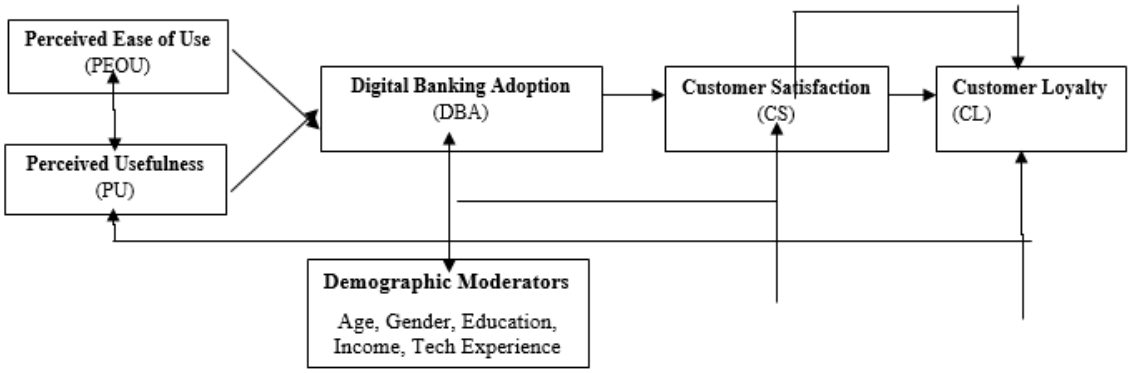


Figure 1: Technology Acceptance Model.

Description: The proposed model regarding digital bank adoption is based on the Technology Acceptance Model (TAM). It hypothesizes that a user's perceived ease of use (PEOU) and perceived utility (PU) will correlate positively with an individual's propensity to adopt digital banking (DBA). It is suggested that DBA will increase a user's level of satisfaction (CS) with the service; and therefore, through satisfaction, increase a user's likelihood of continuing to use the service to develop brand loyalty (CL). Demographic variables (e.g., age, gender, educational level, income, technological experience) are

proposed as moderating variables that impact the strength of the relationship between DBA and customer loyalty.

2. Review of Literature

Theme 1: Theoretical Foundations of Digital Banking Adoption – Davis (1989) developed the Technology Acceptance Model (TAM) which has been utilized primarily as a theoretical model to understand how consumers adopt digital banking. TAM suggests that the most important variables in a consumer's decision about whether or not to adopt a technology are their perceptions of perceived usefulness and perceived ease of use (Davis, 1989). TAM has been validated in many different technology areas and across multiple geographic locations, demonstrating a strong ability to predict acceptance of digital banking **(Venkatesh, 2000).** Perceived usefulness refers to the extent to which potential customers feel that digital banking will improve their performance and make their banking activities easier. Perceived ease of use refers to customers' beliefs that the technology will reduce the amount of effort required to use it (Davis, 1989). Numerous studies conducted in emerging markets have consistently demonstrated that the constructs of TAM have a significant positive effect on consumers' adoption of digital banking. In each of these studies, perceived usefulness and perceived ease of use have been shown to have a positive impact on consumers' behavior with respect to digital financial services **(Jamshaid et al., 2025)**.

The traditional Technology Acceptance Model (TAM) was created in 1985 by Davis. Since then, it has been developed by many different researchers to accommodate additional constructs that are relevant when considering digital banking. An augmented Technology Acceptance Model (TAM) with subjective norms, image of the institution, the bank's initiative, Internet banking self-efficacy, the effectiveness of using the Internet, trust, perceived risk, and government support has been created. According to **(Marakarkandy et al., 2017)**, the augmented Technology Acceptance Model (TAM) is a better predictor of user acceptance of Internet Banking. They provide predictive capability with 29.9% of variance explained, while the basic Technology Acceptance Model (TAM) only had 26.5% of variance explained. In recent years, the Unified Theory of Acceptance and Use of Technology (UTAUT) and its extension UTAUT2 have also been used to study users' propensities to adopt Digital Banking. Using UTAUT and UTAUT2, many researchers have studied the impact of performance expectancy, effort expectancy, social influence, facilitating conditions, and hedonic motivation on users' propensity to adopt Digital **Banking (Venkatesh et al., 2003)**. Emerging economies have reported that users who were Users of

Digital Banks found that the best predictors are performance expectancy, trust, security, perceived usefulness, and attitude (Systematic literature review of trust and security on Fintech adoption, 2023).

