

“ANTECEDANTS AND BARRIERS OF DIGITAL BANKING ADOPTION AND INTENTION TO USE”

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Abstract: The Rapid Evolution of digital banking has completely changed the financial industry by increasing the speed, accessibility, and use of banking services. This study investigates how elements like ease of use, trustworthiness, convenience, customer service, and ease of use affect people's intentions to utilize digital financial services. Structured questionnaires were used to gather data from a sample of online bank customers, and ANOVA, regression, and correlation analysis were used for analysis. The findings show a significant positive, and statistically significant relationship between the intention to adopt digital banking and perceived usefulness and ease of use. Convenience and trust were also found to be important indicators of usage behavior, highlighting the need of a secure, simple, and accessible online banking experience. Customer service, on the other hand, had a lesser relationship with trust and intention to use, suggesting that banks should enhance their responsiveness in providing services on digital platforms. Additionally, it was discovered that demographic variables including age, gender, and marital status had no discernible effect on digital adoption, indicating that considerations relating to technology are the primary drivers behind behavior. In order to boost adoption rates, it is advised that Bank should concentrate on improving the user experience through app redesign, fostering consumer trust through enhanced security measures, and ensuring real-time, individualized support. This study provides valuable insights into the critical antecedents of digital banking adoption and offers practical recommendations for enhancing customer engagement and satisfaction in the digital era.

Keywords: Digital Banking, Ease of Use, Usefulness, Trust, Convenience, Customer Support, Intention to Use.

I. INTRODUCTION

The banking sector has seen a substantial transformation as a result of the digital revolution, and digital banking services are now widely used worldwide. To improve consumer convenience, operational efficiency, and financial inclusion, digital banking has emerged as a key instrument in India. Digital banking adoption, particularly in public sector institutions like Bank faces both positive forces and significant obstacles despite these developments. Comprehending these elements is crucial to encouraging customers to use digital banking more extensively and consistently. Examining the factors that favorably affect the intention to use digital banking platforms—such as convenience, trust, usefulness, ease of use, and customer support—is the main goal of this study.

Simultaneously, it addresses the barriers that impede client acceptance, such as technological problems, restricted app capability, and the requirement for frequent branch visits. When combined, these antecedents and barriers provide a thorough understanding of the variables influencing customers' online banking habits. This study intends to determine how these both positive and negative aspects interact to affect consumers' intention to adopt digital services by examining Bank's digital platform. The study also looks at whether demographic factors like age, gender, marital status, and occupation have a big impact on how people use digital banking.

A quantitative approach, using structured surveys and statistical tools like correlation analysis, regression, and ANOVA, was employed to analyze user perceptions. The insights drawn from this study are intended to help banks identify key areas of improvement, minimize barriers, enhance customer experience, and strategically promote digital adoption. In doing so, it contributes valuable knowledge to the field of digital banking transformation, particularly in emerging market contexts.

OBJECTIVE :

- To identify and analyze key Antecedents and barriers affecting the adoption of digital banking And Intention to use
- To analyze the effect of factors such as ease of use, customer support, usefulness, and convenience on building trust in digital banking.
- To evaluate how barriers to digital banking negatively impact trust among users.
- To assess the role of trust as a mediating factor influencing the intention to adopt digital banking services.

RESEARCH QUESTIONS

1. What are the factors influencing customers' intention to use digital banking services?
2. How do users perceive the ease of use and usefulness of digital banking platforms?
3. What is the relationship between trust, convenience, and customers' digital banking adoption?
4. How do demographic factors impact the adoption and usage of digital banking services?
5. What challenges do customers face that act as barriers to adopting digital banking services?

HYPOTHESES

- H1: Various factors such as ease of use, trust, and convenience significantly influence customers' intention to use digital banking services.
- H2: Higher levels of trust and perceived usefulness are positively associated with greater digital banking adoption.
- H3: Demographic variables such as age, gender, and occupation have a significant impact on the adoption and usage patterns of digital banking services.
- H4: Perceived challenges and barriers negatively influence customers' willingness to adopt digital banking services.

