
Mobile Banking in Motion: An Analytical Study of Consumer Behavior in Porbandar District

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Abstract

This study investigates the multidimensional nature of consumer behaviour towards mobile banking services and its influence on the intention to adopt such platforms. Employing a structured questionnaire, data were collected from a representative sample of banking customers and analysed using Exploratory Factor Analysis (EFA) and Ordinary Least Squares (OLS) multiple regression. EFA revealed seven distinct behavioural dimensions—perceived ease of use, perceived economy, perceived efficiency, perceived security, perceived assurance, perceived trust, and perceived support—demonstrating strong construct validity and reliability. The subsequent regression model exhibited high explanatory power, indicating that these dimensions collectively account for a substantial proportion of the variance in consumers' intention to use mobile banking. All dimensions exerted a statistically significant and positive influence, with perceived trust, support, and efficiency emerging as particularly impactful. The findings underscore the critical role of enhancing these behavioural determinants to foster adoption, retention, and deeper engagement with mobile banking services.

Keywords: Mobile Banking Adoption, Consumer Behaviour, Perceived Trust, Digital Financial Services, Technology Acceptance

Introduction

The proliferation of digital technologies has significantly reshaped the global banking landscape, with mobile banking emerging as a key delivery channel for financial services (Omarini, 2022). In the Indian context, the rapid penetration of smartphones, improved internet accessibility, and supportive government initiatives such as Digital India have accelerated the adoption of mobile banking services (Reserve Bank of India [RBI], 2021). This digital transformation has not only altered banking operations but also fundamentally shifted consumer expectations and behaviors.

Consumers today seek greater convenience, real-time access, enhanced security, and personalized services through mobile platforms (Laukkanen, 2016). These evolving expectations have made understanding consumer behavior toward mobile banking critical for financial institutions aiming to increase adoption, improve service delivery, and sustain customer loyalty in an increasingly competitive environment (Venkatesh, et al., 2012).

Consumer adoption and continued usage of mobile banking are influenced by a combination of functional, psychological, and contextual factors. Key determinants include perceived ease of use, perceived usefulness, trust, risk perception, digital literacy, and prior experience with

technology (Davis, 1989; Zhou, 2011). Behavioral resistance—often stemming from technophobia, lack of awareness, or security concerns—can hinder adoption, despite the availability of services (Srivastava et al., 2013).

While extensive research has been conducted at national and metropolitan levels, regional disparities in consumer behavior remain underexplored, particularly in semi-urban and rural districts. Regional factors such as local income patterns, education levels, infrastructure quality, and socio-cultural norms significantly affect mobile banking behavior (Kaur & Arora, 2021). This creates a pressing need for region-specific studies to uncover granular insights and inform localized banking strategies.

Against this backdrop, the present study aims to analyze consumer behavior toward mobile banking services in the Porbandar district of Gujarat, a region characterized by a mix of urban and semi-urban populations. The study investigates the following core research questions:

- How do consumers in Porbandar perceive mobile banking services in terms of usability, trust, and value?
- What factors facilitate or hinder the adoption of mobile banking in this regional context?
- How do demographic variables such as age, education, income, and occupation impact consumer behavior and satisfaction?
- What improvements can enhance the user experience and promote sustained use of mobile banking?

Understanding these behavioral dynamics is essential for financial service providers seeking to expand mobile banking adoption in smaller districts. The study also aims to contribute to the existing body of literature by offering empirical, region-specific insights that bridge the gap between macro-level adoption trends and localized consumer experiences.

By adopting a structured and data-driven approach, this research endeavors to generate actionable findings that can help financial institutions design user-centric mobile banking solutions, enhance service satisfaction, and foster digital financial inclusion in underrepresented regions like Porbandar.