Theme 2: Determinants of Digital Banking Adoption in Emerging Economies – According to the research of Navigating the digital wave (2025), service quality plays an important role in determining whether or not consumers decide to use digital banking services. Consumers' satisfaction with their experience in digital banking is determined mainly by the reliability of the service; the quality of the website's design; the level of security provided by the bank; and the quality of customer service offered by the bank. In addition to these four factors, the Electronic Banking Service Quality (EBSQ) Framework identifies the five factors that form the basis for how customers perceive the service and are influenced by the intent to use it. This is especially true in developing countries where digital banking is still in its infancy and the availability of reliable and consistent services will build user confidence and facilitate their adoption **(Al-Haddad, et al., 2022)**.

Trust and security concerns are vitally important obstacles or facilitators for the adoption of digital banking, particularly in emerging countries where consumers often have little to no experience using digital financial products and services. Additionally, due to its importance in digital banking adoption and continued usage for customers, trust has majorly influenced the customer's willingness to utilize mobile banking services, their satisfaction, and their ongoing patronage **(Mostafa & Kasamani, 2022)**. Furthermore, it has been shown through research that trust is one of the biggest influences on a customer's perception of service quality (commitment) and how customers form their behavioral intentions to utilize digital banking services **(Between Firewalls and Feelings, 2025)**. The attributes of security, including end-to-end encryption, secure login procedures, fraud detection service and personalized alerts, are necessary for creating a level of trust in customers for them to start using digital banking products and services (Navigating the digital wave, 2025). Studies have also found a significant negative relationship between the perceived risk associated with utilizing digital financial services and consumer behavior that results in purchasing digital financial services; therefore, addressing consumers' security concerns will facilitate the adoption of digital banking services (Jamshaid et al., 2025).

Theme 3: Customer Satisfaction and Loyalty in Digital Banking – Customer satisfaction is key to how digital banking offers lead to increased loyalty from customers and as such has

been widely researched to illustrate the pivotal point of satisfaction within the entire customer satisfaction to customer loyalty cycle. Research indicates that customers' overall levels of satisfaction have a significant positive impact on their level of loyalty to a digital bank; with beta coefficients indicating high levels of influence (Digital Banking Experience and Customer Loyalty, 2025). The best theoretical basis for expectation–confirmation is the Expectation-Confirmation Theory, which asserts: Customers develop expectations about a product/service before they have a chance to use it (consume it); once they do consume the product/service, they will then evaluate their experience by comparing what happened during consumption with what they expected prior to service use, and as a result, this evaluation leads to either satisfaction or dissatisfaction, and will therefore directly impact their future behavioral intentions regarding that company **(Bhattacherjee, 2001)**. In the context of digital banking, customer satisfaction reflects the customer's cumulative assessment of their digital banking service experience for all digital banking services they have utilized to date, and includes Usability; Reliability; Responsiveness; Perceived Value, etc. (Raza et al., 2020).

Numerous Studies have found a strong positive relationship between a customer's satisfaction with a financial institution to many of these factors (e.g., through experience, perceived value) and the loyalty of that customer to the financial institution. In the new digital banking environment as a result of the COVID-19 Pandemic, the expectations of customers for seamless, safe, and fast transactions has increased. The overall satisfaction of customers is now key to a financial institution establishing a competitive advantage and providing its customers with loyalty to that financial institution, as the pandemic has increased these expectations from customers **(Akter et al., 2021)**. Despite the influence of customer satisfaction on customer loyalty, studies indicate that demographic factors moderate the satisfaction-loyalty relationship. This study indicates that the satisfaction-loyalty relationship is strengthened for younger customers and weakened for older customers (Digital Banking Experience and Customer Loyalty, 2025).

