

A Comparative Study of Factors Influencing Behavioural Intention Towards Mobile Banking Adoption Between Rural and Urban Adopters in Punjab

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Abstract

Banking sector is the backbone of the Indian financial system. Banking plays a predominant role in financial inclusion in every economy. The Indian banking sector has undergone a drastic change over the years. Mobile banking is one such innovation that is changing the landscape of the Indian financial system. The study employed an extended UTAUT2 model to determine a comparative study of factors influencing behavioural intention towards adoption of mobile banking in rural and urban users. Significant structural differences between rural and urban respondents were found for structural relationships, namely attitude → behavioural intention, habit → user behaviour and trust → behavioural intention.

Keywords

Mobile, banking, UTAUT2, behavioural, intention

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Introduction

Banking sector is an important pillar of the Indian financial system. It plays a significant role in achieving sustained and inclusive growth of an economy. It is the parameter of the financial health of an economy. In the present era, the world

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has evolved into a global village where everything is facilitated with the aid of advanced technology. The continuous advancements in the field of technology have changed the landscape in which people access banking services. The technology growth is happening at a very high pace, making the lives of people easier and more hassle-free. Banks are continuously competing with the global environment and introducing new services with high convenience to their customers for their survival and revenue generation. Banking sector has outpaced all the other sectors in the adoption of internet technology. The Internet is a big network of various computers and computer networks that communicate with each other using the same communication protocol (Mittal, 2004). It was recognised long before that the internet was bringing revolution in retail banking, as stated by Business Week (Tan & Teo, 2000). An increase in internet subscribers led to the adoption of self-driven banking channels. Self-service technologies are automated delivery channels that allow customers to assess a service without any involvement of service employees (Bitner et al., 2002). Self-service banking technology includes ATMs, internet banking, telephone banking and mobile banking.

Mobile banking refers to providing banking services through a smart mobile device (Kadalarasane, 2015). It is acknowledged as the best-suited method to perform banking transactions in this technology-driven environment. Mobile banking is the delivery of financial services through mobile networks, which is performed on mobile phones (Alampay & Moshi, 2018). Mobile banking is anywhere, anytime banking (Kadalarasane, 2015). Various financial products can also be purchased through mobile banking, such as life insurance, health insurance, fire insurance, mutual funds and IPO. One can also instruct the bank to make payments for the payment of various bills through mobile banking, for example, electricity bills, rental payments and so on. Mobile banking also offers administrative services. Through mobile banking, one can continuously monitor all the transactions related to the account easily through a mobile phone. Mobile banking applications allow users to extract all the financial information through one click. Through mobile banking, one can easily block the credit or debit cards in case of theft and prevent losses. This service also allows users to order a new cheque book and change PIN through the application. Market information services allow users to fetch all the market-related information like stock prices, foreign exchange rates, commodity prices and indexes. Many times, internet banking and mobile banking are used interchangeably. Although both require a secure internet connection, mobile banking is performed using a smartphone or a tablet via a mobile bank application, but internet banking can be performed using any device, such as a desktop, computer, mobile or tablet and does not need to be performed through an application. Mobile banking offers an edge over internet banking by providing 'Anywhere Anytime Banking in your hands' (Gupta et al., 2013). Since mobile banking requires the internet to perform various functions, its success directly depends on the penetration of the internet.

Anonymous (2011) classified mobile transactions as push-based and pull-based. Further pull-based transactions are divided into transaction-based and enquiry-based. Transaction-based transactions include fund transfers, bill payments and other services like share trading, while enquiry-based transactions are

Table 1. Average Monthly Mobile Banking Transactions in India.

Transactions	Value (₹)	Volume (Units)
Mobile banking transactions	31,279,506	12,845
Mobile payments: Interbank	25,251,347	11,968
Mobile payments: Intrabank	6,028,159	877

Source: Anonymous (2024a).

Table 2. Teledensity in Punjab.

Year	Teledensity in Punjab (%)
31 March 2024	114.36
31 March 2023	115.31
31 March 2022	119.41
31 March 2021	125.27

Source: Anonymous (2021, 2023, 2024b).

related to account balance enquiry, cheque status enquiry, account statement enquiry, and cheque book enquiry. Push-based transactions include only enquiry-based alerts like credit card alerts, bill payment alerts and minimum balance alerts.