Review of literature

The concept of mobile banking has evolved considerably in both terminology and scope, reflecting its dynamic position within the broader electronic banking ecosystem. Researchers employ varied nomenclature like m-banking (Liu et al., 2007), branchless banking (Ivatury & Mas, 2008), m-payments, m-transfers, m-finance (Donner & Tellez, 2008), and pocket banking (Amin et al., 2010), yet converge in viewing it as an alternative delivery channel (ADC) alongside ATMs, point-of-sale terminals, interactive voice response systems, mobile devices, and Internet banking. This multiplicity of terms underscores the technological diversity and service integration that characterize mobile banking.

Conceptually, mobile banking is widely regarded as an application of mobile commerce that enables customers to access and manage financial accounts via mobile devices for purposes such as balance inquiries, fund transfers, bill payments, and securities trading (Alafeef et al., 2011; Harma & Dubey, 2009; Lee & Chung, 2009). Building on this, scholars such as Akturan and Tezcan (2012) and Masrek et al. (2012) highlight its role as an innovative communication

channel that facilitates direct interaction between customers and financial institutions. However, Shaikh et al. (2015) critique earlier definitions for insufficiently distinguishing between device categories, noting that laptops—given their interface similarity to desktops—align more with Internet banking than with mobile banking. Complementing this perspective, Cruz et al. (2010) delineate mobile banking from mobile payments, arguing that the latter applies when a bank is not directly involved in the fulfilment of a service.

Technological advancements have amplified mobile banking's appeal through its ubiquity, convenience, and interactivity (Turban et al., 2006). As Laukkanen and Lauronen (2005) observe, the capacity to perform banking transactions at any time and from any location delivers significant value in terms of time efficiency, real-time access to financial information, and enhanced user control. This immediacy positions mobile banking as both a customer acquisition tool and a retention strategy, enabling banks to integrate mobile services into existing delivery channels and potentially convert non-banking mobile users into active banking customers (Devaraj et al., 2003a). Nonetheless, Reddy and Banu (2018) caution that, despite its opportunities in developed and emerging markets, mobile banking adoption is often hindered by customer onboarding challenges and systemic shifts in traditional banking operations.

From a strategic perspective, the adoption of mobile banking is essential for maximizing return on technology investments (Wang et al., 2006; Lee & Chung, 2009). While Internet banking has yielded substantial economic efficiencies, mobile banking's primary value proposition lies in delivering differentiated, value-added services that strengthen competitive advantage (Laukkanen et al., 2007). Yet, achieving such adoption is contingent upon overcoming a range of functional, psychological, and perceptual barriers, as outlined in Ram and Sheth's (1989) innovation resistance framework.

The usage barrier, conceptually linked to the Technology Acceptance Model's (Davis et al., 1989) perceived ease of use, emerges when mobile banking's technological interface is perceived as incompatible with established user habits. Device limitations, such as small screen size and constrained navigation capabilities, have been identified as deterrents to complex transaction-based services (Lee & Chung, 2009; Laukkanen, 2007a). The value barrier, corresponding to perceived usefulness, reflects customer skepticism regarding the comparative advantages of mobile banking over traditional or Internet-based alternatives (Brown et al., 2003; Wu & Wang, 2005).

Security and privacy concerns underpin the risk barrier, where perceived threats of fraud, hacking, or unauthorized account access significantly deter adoption (Luarn & Lin, 2005; Kuisma et al., 2007). Risk-averse individuals tend to adopt new financial technologies more slowly (Dunphy & Herbig, 1995), emphasizing the importance of robust security protocols. The tradition barrier arises from the misalignment of mobile banking with customers' preference for in-person interactions, which are often perceived as more personal and satisfactory (Gerrard et al., 2006; Mattila et al., 2003). Finally, the image barrier relates to unfavorable perceptions of technological usability, such as computer anxiety, which can be mitigated through targeted user education and support (Kay, 1993; Fain & Roberts, 1997; Laukkanen, 2007c).