SIGNIFICANCE OF THE STUDY:

This study offers valuable insight about the main variables affecting the adoption of online banking services. The study helps in understanding the reasons and difficulty of consumers to use digital banking systems by highlighting the significance of perceived barriers, ease of use, convenience, and trust. The results will help banks create more dependable and user-friendly digital services that meet the changing needs of their customers. Furthermore, banks are able to customize their strategies for various consumer categories by comprehending the influence of demographic data. Improving customer satisfaction, boosting trust, and expanding the use of digital banking can result from removing the barriers our study found. The study's ultimate objective is to assist banks in enhancing customer interactions, promoting digital transformation, and improving service delivery in the financial sector

THEORITICAL FRAMEWORK

The Technology Acceptance Model (TAM), created by Davis (1989), acts as the main basis for the present research. According to TAM, a user's intention to employ new technologies is greatly influenced by two key factors: perceived usefulness and ease of use. Considering the adoption of digital banking, perceived usefulness measures how much users feel that digital banking improves their banking experience, while perceived ease of use indicates how easy users find the digital banking platforms. The study also extends the conventional TAM framework to better suit the context of digital banking by include related characteristics like convenience and trust. By focusing on these concepts, the theoretical framework helps in understanding how positive perceptions encourage the use of digital banking, while barriers serve as roadblocks to adoption.

II. REVIEW OF LITERATURE

1. Santos and Ponchio (2021)The study categorizes barriers to digital banking adoption into functional, psychological, and emotional factors. Functional barriers include security concerns and complexity, while psychological barriers involve trust issues. Emotional discomfort with digital transactions also hinders adoption. Banks must enhance security, simplify interfaces, and build trust.

2. Nelwan et al. (2021)This study identifies perceived usefulness, trust, satisfaction, and habit as key drivers of continued digital banking use. Positive experiences and security are critical for customer retention. Improving user experience and reliability encourages repeat usage. The findings help in understanding digital banking user behavior.

3. Galdolage (2021) The study explores customer value co-destruction in digital banking due to technological complexity and poor user experience. Security concerns and digital illiteracy also cause resistance. Simplifying technology and improving support can prevent frustration. Enhancing customer experience is crucial for adoption.

4. Dash, Paul, and Giri (2020) This research offers a gender-based analysis of digital banking satisfaction factors like ease of use, security, and trust. Women prioritize ease of use and support, while men focus on technological efficiency. Security and trust are important for both. Gender-specific strategies are recommended.

5. Lin, Wang, and Hung (2020) Using DEMATEL-ANP-SEM methods, this study finds that trust and security critically impact internet banking adoption. Perceived usefulness, ease of use, and social influence also matter. Trust reduces perceived risk and boosts adoption intentions. A comprehensive analytical framework is provided.