Table 1 highlights the average monthly mobile banking transactions taken from April 2011 to March 2024.

The digital transactions include digital payments from BHIM-UPI, NEFT, IMPS, AePS, NACH, NETC, credit cards, debit cards, PPI, RTGS and others. The number of digital transactions has increased at a CAGR of 45% from 2017 to 2018 to the financial year 2022–2023 (Anonymous, 2023).

Table 2 highlights the teledensity in Punjab for the past 4 years.

It can be observed from the table that teledensity in Punjab has remained almost the same over 2021–2024. As of 31 March 2024, teledensity stands at 114.36% in Punjab.

Theories for Technology Adoption

The success of any technology depends upon the willingness of users to adopt it. Despite the various benefits, some technologies fail miserably due to their complex nature and limited purpose. Adoption can be defined as the continuous use of a product or service (Safeena et al., 2011). To persuade customers to use any service has more to do with behavioural intention (Cudjoe et al., 2015).

There are various models that explain the process of behavioural intention to adopt any new technology. These are the Technology Acceptance Model, Innovation Diffusion Theory, Task Technology Fit, Motivation Model, Unified Theory of Acceptance and Use of Technology, Theory of Planned Behaviour, Theory of Reasonable Action, Information System Success Model, Social Cognitive Theory and Unified Theory of Acceptance and Use of Technology 2. They help in exploring various factors influencing the attitude of users towards

Table 3. Theories for Technology Adoption.

Name of Theory	Constructs Involved	References
Technology acceptance model	Perceived ease of use, behavioural intention to use, attitude towards use, perceived usefulness and actual usage.	Davis et al. (1989)
Innovation diffusion theory	Relative advantage, complexity, compatibility, observability, trialability, and adoption intention.	Rogers (1992)
Unified theory of acceptance and use of technology	Performance expectancy, social influence, effort expectancy, facilitating conditions, intention to use and actual usage.	Venkatesh et al. (2003)
Theory of planned behaviour	Attitude, behavioural control, subjective norms, intention, behaviour.	Ajzen (1991)
Theory of reasonable action	Behavioural beliefs, normative beliefs, attitude, subjective norms, motivation to comply, behavioural intention, outcome evaluation, behaviour.	Fishbein and Ajzen (1975)
Motivation model	Intrinsic motivation, extrinsic motivation.	Davis et al. (1992)
Social cognitive theory	Self-efficacy, outcome expectation (personal), outcome expectation (performance), affect, anxiety, usage	Compeau and Higgins (1995)
Unified theory of acceptance and use of technology 2	Effort expectancy, hedonic motivation, performance expectancy, habit, hedonic motivation, facilitating conditions, price value, intention to use and actual usage.	Venkatesh et al. (2012)

any new technology. New variables can be added to the existing models to meet the objectives of research.

Table 3 highlights the various theories and the constructs involved in technology adoption.

Advantages of Mobile Banking

Mobile banking has an edge over traditional banking channels. Competitive advantage, convenience and cost reduction motivate the banks in their adoption of mobile banking (Dash et al., 2014). All the services of the bank can be accessed with one click from anywhere, anytime. The mobile phone offers the convenience

to the customers to conduct any financial transaction and offers the potential for financial growth and financial inclusion (Kadalarasane, 2015). Customers can now avail banking services from any geographical location around the clock according to their convenience. Through the internet, the geographical boundaries are eliminated (Premalatha & Sundaram, 2014). Mobile banking applications also allow users to download their e-passbooks and bank statements on a real-time basis.

To provide security in mobile banking, banks are constantly improving customer care services to prevent any mishap. Through mobile technology and SMS services, customers can track all their account transactions. Continuous upgradation of technology helps banks to design their applications in order to improve privacy, authenticity and security.

Mobile banking cuts down the huge transaction costs of the banks. It also reduces the dependence of banks on the staff, thus reducing the pressure on bankers. Customers save a great deal of time and energy by accessing banking services through mobile phones instead of personally visiting banks and standing in long queues. Mobile banking strengthens customer relationships and loyalty.