Online customer engagement is becoming an increasingly important bridge between quality of digital bank services and loyalty of users. As companies become more reliant on both forms of communication, it is becoming evident that content marketing and interactive online strategies will play a larger role in maintaining strong customer ties. Studies have proven that the role of content marketing has helped to create loyalty by creating an increased level of online engagement, where online customer engagement acts as a mediator between the two variables (Driving Customer Loyalty in Digital Banking, 2025). Unlike traditional methods of advertising, using content marketing allows for the establishment of trust and long-term

relationships, as it addresses the value of the customer's individual needs and desires as a consumer, which are important within a digital banking environment as the consumer is looking for information that is valuable and assists them in making decisions **(Wang et al. 2019)**. In addition, studies have also indicated that having an emotional bond with a digital banking platform increases the impact of the customer's trust and ultimately affects the customer's use and ongoing interaction with the service (Between Firewalls and Feelings, 2025).

Theme 4: Challenges and Barriers to Digital Banking Adoption – Emerging economies are likely confronting major impediments to adopting digital banking due to their relatively less established cyber security infrastructure. Increasing incidences of cybercrime coupled with the many banks' reliance upon third-party IT services are major contributors to the high degree of vulnerability banks currently face regarding cyber-breach and systemic cyberattack (Building Trust in the Digital Age, 2025). According to research, the level of awareness surrounding cybersecurity has become an essential component for protecting banks from the consequences associated with the migration towards a digitalized platform and failure to be diligent in securing banking systems creates opportunities for cyber-attack on banks that will ultimately have a negative impact on the users' trust (Examining Initial Trust in Adoption of Digital Banking Platform, 2024). A major conclusion that multiple studies have come to is that 53 percent of customers are genuinely concerned about their privacy but want to be able to receive personalized experiences, thus giving banks the ongoing dilemma of how to find the correct balance between both modes of operation **(Qualtrics Research, 2024)**.

Digital literacy and technology capability deficiencies impede a large segment of the population in emerging economies from utilizing digital banking. A number of factors including insufficient education, deficiencies in digital infrastructure and poor connectivity all contribute to decreased digital banking channel adoption within emerging markets such as India (Digital Banking Channel Adoption in Emerging Economies, 2021). Digital banking channels continue to go underutilized by consumers as many customers do not have sufficient knowledge and understanding regarding digital banking **(Shaikh et al., 2020)**. In order to develop positive perceptions amongst consumers about the effectiveness of digital banking channels, investments must be made in user education and digital literacy instructional programs within these environments. Infrastructure constraints such as unreliable internet connection, lack of a secure power source and limited access to smartphones are significant structural impediments to digital banking adoption for many emerging markets.

3. Research Gap

While significant research has investigated how customers adopt digital banking and build loyalty to the digital banks they have adopted, there has been little empirical research demonstrating how the factors that drive customers' adoption of digital banks lead to continued customer loyalty within emerging economies. Most of the previous research has focused on understanding how customers adopt digital banks and how loyal they are to those digital banks; however, very little has been published that integrates the link between the drivers of adoption, customer satisfaction, and loyalty to digital banking. Additionally, few studies have explored the unique socio-economic and technological characteristics of emerging markets; demographic factors in these studies are often viewed as control variables rather than moderators, which limits our understanding of how they interact with each other to shape the relationship between adoption and loyalty.

4. Research Objective & Hypotheses Formulation

1. To identify the key determinants influencing digital banking adoption in an emerging economy.
2. To examine the effect of digital banking adoption on customer satisfaction and customer loyalty.
3. To analyze the mediating role of customer satisfaction in the relationship between digital banking adoption and customer loyalty.
4. To examine the moderating effect of demographic factors on the relationship between digital banking adoption and customer loyalty.

Hypothesis Formulation

H1: *Perceived usefulness has a significant positive impact on digital banking adoption.*
H2: *Perceived ease of use has a significant positive impact on digital banking adoption.*

5. Research Methodology

Research Design – Using a quantitative and explanatory research design, the research will investigate the relationship between the determinants of adopting digital banking, being satisfied as a customer, and loyalty as a customer. The explanatory design will help identify causal relationships between variables based on the Technology Acceptance Model (TAM) in an emerging economy context.

Sampling Design – A convenience sampling strategy based on non-probability was chosen based on access and time limitations. Targeted participants were those who actively use

digital banking services from an emerging economy. Approximately 150-200 potential responses were determined to be sufficient for a regression-based analysis and have also been used in previous studies that investigated the Technology Acceptance Model (TAM) frameworks surrounding digital banking adoption.