Synthesizing these insights, it is evident that while mobile banking offers substantial potential in terms of customer convenience, market reach, and competitive differentiation, its adoption

is mediated by a complex interplay of technological, psychological, and value-based considerations. Effective diffusion strategies therefore require a dual focus: enhancing system usability, security, and perceived value, while simultaneously addressing cultural and perceptual resistance through tailored customer engagement and education initiatives.

While prior literature offers substantial insights into mobile banking adoption, most studies focus on urban and technologically advanced regions, with limited attention to smaller districts such as Porbandar. The distinct socio-economic and infrastructural conditions of such areas can shape consumer attitudes, perceived risks, and adoption behaviors differently from metropolitan patterns. This study addresses the gap through a context-specific analysis of consumer behavior in Porbandar District, enriching theory by integrating regional behavioral factors into adoption frameworks and offering practical guidance for banks and policymakers to enhance service uptake and financial inclusion in semi-urban settings.

Data and Methodology

The present study adopts a descriptive research design to systematically examine consumer behavior towards mobile banking in Porbandar District, focusing on usage patterns, satisfaction levels, and the influence of behavioral parameters on adoption intentions. Descriptive designs are widely employed in behavioral finance and technology adoption research, as they allow for the identification of patterns and relationships without manipulating study variables (Kothari, 2004). Both quantitative and analytical approaches were integrated to ensure robust empirical insights, with primary data collected through a structured questionnaire developed from an extensive review of relevant literature and expert consultation (Davis, 1989; Venkatesh et al., 2003). The instrument included sections on demographic details, service usage behavior, satisfaction levels, and future adoption intentions, and was pilot-tested to ensure clarity, reliability, and content validity.

The study population comprised customers of banks operating in Porbandar District who are active users of internet and mobile banking services. Due to the absence of a comprehensive sampling frame, a non-probability convenience sampling method was adopted, a common approach in regional consumer studies where accessibility and resource constraints are significant (Sekaran & Bougie, 2016). Using Cochran's formula for sample size determination at a 95% confidence level and a $\pm 3.7\%$ margin of error, the final sample size was fixed at 700 respondents. Data were collected primarily through face-to-face interactions to ensure high response rates and accuracy, while also enabling clarification of any doubts regarding the survey items.

Data analysis was performed using SPSS Statistics, employing univariate and multivariate techniques. Univariate analysis included descriptive statistics, frequency distributions, and graphical representations to map user demographics, usage intensity, and satisfaction trends. Multivariate analysis involved Exploratory Factor Analysis (EFA) to identify latent constructs related to mobile banking satisfaction and behavioral attitudes, ensuring sampling adequacy ($KMO > 0.6$) and statistical significance (Bartlett's test, $p < 0.05$), with factor loadings ≥ 0.4 retained for interpretation. Multiple regression analysis using the Ordinary Least Squares (OLS) method was then employed to assess the predictive influence of these factors on adoption intentions, with model diagnostics including Durbin-Watson statistics for autocorrelation and Variance Inflation Factors (VIF) for multicollinearity. Reliability was

verified through Cronbach's alpha coefficients exceeding the generally accepted threshold of 0.70 (Nunnally, 1978).

Results and Discussion

The analysis of mobile banking usage among respondents in Porbandar District indicates substantial adoption and frequent engagement with mobile services. Approximately 43% of respondents reported daily usage, while 24% used it weekly, reflecting the integration of mobile banking into routine financial activities. Moreover, 78% of respondents utilize mobile banking for all transactions that can be conducted online, demonstrating a high degree of reliance on this channel. Transaction-specific preferences reveal that mobile banking is predominantly used for online payments, bill payments, fund transfers, account statement inquiries, and balance checks. In contrast, services such as loan applications, stop payments, fixed deposit operations, and investments are least preferred, indicating that customers reserve complex or sensitive financial operations for traditional channels, likely due to perceived risk or procedural complexity.

Respondents rated the advantages of mobile banking in order of importance, with anywhere access, convenience, ease of use, and time savings considered most critical. Permanent 24/7 availability, lower transaction costs, and ease of fund transfers were also highly valued, while security, though acknowledged, received comparatively lower importance. These findings align with established technology adoption constructs, emphasizing perceived usefulness and convenience as primary drivers of mobile banking usage (Davis, 1989; Laukkanen & Lauronen, 2005).