Mobile banking applications allow banks to redefine their traditional channels of providing services. Now, banks can offer their services to different groups without any hassle. It allows cross-selling, which means that customers who have access to mobile banking have more product holdings as compared to branch-only customers. This service also makes way for personalised communication. Users can even pay their bills and purchase various policies with a single click on their devices.

Due to enhanced security features, mobile banking applications are now a more secure means to conduct banking transactions. In addition to username and password, these applications now require a finger scan, OTP or even a face scan to access the account. Applications are also encrypted to prevent any theft of personal data.

Constraints in Mobile Banking

Mobile banking is a relatively new concept in India, and very few people are aware of its usage and benefits. It requires a lot of effort by the government and the banks to reach the masses. Moreover, education levels and financial literacy in the rural areas are so low that it becomes difficult to include them in a financial umbrella any time soon. People lack the technical skills essential to operating the mobile banking application.

Privacy and trust issues are the major constraints in the success of electronic applications (Liu et al., 2005). Despite several safety measures taken by the banks to prevent fraud and leakage of data, there is always a risk to the security, reliability and authenticity of the application.

Mobile banking applications do not come totally free of cost. It requires users to have a smartphone such as Apple iPhone, Android phones and so on, a subscription to a good internet connection and text message service by the banks.

Although these fees are not significant, they come at a price. Also, some banks charge extra fees for certain mobile banking services.

Review of Literature

Continuous advancements in the field of financial technology are a major breakthrough, resulting in reduced cost and standardised service offerings (Ibrahim et al., 2006). Payment, advisory service, compliance and finance are the major categories of financial technology (Leong & Sung, 2018). Mobile Banking enables conducting bank transactions through a mobile device or mobile terminal (Verma & Nehra, 2016).

Increasing penetration of mobile technologies in the backward communities has made financial inclusion possible (Medhi et al., 2009). Although the adoption of mobile banking is in its initial stages. Dapp et al. (2014) emphasised the need for investment in new financial innovations by the banking sector. Mobile users can be categorised into three main clusters based on their perception, namely: technology adoption laggards, technology adoption followers and technology adoption leaders. In the previous research, various factors have been identified that influence the adoption of mobile banking. Both attitude and intention towards mobile banking vary significantly across these segments (Chawla & Joshi, 2018). Trust in the technology has a predominant part in its adoption (Koksal, 2016). It has a strong and significant effect towards the mobile banking adoption (Hanafizadeh et al., 2014; Mashhour & Saleh, 2015). Furthermore, consumers' perceptions of knowledge availability, resources and opportunities critical for usage of the service, along with the pressure of both interpersonal and external social contexts towards the use of mobile banking, are important adoption drivers (Giovanis et al., 2019). Some other antecedents towards mobile banking adoption have been found, namely competitive advantage, mobile phone penetration, security concerns, customer convenience, strategic importance, customer demand and low perceived risk (Mullan et al., 2017). Karjaluoto & Huhtamäki (2010) highlighted the role of guidance and information provided by banks for reducing the barrier to the adoption of mobile banking. Carmi and Drezner (2019) stated that periods of service unavailability or long waiting times when implementing an application have a significant influence on customer usage.

In spite of the benefits of mobile banking, people are still reluctant to adopt mobile banking services. Lee et al. (2003) predicted that the mobile banking services usage is hampered by the risk perceptions of consumers. They identified risk in six dimensions, namely physical, time, psychological, financial, performance and social risk. Bamoriya and Singh (2011) highlighted that the operability of mobile handsets, security and privacy and standardisation of mobile banking services were some of the major issues that hampered the growth of mobile banking adoption. Luo et al. (2012) elucidated that well-developed e-banking systems, such as ATMs, are the main reasons for the lack of m-banking channels.

Conclusively, although there is extensive research on mobile banking adoption and its models, some of the aspects have not been touched upon, for example, a

comparison of factors influencing behavioural intention towards mobile banking adoption between rural and urban users.