Data Collection Method – A structured self-administered questionnaire was created using existing models already established in the literature for gathering primary data. The questionnaire was divided into two sections, the first contained demographic information such as age, sex, education, earnings and experience with technology, while the second assessed respondents' thoughts about adopting digital banking, satisfaction with digital banking, and loyalty towards digital banking as per the constructs of the technology acceptance model.

Variables and Operationalization – The study's framework has four main components that will be analyzed as explained in detail in the Literature Review chapter. It identifies each of those elements as constitutive variables and identifies each constitutive variable as being operationalized through additional overlapping variables and attributes to determine the influence of digital banking adoption on customer loyalty.

- Independent Variables (IV): Perceived Usefulness (PU), Perceived Ease of Use (PEOU)
- Dependent Variable (DV): Customer Loyalty (CL)
- Mediating Variable (MV): Customer Satisfaction (CS)
- Moderating Variables (MV): Demographic factors (age, gender, income, education, and technological experience)

Tools and Techniques of Analysis – Data analysis was conducted using **SPSS 29** software. The following statistical techniques were applied:

- Data screening and coding
- Reliability analysis using Cronbach's alpha
- Normality test by using Kolmogorov & Shapiro
- Frequency analysis of demographic profile
- Descriptive statistics of dependent variables
- Correlation, Regression and Exploratory Factor Analysis (EFA)

6. Data Collection and Analysis

Reliability analysis using Cronbach's alpha

Table 2: Reliability Statistics.

Cronbach's Alpha	N of Items
.950	18

Interpretation: Table 2 demonstrate the reliability information of the 18-item questionnaire from the study. Cronbach's Coefficient Alpha (Cronbach's alpha) was 0.950 for the 18 items, indicating excellent internal consistency for the items contained in this instrument. The existing literature suggests that a value of 0.70 or greater is acceptable, 0.80 or greater is considered good, and a value of 0.90 or greater indicates very high reliability. Thus, the obtained alpha value from the instrument is 0.950 implying that the instrument has very high reliability and that the responses obtained from the study will be reliable, stable, and appropriate for subsequent statistical analyses.

Normality Test by Using Kolmogorov-Smirnov[a] & Shapiro-Wilk

Table 3: Tests of Normality.

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
PCA Factors	Statistic	df	Sig.	Statistic	df	Sig.
PU	.085	450	.000	.949	450	.000
PEOU	.079	450	.000	.949	450	.000
DBA	.091	450	.000	.948	450	.000
CS	.092	450	.000	.945	450	.000
CL	.094	450	.000	.945	450	.000
a. Lilliefors Significance Correction						

Interpretation: The findings of the normality test show that all five measurements Perceived Usefulness, Perceived Ease of Use, Digital Banking Adoption, Customer Satisfaction, and Customer Loyalty have significance greater than 0.05 in the Kolmogorov-Smirnov and Shapiro-Wilk tests for normality. Thus, the data deviate from a normal distribution.

However, given the large sample size of 450 respondents, it is common for these types of deviations from normality to occur without violating any assumptions required to perform additional statistical analysis.

Normality tests on large datasets are very sensitive and are therefore able to identify very small deviations from normality.

Frequency Analysis of Demographic Profile

Table 4: Gender

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
ValidFemale	226	50.2	50.2	50.2
Male	224	49.8	49.8	100.0
Total	450	100.0	100.0	

Interpretation: There are 450 total respondents: 226 females (50.2%) and 224 males (49.8%). The difference in numbers between males and females is minimal, showing that both genders participated adequately in this study which helps create a more balanced sample. With both genders being represented equally, minimizing the chance of gender-based bias, and helping to create a more representative sample of the population, the gender distribution for respondents included in this research may be judged as valid for subsequent statistical and comparative analysis.

Table 5: Educational Qualification.

Educational Qualification		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Doctoral	36	8.0	8.0	8.0
	Postgraduate	141	31.3	31.3	39.3
	Professional/Technical	97	21.6	21.6	60.9
	Undergraduate	176	39.1	39.1	100.0
	Total	450	100.0	100.0	

Interpretation: Education level eligibility for the sample suggests a large percentage of individuals holding, respectively, either an undergraduate (39.1%, 176), a post-graduate (31.3%, 141), a professional or technical (21.6%, 97), or a doctoral degree (or higher) (8.0%, 36). Given the relatively high education levels of respondents, it can be anticipated that most will possess a fair degree of digital literacy and awareness through which to investigate the link between digital banking services and customer loyalty. T

he educational profile suggests that respondents likely have adequate knowledge and skills to evaluate and assess digital banking services and it supports their trustworthiness in providing accurate accounts of their experiences with technology-based banking's. Thusly, the educational distribution of the sample is generally representative of the population to be examined and therefore will help satisfy the intent or objectives of this study.