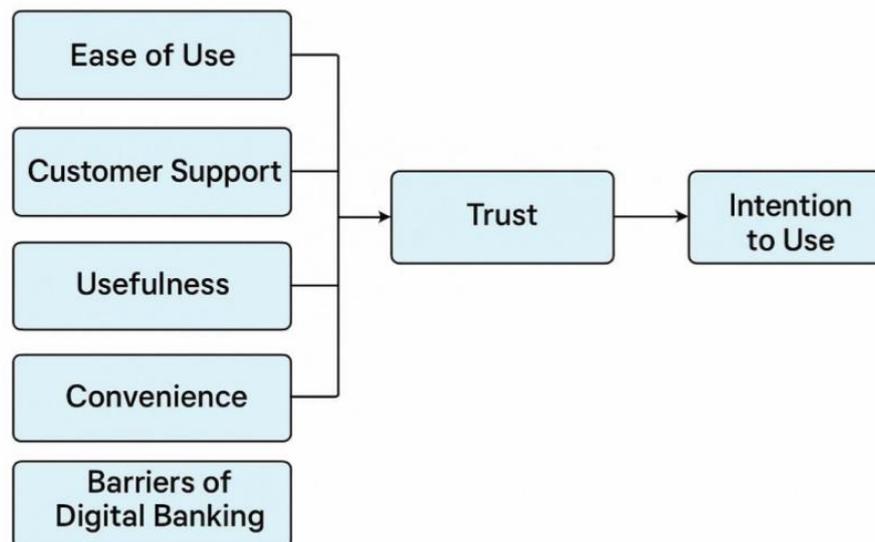
III. RESEARCH GAP

While prior studies have identified various factors influencing digital banking adoption and usage, notable gaps remain. Santos and Ponchio (2021) and Galdolage (2021) address barriers like security concerns, trust issues, and emotional discomfort, yet there is limited integration of these factors into a comprehensive framework. Emotional barriers are recognized but rarely measured quantitatively. Nelwan et al. (2021) and Lin et al. (2020) highlight antecedents such as trust and satisfaction but overlook how negative experiences impact continued usage. Dash, Paul, and Giri (2020) examine gender differences but ignore other demographic factors like age and education. Furthermore, although trust and security are emphasized, few studies propose or test practical strategies to strengthen them among users. There is also a lack of intervention-based research aimed at improving user experience. Future studies should integrate emotional, functional, and demographic variables while testing practical solutions to enhance adoption and retention.

RESEARCH DESIGN:

A Quantitative Research design was adopted ,using structured questionnaire/survey to measure perceptions numerically.

RESEARCH MODEL



SAMPLING:

- Population :Bank Customers
- Sampling Size:130 Samples
- Sampling Method :Convenience Sampling

DATA COLLECTION :

- Format: Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).
- Mode: Physical distribution at bank branches

DATA ANALYSIS TOOL:

Software: SPSS 21

Tests:

- Regression analysis
- Correlation analysis
- Anova

ETHICAL CONSIDERATIONS

- Informed consent obtained.
- Anonymity and confidentiality maintained.
- Participation was voluntary with no coercion.

RESULTS:

REGRESSION

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.223 ^a	.050	.035	.71459

a. Predictors: (Constant), CON, EOU

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.396	2	1.698	3.325	.039 ^b
	Residual	64.852	127	.511		
	Total	68.248	129			

a. Dependent Variable: TRU

b. Predictors: (Constant), CON, EOU

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.628	.245		14.801	.000
	EOU	.068	.094	.097	.719	.474
	CON	.096	.092	.140	1.043	.299

a. Dependent Variable: TRU

The overall regression model is significant ($p = 0.039$), so we reject the null hypothesis at the model level. However, both Ease of Use ($p = 0.474$) and Convenience ($p = 0.299$) are not significant individually. We found out the Null Hypothesis which we predicted suitable for present model, however it may slightly weaken the influencing of trust, we propose this null hypothesis (H_0) can be nullified and neither variable significantly influences Trust on its own.

CORRELATION:

Correlations

		USE	TRU
USE	Pearson Correlation	1	.094
	Sig. (2-tailed)		.289
	N	130	130
TRU	Pearson Correlation	.094	1
	Sig. (2-tailed)	.289	
	N	130	130

The correlation between usefulness and trust is .094, indicating a weak positive relationship. With a significance level of .289, which is greater than the standard alpha of 0.05, the null hypothesis (no significant correlation) cannot be rejected. This suggests that, based on this data, there is no statistically significant correlation between usefulness and trust.