Research Methodology

To achieve the objectives of the study, data were collected from the rural and urban areas of Punjab. The districts were selected on the basis of the largest population as per the 2011 census. The three selected districts were Ludhiana, Jalandhar and Amritsar in Punjab. The population of Punjab, as per the 2011 census, is 2,77,43,338, of which Ludhiana is the most populated district. A list of both rural and urban bank branches of the banks operating in selected cities was prepared. A multistage sampling procedure was adopted for the sample selection. In the first stage of sample selection, three rural and three urban bank branches were randomly selected from the prepared list of bank branches from each selected district. In the second stage of sample collection, 30 bank customers were selected from each selected branch using systematic random sampling in terms of selecting the 5th customer entering the bank branch premises. Data was collected from

Table 4. Definitions of Different Constructs.

Construct	Definition
Performance expectancy	The degree to which users will take advantage of using a particular technology in the performance of certain tasks
Effort expectancy	The extent of ease that comes with using the technology by consumers
Social influence	The perception of consumers that their friends and family believe in using the particular technology
Facilitating conditions	The perception of consumers relating to support and resources available to perform a behaviour
Hedonic motivation	The degree to which using a technology is fun
Price value	Trade-off between cost and perceived benefits associated with using a technology
Habit	The extent to which behaviour is undertaken repeatedly because of learning
Trust	Level of confidence about the reliability
Perceived financial literacy	Self-accessed ability to implement financial knowledge to undertake personal finances and make an informed financial decision
Behavioural intention	The relative strength of intention of the customer to perform the behaviour
User behaviour	User's decision, action and interaction while using a product or service
Attitude	Beliefs related to the consequences of performing the behaviour multiplied by the valuation of these consequences of the user

540 respondents, equally divided between rural and urban mobile banking. The data was collected both by direct contact and through Google Forms. Data were collected between 1 January 2023 and 30 August 2023. The present study has used the UTUT2 model (Venkatesh et al., 2012) with two additional variables, namely trust and attitude, as a conceptual model to explore the factors influencing behavioural intention in the adoption of mobile banking. Table 4 depicts the definitions of different constructs used in the study. The model thereby included effort expectancy, performance expectancy, trust, social influence, price value, facilitating conditions, attitude, habit, hedonic motivation, user behaviour and behavioural intention.

To examine the collected data, the partial least squares structural equation modelling (PLS-SEM) technique was adopted with SmartPLS4. It is a non-parametric technique undertaken for measuring explained variance in latent constructs. In model testing, a two-step approach was used; reliability and validity were first tested in the outer model, and then hypothesis testing in the proposed conceptual model of mobile banking adoption was tested in the second stage. For calculating the reliability and validity of the study in the outer model, the statistics suggested by Hair et al. (2019) and Kline (2023) were used. These statistics include internal consistency, convergent validity, composite reliability (CR) and discriminant validity.

Standardised factor loadings were calculated for each indicator of the construct. Reliability was ensured by calculating Cronbach's alpha (CA) and CR. To ensure reliability, the values of both should be greater than 0.70. To ensure convergent validity, average variance extracted (AVE) should be greater than 0.5, and factor loadings should be greater than 0.70. Fornell–Larcker criterion method and Heterotrait–Monotrait method ratio (HTMT) were employed to check discriminant validity. HTMT should be less than 0.85 to ensure discriminant validity (Hair et al., 2019).

To calculate the path coefficient along with its associated *t*-value for direct, mediating and moderating relationship bootstrapping method was implemented. Using multigroup analysis in Smart PLS 4.0, significant differences were assessed between rural and urban respondents in factor loadings and structural path coefficients of the proposed mobile banking adoption model.

Results and Discussion

The data gathered through questionnaires was further analysed using SPSS for frequency analysis. Table 5 shows the demographic and economic profile of the respondents and their respective frequency percentages.

Out of 540 respondents, 53.70% were male and 46.30% were female. Further, out of the total sample size of 540 respondents, 62.22% were single, and 37.78 were married at the time of data collection. The mean age of respondents was found to be 29.03 years with a standard deviation of 8.53. Educational qualification of respondents was categorised into five categories, namely 10 + 2, graduation, post-graduation and doctorate. It was found that the maximum number of

Table 5. Descriptive Statistics.