Table 6: Annual Income.

Annual Income	Frequency	Percent	Valid Percent	Cumulative Percent
3-6 Lakhs	148	32.9	32.9	32.9
6-9 Lakhs	107	23.8	23.8	56.7
9-12 Lakhs	49	10.9	10.9	67.6
Above 12 Lakhs	41	9.1	9.1	76.7
Below 3 Lakhs	105	23.3	23.3	100.0
Total	450	100.0	100.0	

Interpretation: The total sample size (450), the largest segment of respondents (32.9 percent or 148) reported earnings between 3 and 6 lakhs. The next largest segments were reported in the 6–9 lakh category, which numbered 107 or 23.8 percent and in the below 3 lakh categories (105), which accounted for 23.3 percent of respondents. Finally, the number of respondents in the 9 to 12 lakh range (49 respondents) and those with more than 12 lakhs (41) represented 10.9% and 9.1%.

Descriptive statistics of Study Variables

Table 7: Descriptive Statistics.

PFA Factors	N	Minimum	Maximum	Mean	Std. Deviation
PU	450	3.25	16.25	10.50	3.94
PEOU	450	3.25	16.25	10.50	3.95
DBA	450	3.25	16.25	10.50	3.97
CS	450	2.33	11.67	7.54	2.87
CL	450	2.33	11.67	7.54	2.87

Interpretation: Descriptive statistics for the constructs within this study can be seen in Table 7. For all constructs, calculated using a total of 450 valid cases (i.e., no missing data points), results showed mean values for PU = 10.5011 (SD = 3.93842), PEOU = 10.5011 (SD = 3.95239), and DBA = 10.5011 (SD = 3.96856), suggesting moderate variability in respondents' perceptions and behaviors around adopting digital banking services.

Similarly, Customer Satisfaction (CS) and Customer Loyalty (CL) each displayed means of 7.5393 (CS; SD = 2.86573) and 7.5393 (CL; SD = 2.86780), respectively. Based on the bootstrap data analysis, there were minimal biases and relatively small 95% confidence intervals, providing further evidence that participants showed moderate to positive outlooks toward using digital banking systems.

Exploratory Factor Analysis (EFA) to assess Construct Validity

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.828

Bartlett's Test of Sphericity	Approx. Chi-Square	1072.508
	df	10
	Sig.	.000

Interpretation: The KMO statistic is **0.828**, meaning the sample size is good (above the recommended minimum value of 0.60), and thus the correlations are strong enough that we can extract factors. Also, Bartlett's Test of Sphericity was statistically significant; the chi-square statistic was **1072.508 with df=10 and p<0.001**; therefore, the correlation matrix is not an identity matrix. All of these results tell us that this dataset can be used for conducting exploratory factor analysis (EFA). These variables collectively provide a structured framework for examining customer behavior in digital banking. The inclusion of mediating and moderating variables strengthens the analytical depth of the study. This classification also supports effective hypothesis testing and model interpretation.

Communalities		
Constructs	**Initial**	**Extraction**
PU	1.000	.535
PEOU	1.000	.526
DBA	1.000	.796
CS	1.000	.673
CL	1.000	.688

Interpretation: Table 9 presents the communalities for the five study constructs extracted through **Principal Component Analysis (PCA)**. As expected in PCA, the initial communality for each variable is **1.000**. The extracted communalities indicate the proportion of variance in each variable explained by the retained factor solution.