The present study adopts a structured approach to measure consumer behavior towards mobile banking by examining respondents' perceptions across eight critical dimensions: perceived ease of use, perceived economy, perceived efficiency, perceived security, perceived assurance, perceived trust, and perceived support. Each dimension was assessed using a five-point Likert scale, with responses ranging from 'Strongly Disagree' to 'Strongly Agree,' enabling a quantifiable evaluation of consumers' attitudes, preferences, and satisfaction levels regarding mobile banking services. This methodology aligns with prior research that emphasizes the multidimensional nature of consumer behavior in technology-mediated financial services (Davis, 1989; Gefen, 2000; Almarashdeh et al., 2019).

Table 1: Summary of consumer behavior towards mobile banking

Parameter	Average Rating	Remarks
Perceived Ease of Use	4.65	Perceived ease of using of mobile banking is very high
Perceived Economy	4.73	Perceived economy of mobile banking is very high
Perceived Efficiency	4.18	Perceived efficiency of mobile banking is high
Perceived Security	4.53	Perceived security of mobile banking is very high
Perceived Assurance	3.15	Perceived assurance in mobile banking is average
Perceived Trust	4.21	Perceived trust in mobile banking is high
Perceived Support	3.32	Perceived level of support in mobile banking is average

Source: Compiled from Primary Data Collected from respondents

The analysis indicates that perceived ease of use is a primary driver of mobile banking adoption. Respondents generally agree that mobile banking allows seamless access to financial services irrespective of time and location and that the platform is convenient, intuitive, and easy to learn. Similarly, perceived economy emerged as a highly influential factor, with users recognizing mobile banking as a cost-efficient alternative to traditional banking, characterized by low transaction costs and minimal hidden charges.

Perceived efficiency also received strong agreement, suggesting that respondents consider mobile banking an effective tool for managing routine transactions and enhancing productivity, although some respondents noted that certain banking requirements are not fully accommodated through the mobile platform. Perceived security is another key determinant, reflecting strong consumer confidence in the safety measures and protocols embedded within mobile banking applications. Trust, closely linked with security, was also highly regarded, indicating that users believe in the ethical conduct of service providers and the confidentiality of their personal information, consistent with findings in digital financial service literature (Gefen, 2000; Lee and Turban, 2001).

In contrast, perceived assurance, which relates to the reliability of transactions and the effectiveness of complaint redressal mechanisms, elicited more moderate responses. While users generally trust that their transactions are executed correctly, concerns persist regarding the timeliness and effectiveness of grievance handling. Similarly, perceived support was perceived as average, with respondents acknowledging the accessibility and informational aspects of mobile banking but identifying gaps in customer assistance, clarity of policies, and availability of dedicated support channels.

Prior to conducting multivariate analysis, the measurement instruments used to assess consumer behavior towards mobile banking services were subjected to rigorous reliability testing. Reliability, a fundamental criterion in behavioral research, refers to the consistency and stability of an instrument when applied repeatedly under similar conditions. In the present study, Cronbach's alpha was employed as the primary measure of internal consistency, as it evaluates the proportion of shared variance among items relative to the total variance (Cronbach, 1951; Hair et al., 2019). Corrected item-total correlations were also computed to assess the degree to which each item correlates with the overall construct, with thresholds of 0.5 for item-total correlation and 0.6 for Cronbach's alpha being adopted in line with established guidelines (Field, 2005; Hair et al., 2019; Kline, 2013).