N = 540	Frequency	%
Gender of Respondents		
Male	290	53.70
Female	250	46.30
Marital Status		
Single	336	62.22
Married	204	37.78
Mean age	29.03 years	
Highest Educational Qualification		
10 + 2	81	15
Graduation	236	43.70
Post graduation	191	35.37
Doctorate	32	5.93
Occupation		
Government service	127	23.52
Private service	80	14.82
Business	49	9.07
Professional	22	4.07
Housewife	26	4.82
Student	158	29.26
Agriculture	78	14.44
Individual Annual Income		
Less than 3,00,000	238	44.07
3,00,001–6,00,000	126	23.33
6,00,001–9,00,000	68	12.59
9,00,001–12,00,000	53	9.82
12,00,001–15,00,000	20	3.70
Above 15,00,000	35	6.48

respondents are graduates (43.70%). The minimum number of respondents is doctorates (5.93%). Occupation was categorised into seven categories, namely government service, private service, business, professional, housewife, student and agriculture. The highest number of respondents were students (29.26%), and the least were professionals (4.07%).

Annual individual income of respondents was categorised into six categories, namely less than ₹300,000, ₹300,001–600,000, ₹600,001–900,000, ₹900,001–1,200,000, ₹1,200,001–1,500,000, and above ₹1,500,000. The maximum number of respondents have an income of less than ₹300,000.

The proposed model as indicated in Figure 1 under the study was examined using the PLS-SEM technique with the help of Smart PLS 4.0 (Ringle et al.,

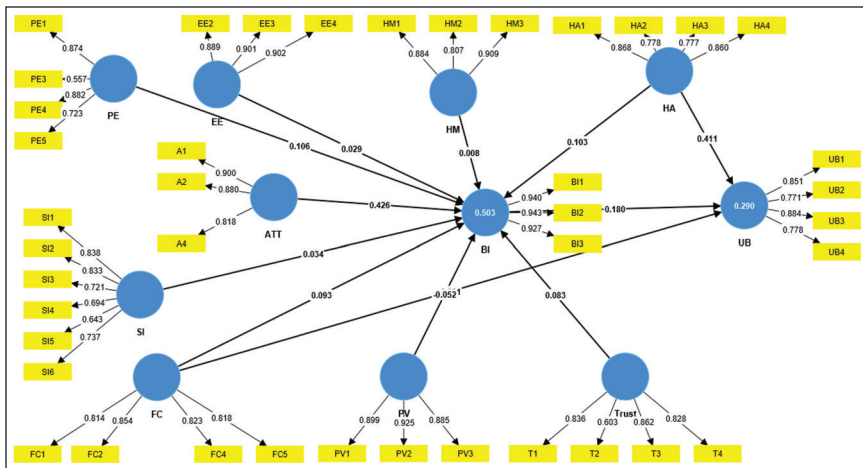


Figure 1. Mobile Banking Adoption (Revised UTAUT2) Model.

2022). The testing of the measurement model examines the relationship between observed and latent variables (Hair et al., 2019). Data was collected using numerical values for all items of the latent constructs. Table 6 depicts the results of the measurement model. Construct reliability of the measurement model was established as both CA and CR values were over 0.70 (Hair et al., 2019). Convergent validity was confirmed as values of all factor loadings were higher than 0.708, and AVE was above 0.50.

Performance expectancy included five items, out of which PE2 was deleted because of a factor loading less than 0.50. For the included statements, it ranged from 0.557 to 0.882. The construct of performance expectancy had a CA of 0.766 and a CR of 0.850. The AVE explained by performance expectancy was recorded at 0.594. Effort expectancy included four items, out of which EE1 was deleted because of a factor loading less than 0.50. The factor loadings of the included statements were between 0.889 and 0.902. The construct of effort expectancy had a CA of 0.879 and a CR of 0.925. The AVE explained by performance expectancy was recorded at 0.805.