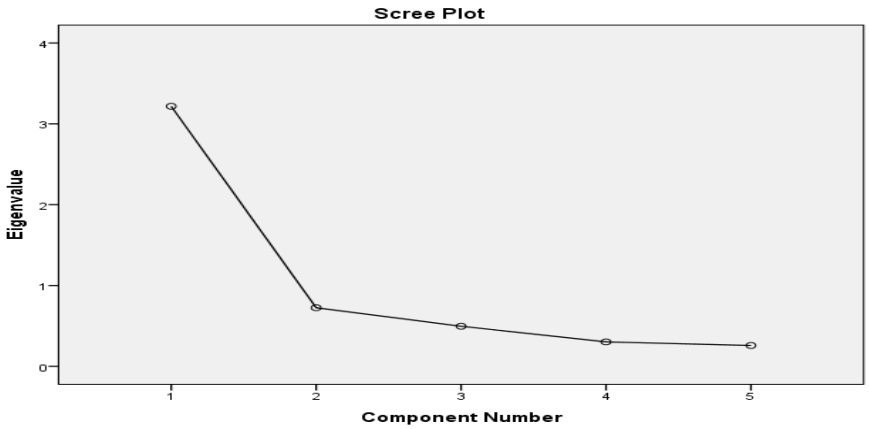
The values range from **0.526 to 0.796**, with **Digital Banking Adoption (DBA)** showing the highest communality (**0.796**), followed by **Customer Loyalty (CL)** (**0.688**), **Customer Satisfaction (CS)** (**0.673**), **Perceived Usefulness (PU)** (**0.535**), and **Perceived Ease of Use (PEOU)** (**0.526**).

Total Variance Explained						
	Initial Eigenvalues			**Extraction Sums of Squared Loadings**		
Component	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	3.217	64.349	64.349	3.217	64.349	64.349
2	.725	14.505	78.854			
3	.496	9.928	88.782			
4	.303	6.054	94.835			
5	.258	5.165	100.000			

Interpretation: The total amount of variance explained by the extracted components from PCA (Principal Component Analysis) analysis can be found in Table 10. The first extracted component had an eigenvalue **(Kaiser's criterion of eigenvalue > 1) of 3.217** and accounted for 64.349% of the total amount of variance, which is above the acceptable threshold for research in social & behavioral sciences; however, the other four extracted components all had eigenvalues below 1.0 so they were not retained for analysis.

Component Matrix[a]	
Constructs	Component 1
PU	.732
PEOU	.725
DBA	.892
CS	.820
CL	.829

Interpretation: According to the component matrix, the five constructs were all positively loaded onto the single extracted component and have loadings from 0.725 to 0.892, with DBA highest at 0.892, CL second at 0.829, CS next at 0.820, then PU at 0.732, and lastly, PEOU at 0.725; therefore, each of the five constructs had a strong influence on the single underlying construct. According to the component matrix, the five constructs were all positively loaded onto the single extracted component and have loadings from 0.725 to 0.892, with DBA highest at 0.892, CL second at 0.829, CS next at 0.820, then PU at 0.732, and lastly, PEOU at 0.725; therefore, each of the five constructs had a strong influence on the single underlying construct. This reflects strong convergence among the constructs. The results also support the validity of the measurement structure within the study framework.



Interpretation: The Scree Plot was reviewed to visually verify the number of components to keep in the PCA. The plot shows an abrupt reduction in eigenvalue between the first and second components, followed by a more gradual flattening of the curve. This obvious inflection point after the first component indicates only one component should be maintained. Thus, the results of the Scree Plot provide evidence for a one-dimensional factor structure confirmed by the Kaiser's Eigenvalue greater than one criterion, and provide additional support for the adequacy of the composite construct single-component solution.

Correlation Analysis

Correlations						
PFA Factors		**PU**	**PEOU**	**DBA**	**CS**	**CL**
PU	Pearson Correlation	1	.504**	.585**	.444**	.446**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	450	450	450	450	450
PEOU	Pearson Correlation	.504**	1	.594**	.433**	.429**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	450	450	450	450	450
DBA	Pearson Correlation	.585**	.594**	1	.662**	.694**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	450	450	450	450	450
CS	Pearson Correlation	.444**	.433**	.662**	1	.710**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	450	450	450	450	450
CL	Pearson Correlation	.446**	.429**	.694**	.710**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	450	450	450	450	450
**. Correlation is significant at the 0.01 level (2-tailed).						

Interpretation: A Pearson Correlation Analysis was made to investigate the relationship of PUE (Perceived Usefulness), PEOU (Perceived Ease of Use), and DBA (Digital Banking Adoption). It found that all three variables were all found to have significantly positive (at the 1%) correlation with each other ($p<0.001$).