Initial reliability assessment revealed that certain items, namely CBMB_PEF2, CBMB_PA3, CBMB_PSUP3, CBMB_PSUP4, and CBMB_PSUP5, did not meet the prescribed thresholds and were therefore recommended for elimination. Following the removal of these items, all constructs demonstrated satisfactory internal consistency. Specifically, constructs measuring perceived ease of use, perceived economy, perceived efficiency, perceived security, perceived assurance, perceived trust, and perceived support all exhibited corrected item-total correlations above the acceptable limit and Cronbach's alpha values indicative of high reliability. These results affirm the stability and consistency of the measurement instruments employed in this study, providing a robust foundation for subsequent multivariate analyses.

Exploratory factor analysis (EFA) was conducted to identify the underlying dimensions of consumer behavior towards mobile banking services.

Table 2: Exploratory Factor Analysis - KMO and Bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.829
Bartlett's Test of Sphericity	Approx. Chi-Square	11336.676
	Df	325
	Sig.	.000

The appropriateness of the dataset for factor analysis was confirmed through the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The KMO statistic exceeded the minimum threshold of 0.6, while Bartlett's test was statistically significant, indicating that correlations among variables were sufficiently large for factor extraction (Pallant, 2010).

Table 3: Exploratory Factor Analysis – Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %						
1	6.620	25.460	25.460	6.620	25.460	25.460	3.629	13.959	13.959
2	2.999	11.534	36.994	2.999	11.534	36.994	3.577	13.757	27.716
3	2.982	11.471	48.465	2.982	11.471	48.465	3.444	13.245	40.961
4	2.604	10.015	58.480	2.604	10.015	58.480	3.061	11.773	52.735
5	1.680	6.462	64.942	1.680	6.462	64.942	2.449	9.419	62.153
6	1.408	5.417	70.359	1.408	5.417	70.359	1.688	6.492	68.645
7	1.187	4.567	74.926	1.187	4.567	74.926	1.633	6.281	74.926
8	0.718	2.762	77.688						

Extraction Method: Principal Component Analysis.

Principal component analysis (PCA) was employed as the factor extraction method, with eigenvalues greater than one and the scree test guiding the determination of the number of factors to retain. Seven factors were ultimately extracted, cumulatively explaining a substantial proportion of the variance in consumer behavior towards mobile banking services. These factors were subjected to orthogonal rotation using the VARIMAX method to achieve a simpler and more interpretable factor structure. Factor loadings exceeding 0.5 were considered significant, and communalities were assessed to ensure that each observed variable was adequately represented by the extracted factors. The analysis revealed that all variables demonstrated communalities above 0.5, indicating that the retained factors accounted for a significant proportion of variance across the observed items.

Table 4: Exploratory Factor Analysis – Rotated Component Matrix^a

	Component						
	1	2	3	4	5	6	7
CBMB PEU1		.860					
CBMB PEU2		.815					
CBMB PEU3		.817					
CBMB PEU4		.817					
CBMB PEU5		.819					
CBMB PE1					.899		
CBMB PE2					.840		
CBMB PE3					.884		
CBMB PEF1				.896			
CBMB PEF3				.862			
CBMB PEF4				.863			
CBMB PEF5				.692			
CBMB PS1			.925				
CBMB PS2			.716				
CBMB PS3			.758				
CBMB PS4			.753				
CBMB PS5			.826				
CBMB PA1						.917	
CBMB PA2						.916	
CBMB PT1	.780						
CBMB PT2	.841						
CBMB PT3	.870						
CBMB PT4	.818						
CBMB PT5	.694						
CBMB PSUP1							.830
CBMB PSUP2							.876
Extraction Method: Principal Component Analysis.							
Rotation Method: Varimax with Kaiser Normalization.							
a. Rotation converged in 6 iterations.							

The rotated component matrix indicated a clear and conceptually coherent factor structure. Items measuring perceived ease of use loaded distinctly on the first factor, perceived economy on the fifth factor, perceived efficiency on the fourth factor, perceived security on the third factor, perceived assurance on the sixth factor, perceived trust on the second factor, and perceived support on the seventh factor. The factor loadings demonstrated moderate to strong correlations between each item and its corresponding latent construct, supporting the construct validity of the measurement model. These results collectively suggest that the measurement instruments employed in this study are both reliable and valid for capturing the multidimensional nature of consumer behavior towards mobile banking services.