Facilitating Conditions included five items, out of which FC3 was deleted because of factor loading less than 0.50. For the included statements, it ranged from 0.814 to 0.854. The construct of facilitating conditions had a CA of 0.846 and a CR of 0.897. The AVE explained by facilitating conditions was recorded at 0.685. Social influence included six items, and factor loadings of the included statements ranged between 0.643 and 0.838. Social influence had a CA of 0.842 and a CR of 0.883. The AVE explained by performance expectancy was recorded at 0.559. The habit included four items, and factor loadings of the included statements ranged between 0.777 and 0.868. The construct of habit had a CA of 0.840 and a CR of 0.893. The AVE explained by habit was recorded at 0.676. Hedonic motivation included three items, and factor loadings of the included statements ranged between 0.807 and 0.909. The construct of hedonic motivation had a CA

Table 6. Measurement Model: Mobile Banking Adoption Model (Reliability and Validity).

Latent Construct	Items	Factor Loadings	Cronbach Alpha	Composite Reliability (rho_c)	Average Variance Explained (AVE)
Performance expectancy	PE1	0.874	0.766	0.850	0.594
	PE3	0.557			
	PE4	0.882			
	PE5	0.723			
Effort expectancy	EE2	0.889	0.879	0.925	0.805
	EE3	0.901			
	EE4	0.902			
Facilitating conditions	FC1	0.814	0.846	0.897	0.685
	FC2	0.854			
	FC4	0.823			
	FC5	0.818			
Social influence	SI1	0.838	0.842	0.883	0.559
	SI2	0.833			
	SI3	0.721			
	SI4	0.694			
	SI5	0.643			
	SI6	0.737			
Habit	HA1	0.868	0.840	0.893	0.676
	HA2	0.778			
	HA3	0.777			
	HA4	0.860			
Hedonic motivation	HM1	0.884	0.837	0.901	0.753
	HM2	0.807			
	HM3	0.909			
Price value	PV1	0.899	0.887	0.930	0.815
	PV2	0.925			
	PV3	0.885			
Trust	T1	0.836	0.795	0.867	0.623
	T2	0.603			
	T3	0.862			
	T4	0.828			
Attitude	A1	0.900	0.834	0.900	0.751
	A2	0.880			
	A4	0.818			
Behavioural intention	BI1	0.940	0.930	0.956	0.877
	BI2	0.943			
	BI3	0.927			
User behaviour	UB1	0.851	0.839	0.893	0.676
	UB2	0.771			
	UB3	0.884			
	UB4	0.788			

Table 7. Discriminant Validity: Fornell–Larcker Criterion (Mobile Banking Adoption Model).

Latent Construct	Attitude	Behavioural Intention	Effort Expectancy	Facilitating Conditions	Habit	Hedonic Motivation	Performance Expectancy	Price Value	Social Influence	Trust	User Behaviour
Attitude	0.867										
Behavioural intention	0.665	0.937									
Effort expectancy	0.614	0.542	0.897								
Facilitating conditions	0.649	0.577	0.770	0.828							
Habit	0.453	0.453	0.501	0.535	0.822						
Hedonic motivation	0.316	0.325	0.363	0.452	0.536	0.868					
Performance expectancy	0.633	0.559	0.763	0.714	0.483	0.393	0.771				
Price value	0.406	0.340	0.462	0.531	0.438	0.439	0.505	0.903			
Social influence	0.464	0.454	0.617	0.659	0.570	0.583	0.597	0.468	0.748		
Trust	0.600	0.526	0.571	0.671	0.495	0.436	0.580	0.469	0.494	0.789	
User behaviour	0.418	0.384	0.296	0.355	0.510	0.457	0.424	0.379	0.440	0.437	0.822

of 0.837 and a CR of 0.901. The AVE explained by hedonic motivation was recorded at 0.753.

Price value included three items, and factor loadings of the included statements ranged between 0.885 and 0.925. The construct of price value had a CA of 0.887 and a CR of 0.930. The AVE, explained by price value, was recorded at 0.815. Attitude included four items, out of which A3 was deleted because of factor loading less than 0.50. The factor loadings of the included statements ranged between 0.818 and 0.900. The construct of attitude had a CA of 0.834 and a CR of 0.900. The AVE explained by attitude was recorded at 0.751. Trust included four items, and factor loadings of the included statements ranged between 0.603 and 0.862. The construct of trust had a CA of 0.795 and a CR of 0.867. The AVE explained by trust was recorded at 0.623. Behavioural intention included three items, and factor loadings of the included statements ranged between 0.927 and 0.943. The construct of behavioural intention had a CA of 0.930 and a CR of 0.956. The AVE explained by behavioural intention was recorded at 0.877. The construct of user behaviour included four items, and factor loadings of the included statements ranged between 0.771 and 0.884. The construct of user behaviour had a CA of 0.839 and a CR of 0.893. The AVE explained by user behaviour was recorded at 0.676.