Correlations

		BAR	ITU
BAR	Pearson Correlation	1	-.510 ^{**}
	Sig. (2-tailed)		.000
	N	130	130
ITU	Pearson Correlation	-.510 ^{**}	1
	Sig. (2-tailed)	.000	
	N	130	130

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

The correlation matrix reveals a statistically significant negative relationship between BAR and ITU ($r = -.510, p < 0.01$), indicating that as BAR increases, ITU tends to decrease, and vice versa. This moderate negative correlation suggests an inverse relationship between the two variables. The significance level of 0.01 implies that the observed correlation is unlikely due to chance, strengthening the evidence of an actual relationship between BAR and ITU.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
AGE	Between Groups	4.755	4	1.189	1.609	.176
	Within Groups	92.352	125	.739		
	Total	97.108	129			
MARITALSTATUS	Between Groups	.696	4	.174	.909	.461
	Within Groups	23.927	125	.191		
	Total	24.623	129			
GENDER	Between Groups	.708	4	.177	.731	.573
	Within Groups	30.284	125	.242		
	Total	30.992	129			
OCCUPATION	Between Groups	4.722	4	1.181	1.389	.242
	Within Groups	106.270	125	.850		
	Total	110.992	129			

The ANOVA analysis indicates that demographic factors such as age, marital status, gender, and occupation do not have a statistically significant impact on Intention to use, as the significance values (p-values) for all variables are greater than 0.05. Specifically, age (Sig = 0.176), marital status (Sig = 0.461), gender (Sig = 0.573), and occupation (Sig = 0.242) show no meaningful differences between groups. The low F-values further confirm that the variations among the groups are not substantial. Therefore, it can be concluded that these demographic characteristics do not significantly influence the Intention to use.

SUGGESTION:

- **Reduce barriers to Increase Adoption:** Banks should streamline procedures, minimize technical issues, and enhance user navigation to promote adoption, as obstacles have a substantial negative effect on the intention to use digital banking.
- **Enhance Overall Trust Mechanisms:** The overall model was significant even though individual characteristics like convenience and ease of use were not very good predictors of trust. Therefore, banks have to have in place thorough trust-building measures like multi-layered security, transparent policies, and reliable app performance.
- **Expand Focus Beyond Demographics:** Banks should concentrate more on behavioral and psychographic variables than demographic segmentation in their marketing and digital strategy, as age, gender, marital status, and occupation did not significantly influence adoption intention.
- **Integrated Improvement Strategy:** To increase confidence and acceptance, banks should use a comprehensive approach that enhances app dependability, customer support, and user experience collectively rather than concentrating just on one area, such as usability or convenience.
- **User Education and Support:** Since usefulness did not significantly influence trust, this may indicate a lack of awareness or understanding. Banks should provide tutorials, in-app guidance, and responsive customer support to help users fully understand and benefit from digital features.

LIMITATIONS OF THE STUDY

- The study was conducted on a limited sample size(130) within a specific geographic area, which may affect the generalizability of the results.
- Data was collected through self-reported questionnaires, which may be influenced by personal bias or misunderstanding.
- Digital infrastructure differences among respondents (like internet speed or smartphone quality) were not considered but could influence perceptions.

FUTURE SCOPE

Although this study offers a foundation for understanding the main elements impacting the adoption of digital banking, further research can be conducted by incorporating larger and more varied samples from various geographical areas. Emerging technologies like blockchain integration with digital banking platforms, biometric authentication, and AI-based banking could be the subject of future research. Further insights can also be gained by looking at how enhanced customer trust and service personalization affect digital banking loyalty over the long run. Future studies might also concentrate on customer retention, post-acquisition behavior, and how digital literacy can improve adoption across various demographic groups.

IV. CONCLUSION

The study comes to the conclusion that important elements like perceived usefulness, convenience, trust, and ease of use have a big impact on consumers' intentions in using digital banking services. Consumers that find digital banking platforms easy to use, helpful, reliable, and convenient are more likely to use them. Wider acceptance is still limited by obstacles like lack of individualized support, technical challenges, and security concerns. The lack of significant influence from demographic characteristics suggests that the adoption behavior of digital banking is rather constant across various user groups. Banks must concentrate on improving platform usability, fostering consumer trust, and removing typical obstacles with focused tactics and better customer support systems in order to encourage more usage. In addition to increasing adoption rates, strengthening these areas will increase general customer satisfaction and loyalty.

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