To examine the impact of consumer behavior on respondents' intention to use mobile banking services, an Ordinary Least Squares (OLS) multiple regression analysis was conducted. In this analysis, the respondents' intention to use mobile banking services was treated as the dependent variable, while the various dimensions of consumer behavior—including perceived ease of use, perceived economy, perceived efficiency, perceived security, perceived assurance, perceived

trust, and perceived support—were treated as independent variables. The primary objective was to quantify the relative influence of each behavioral dimension on the intention to adopt mobile banking services.

Table 4: Summary of Variables in Regression Model

Dependent Variable	Independent Variables
Intention to use mobile banking services (MB_IU)	Perceived Ease of Use (CBMB_PEU)
	Perceived Economy (CBMB_PE)
	Perceived Efficiency (CBMB_PEF)
	Perceived Security (CBMB_PS)
	Perceived Assurance (CBMB_PA)
	Perceived Trust (CBMB_PT)
	Perceived Support (CBMB_PSUP)

The regression model demonstrated a high explanatory power, with approximately 70% of the variance in respondents' intention to use mobile banking services being jointly explained by the seven behavioral dimensions.

Table 5: Multiple Regression analysis – Model Summary

Model Summary ^b						
Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.838 ^a	.703	.700		.153	2.015
a. Predictors: (Constant), CBMB_PSUP, CBMB_PA, CBMB_PEF, CBMB_PE, CBMB_PEU, CBMB_PT, CBMB_PS						
b. Dependent Variable: MB_IU						

The correlation between the observed and predicted values of intention to use mobile banking was strongly positive, indicating a robust predictive relationship. Furthermore, the Durbin-Watson statistic supported the absence of autocorrelation, thereby satisfying a key assumption of regression analysis.

Table 6: Multiple Regression analysis – ANOVA Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.833	7	5.548	236.162	.000 ^b
	Residual	16.420	699	.023		
	Total	55.253	706			
a. Dependent Variable: MB_IU						
b. Predictors: (Constant), CBMB_PSUP, CBMB_PA, CBMB_PEF, CBMB_PE, CBMB_PEU, CBMB_PT, CBMB_PS						

The results of the ANOVA test indicated that the overall regression model is statistically significant, confirming that the set of independent variables collectively exerts a meaningful influence on respondents' intention to adopt mobile banking services. Individual regression

coefficients revealed that all dimensions of consumer behavior are positively associated with the intention to use mobile banking. Specifically, perceived ease of use, perceived economy, perceived efficiency, perceived security, perceived assurance, perceived trust, and perceived support each contributed significantly to the model. This implies that higher perceptions of these factors among consumers correspond to a greater likelihood of intending to use mobile banking services.

Table 7: Multiple Regression analysis – Coefficients

Coefficients ^a		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	.772	.098		7.857	.000		
	CBMB_PEU	.123	.015	.181	8.017	.000	.836	1.197
	CBMB_PE	.134	.015	.199	8.814	.000	.837	1.194
	CBMB_PEF	.131	.014	.222	9.483	.000	.776	1.288
	CBMB_PS	.078	.014	.143	5.717	.000	.679	1.472
	CBMB_PA	.076	.008	.189	8.974	.000	.956	1.046
	CBMB_PT	.114	.010	.288	11.522	.000	.682	1.466
	CBMB_PSUP	.118	.013	.224	9.159	.000	.708	1.412

a. Dependent Variable: MB IU

The estimated regression equation, incorporating standardized coefficients, further highlights the relative contribution of each behavioral dimension to the dependent variable. The intercept term, although positive, suggests the presence of additional unobserved factors influencing consumers' intention, which were not captured by the current set of independent variables. Collinearity diagnostics confirmed that multicollinearity among the independent variables is not a concern, as all Variance Inflation Factor (VIF) values were well below the critical threshold.