There was moderately strong positive correlation between PUE and PEOU ($r=0.504$, $p<.001$) which indicates that those who consider Digital Banking to be useful also consider it easy to use. In addition, both PUE ($r=0.585$, $p<0.001$) and PEOU ($r=0.594$, $p<0.001$) have moderate positive correlations with DBA indicating that the greater the perceived ease of use and perceived usefulness, the greater the degree of Digital Banking Adoption. Since the correlation coefficient for these variables is less than 0.80, no serious multicollinearity issue exists, therefore multiple linear regression analysis will be a suitable method of analysis.

Regression Analysis

Determinants of Digital Banking Adoption

Regression Equation

DV = DBA **IVs** = PU, PEOU

DBA = β0+β1(PU)+β2(PEOU)+ϵDBA +ϵ

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.680[a]	.462	.460	2.91675

a. Predictors: (Constant), PEOU, PU

ANOVA[a]

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	3268.684	2	1634.342	192.108	.000[b]
	Residual	3802.815	447	8.507		
	Total	7071.499	449			

a. Dependent Variable: DBA

b. Predictors: (Constant), PEOU, PU

Coefficients[a]

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	2.220	.444		4.996	.000
	PU	.387	.040	.384	9.561	.000
	PEOU	.402	.040	.400	9.965	.000

a. Dependent Variable: DBA

Interpretation: Using multiple linear regression analysis the effectiveness of the Perceived Usefulness (PU) and the Perceived Ease of Use (PEOU) on Digital Banking Adoption (DBA) were evaluated. The overall results showed a high level of statistical significance ($F = 192.108$, $p < 0.001$) and accounted for 46.2% of the variance of the DBA ($R^2 = 0.462$; Adjusted $R^2 = 0.460$). Both PU and PEOU had a statistically significant and positive relationship with DBA. PU had a strong relationship to DBA ($B = 0.387$, $\beta = 0.384$, $t = 9.561$, $p < 0.001$), while PEOU had a very strong relationship to DBA ($B = 0.402$, $\beta = 0.400$, $t = 9.965$, $p < 0.001$). The results indicated that PEOU was slightly more influential on DBA than PU.

Hypothesis Testing & Result Decision

H1	Perceived usefulness has a significant positive impact on digital banking adoption.	Supported ($\beta = 0.384$, $p < 0.001$)	Accepted
H2	Perceived ease of use has a significant positive impact on digital banking adoption.	Supported ($\beta = 0.400$, $p < 0.001$)	Accepted

7. FINDINGS

This research has demonstrated that both the relatively high level of Perceived Usefulness (PU) and relative ease of use (PEOU) will play an important role in Digital Banking Adoption (DBA) among an emerging market. The reliability analysis found a strong internal consistency of the Questionnaire with a Cronbach's alpha = 0.950. Construct validity was also established through Exploratory Factor Analysis with KMO = 0.828 and a significant Bartlett's Test of Sphericity ($p < 0.001$). Both PU ($r = 0.585$, $p < 0.001$) and PEOU ($r = 0.594$, $p < 0.001$) are positively and significantly correlated with Digital Banking Adoption, indicating that while consumers perceive digital banking as useful – it is helpful to actually use. Additionally, the regression model was statistically significant ($F = 192.108$, $p < 0.001$) and explained 46.2% of the variance in Digital Banking Adoption ($R2 = 0.462$). Evidence shows both PU ($\beta = 0.384$, $p < 0.001$) and PEOU ($\beta = 0.400$, $p < 0.001$) significantly impact DBA, with PEOU being the stronger predictor; therefore, H1 and H2 were accepted.

8. CONCLUSION

The research shows that the two most significant factors influencing an individual's decision to use digital banking are the perceived usefulness of the bank's services, and the ease of use in accessing those services. The findings of this study support the concept that there is a significant relationship between perceived usefulness and perceived ease of use in determining whether or not individuals will accept and utilize digital banking. As such, if customers consider the bank's services and online banking platform to be useful, easy to use, and accessible; they will be more inclined to adopt digital banking services from their bank. When making decisions about how to increase the number of customers adopting digital banking, financial institutions should focus on improving the usability and accessibility of their digital banking platform. The findings add value to researchers on the subject of digital banking adoption, as well as provide valuable information to financial institutions in developing strategies for attracting customers in developing countries.

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