Discriminant validity is used to confirm that latent variables are unrelated to each other and that each latent variable is unique. According to Fornell and Larcker (1981), the square root of AVE should be higher than the correlations to ensure discriminant validity. As illustrated by Table 7, all the square roots of AVE values were higher than inter-construct correlation coefficients.

HTMT is a measure of discriminant validity in the PLS-SEM approach (Hair et al., 2019). Discriminant validity is ensured When the HTMT value is less than 0.90, discriminant validity is ensured. The results indicate that all the latent variables were unique, as all the HTMT values, as shown by Table 8, are less than 0.90, thus ensuring discriminant validity.

Table 9 depicts notable variations between rural and urban respondents in terms of various items of different factors influencing behavioural intention towards mobile banking adoption. The results revealed that most of the factor loading differences among different items between rural and urban respondents were non-significant, except for two items. The factor loading difference was significant for Hedonic Motivation $\rightarrow$ HM1 ($p = .044$). The difference in path coefficients revealed that the impact of HM1 was stronger among urban respondents. The results also found the significant factor loading difference for Performance Expectancy $\rightarrow$ PE1 ($p = .043$). The difference in path coefficients revealed that the impact of PE1 was stronger among rural respondents.

Table 10 depicts multigroup analysis for the difference between rural and urban areas for different constructs. The findings revealed path coefficients, namely Attitude $\rightarrow$ Behavioural Intention (coefficient = -0.088 , $p = .042$), Facilitating Conditions $\rightarrow$ User Behaviour (coefficient = 0.253 , $p = .018$), Habit $\rightarrow$ User Behaviour (coefficient = -0.263 , $p = .001$) and Trust $\rightarrow$ BI (coefficient = 0.234 , $p = .046$), were found to be significantly different between urban and rural respondents.

Table 8. Discriminant Validity: Heterotrait–Monotrait Ratio (Mobile Banking Adoption Model).

Latent Construct	Attitude	Behavioural Intention	Effort Expectancy	Facilitating Conditions	Habit	Hedonic Motivation	Performance Expectancy	Price Value	Social Influence	Trust	User Behaviour
Attitude											
Behavioural intention	0.754										
Effort expectancy	0.716	0.597									
Facilitating conditions	0.774	0.649	0.892								
Habit	0.536	0.506	0.578	0.632							
Hedonic motivation	0.373	0.361	0.417	0.534	0.639						
Performance expectancy	0.772	0.638	0.854	0.872	0.618	0.530					
Price value	0.474	0.374	0.525	0.612	0.507	0.503	0.626				
Social influence	0.535	0.492	0.696	0.765	0.673	0.706	0.750	0.544			
Trust	0.715	0.597	0.662	0.790	0.605	0.553	0.741	0.547	0.602		
User behaviour	0.497	0.432	0.340	0.417	0.595	0.559	0.587	0.437	0.536	0.571	

Table 9. Multigroup Analysis (Factor Loading Difference Between Rural and Urban).