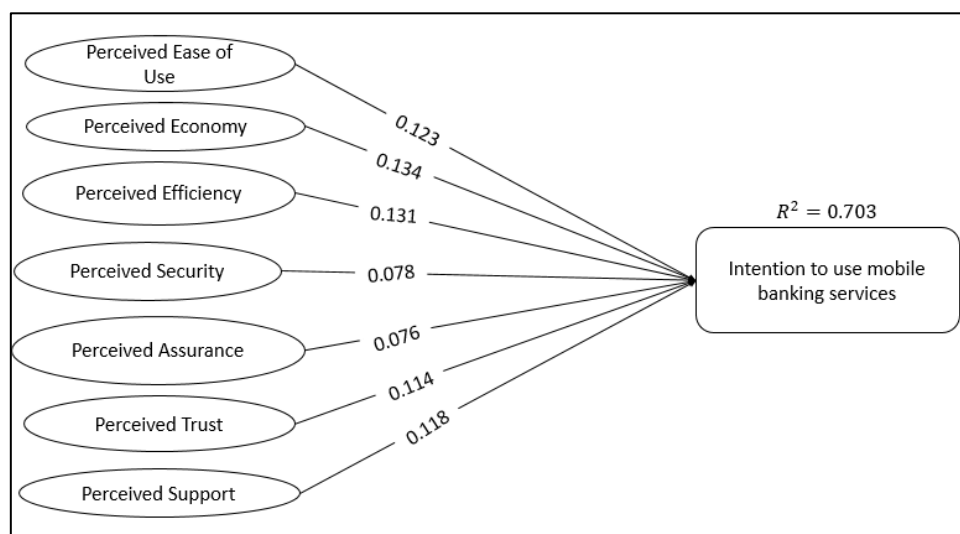


Fig. 1: Multiple Regression analysis – Model Overview

Overall, the findings indicate that consumer behavior dimensions play a significant and complementary role in shaping the intention to use mobile banking services. Among these, dimensions such as perceived trust, perceived support, and perceived efficiency emerge as particularly influential, underscoring the importance for banks to enhance these aspects to drive adoption and sustained usage of mobile banking platforms.

Conclusion

The present study provides a comprehensive understanding of consumer behavior towards mobile banking in Porbandar District, offering both theoretical and practical contributions to the discourse on digital financial services. The findings highlight that consumer adoption is shaped by a complex interplay of perceived convenience, ease of use, trust, security perceptions, and the perceived cost-benefit trade-off of mobile banking services. While users generally recognize the efficiency and flexibility offered by mobile banking, concerns related to security risks, transaction errors, and lack of personal interaction remain significant adoption barriers. This underscores the importance of building robust trust mechanisms and delivering seamless, user-friendly platforms to sustain customer engagement.

From a theoretical perspective, the study adds value by contextualizing mobile banking adoption within a semi-urban and less technologically saturated environment, thus enriching the existing body of literature which has predominantly focused on urban and metropolitan contexts. By integrating region-specific socio-economic and cultural dynamics into the analysis, the study demonstrates that consumer decision-making in smaller districts can diverge notably from patterns observed in highly urbanized markets.

Practically, the insights derived from this research can assist financial institutions and policymakers in designing targeted interventions that address localized barriers, enhance user confidence, and promote financial inclusion. Strategic initiatives such as tailored awareness campaigns, simplified user interfaces, localized language support, and strengthened digital security measures could significantly increase adoption rates in similar semi-urban and rural settings. Moreover, fostering trust through transparent communication, responsive grievance redressal systems, and consistent service quality will be essential to ensuring sustained usage.

Ultimately, this research underscores that mobile banking is not merely a technological innovation but a transformative tool for bridging financial access gaps. By recognizing and responding to the unique behavioral patterns of consumers in smaller districts like Porbandar, stakeholders can advance the dual objectives of enhancing customer satisfaction and promoting sustainable digital financial ecosystems.

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