Relationships	Difference (Rural–Urban)	p Value	Results
A1 ← attitude	0.007	.719	Insignificant
A2 ← attitude	0.016	.595	Insignificant
A4 ← attitude	–0.051	.310	Insignificant
BI1 ← behavioural intention	–0.002	.937	Insignificant
BI2 ← behavioural intention	0.008	.485	Insignificant
BI3 ← behavioural intention	–0.001	.944	Insignificant
EE2 ← effort expectancy	0.020	.456	Insignificant
EE3 ← effort expectancy	0.021	.444	Insignificant
EE4 ← effort expectancy	0.004	.857	Insignificant
FC1 ← facilitating conditions	0.036	.319	Insignificant
FC2 ← facilitating conditions	–0.041	.162	Insignificant
FC4 ← facilitating conditions	–0.003	.935	Insignificant
FC5 ← facilitating conditions	0.011	.797	Insignificant
HA1 ← habit	–0.040	.114	Insignificant
HA2 ← habit	–0.031	.547	Insignificant
HA3 ← habit	0.009	.799	Insignificant
HA4 ← habit	–0.027	.377	Insignificant
HMI ← hedonic motivation	–0.072	.044	Significant
HM2 ← hedonic motivation	0.075	.248	Insignificant
HM3 ← hedonic motivation	–0.043	.133	Insignificant
PE1 ← performance expectancy	0.054	.043	Significant
PE3 ← performance expectancy	–0.039	.666	Insignificant
PE4 ← performance expectancy	0.004	.880	Insignificant
PE5 ← performance expectancy	–0.073	.273	Insignificant
PV1 ← price value	–0.027	.305	Insignificant
PV2 ← price value	–0.008	.602	Insignificant
PV3 ← price value	–0.017	.554	Insignificant
SI1 ← social influence	–0.032	.296	Insignificant
SI2 ← social influence	–0.023	.468	Insignificant
SI3 ← social influence	–0.038	.596	Insignificant
SI4 ← social influence	–0.122	.075	Insignificant
SI5 ← social influence	–0.083	.255	Insignificant
SI6 ← social influence	–0.019	.736	Insignificant

(Table 9 continued)

(Table 9 continued)

Relationships	Difference (Rural–Urban)	p Value	Results
T1 ← trust	−0.002	.944	Insignificant
T2 ← trust	−0.093	.294	Insignificant
T3 ← trust	−0.037	.288	Insignificant
T4 ← trust	0.015	.675	Insignificant
UB1 ← user behaviour	−0.003	.891	Insignificant
UB2 ← user behaviour	−0.090	.063	Insignificant
UB3 ← user behaviour	−0.043	.065	Insignificant
UB4 ← user behaviour	0.009	.981	Insignificant

Table 10. Bootstrap Multi-group Analysis (Structural Model).

Latent Construct	Difference (Rural–Urban)	p Value	Results
Attitude → behavioural intention	−0.088	.042	Significant
Effort expectancy → behavioural intention	−0.15	.166	Insignificant
Facilitating conditions → behavioural intention	−0.124	.294	Insignificant
Facilitating conditions → user behaviour	0.253	.018	Significant
Habit → behavioural intention	0.035	.714	Insignificant
Habit → user behaviour	−0.263	.001	Significant
Hedonic motivation → behavioural intention	0.071	.344	Insignificant
Performance expectancy → behavioural intention	0.146	.205	Insignificant
Price value → behavioural intention	0.129	.131	Insignificant
Social influence → behavioural intention	0.068	.520	Insignificant
Trust → behavioural intention	0.234	.046	Significant
Behavioural intention → user behaviour	0.125	.278	Insignificant

Limitations for the Study

- Although every factor affecting mobile banking adoption has been tried to include yet survey approach of data collection has its limitations in exploring human perceptions and behaviours.
- Data has been collected from only three cities. This might restrict the generalisations of the results.
- Technology adoption is measured by several models, but this study has applied only the UTAUT2 model.

Conclusion

It is well acknowledged that the banking sector is the backbone of the Indian financial system. Banking plays a predominant role in financial inclusion in every economy. The Indian banking sector has undergone drastic change over the years. Various innovations and new products have swept into the financial market to make banking easier and more convenient. The banking sector has outpaced all other sectors in the adoption of new technologies. Mobile banking is one such innovation. Mobile banking involves using mobile phones for banking services. Mobile banking offers various advantages over traditional methods of banking. Convenience, saving of time and effort and cost reduction offer a competitive edge over other methods of banking, but at the same time, security and privacy concerns have hampered the growth of adoption of mobile banking. The present research has undertaken a comparative study of rural and urban users for factors affecting behavioural intention towards mobile banking adoption. The study highlighted significant structural differences between rural and urban respondents' structural relationships, namely attitude → behavioural intention, habit → user behaviour and trust → behavioural intention.

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