Intension to Use Mobile Banking: An Integration of Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM)

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Abstract

The paper is an attempt to study the individual's intention to use mobile banking. In light of the results obtained from the study, the proposed model offers a better fit with the data and explains the intention of individuals to use mobile banking services. Government support, trust, and compatibility significantly contribute to the Perceived behavioral control of a bank customer to use mobile banking while Perceived ease of use, Perceived usefulness, Security and privacy, and risk have a significant positive impact on the attitude of the individuals to utilize mobile banking service. The study uses primary data and the final instrument was administered to 950 respondents, across the country of which 904 data were used for the analysis after editing to accommodate the missing values. The study has adopted structural equation modeling approach to analyze the relationships between the variables in the study. The proposed framework in this study can be utilized to identify the factors that promote the adoption of mobile banking practices and the study also has the potential to provide updated and comprehensive literature on mobile banking, which can accelerate future research in this field.

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1. Introduction

The financial service sector has undergone a tremendous process of significant disruption, changing customer behavior, developing advanced technologies, and offering their customers new products and better services, thereby increasing customer satisfaction over the past decade [1]. Numerous changes have been made to how products and services are designed and made available in the banking sector as a consequence of continuous developments, and technological and informational breakthroughs. Internet banking has become increasingly popular with consumers as a result of the increased availability of internet and tremendous progress in information and technology. In recent years, mobile banking users have outnumbered those of online banking services, and their use has grown significantly worldwide [2].

Through mobile banking, Customers use mobile phones to access different financial services, including checking account balances, fund transfers, fund remittances to other bank accounts, bill payments, and financial management [2]. Effective use of mobile banking services helps banks to attain a competitive advantage by retaining and gaining new consumers [3]. Banks prefer the mobile banking channel to supply their financial services as it is more affordable and more accessible, which encourages customers to adopt the offered mobile banking services [4].

The TAM has primarily been used to emerging technologies in the literature that has already been published. Perceived ease of use and perceived usefulness are the two criteria, according to TAM, that impact the customers' usage while deciding whether or not to utilize a certain technology [5].By incorporating a fresh idea called perceived behaviour control, the TPB builds on the Theory of Reasoned Action (TRA). PB claims that a person's conduct can be explained by a combination of subjective norms, attitude, and perceived behavioral control [6].

The TPB and TAM models are integrated in the study to provide a theoretical framework. Behavioral variables make up the TPB, while factors contributing to technology are usually the focus of the TAM. For a more thorough approach, it is possible to look into users' intentions when they adopt mobile banking and to the combination of these two models. In contrast to traditional models, the study takes into account important factors including risk, security and privacy, compatibility and trust. The research offers a current insight of how individuals perceive and prioritize security and privacy concerns in their decision-making processes, acknowledging and recognizing the contemporary significance. This research also delves into the intricate relationship between customers' risk perception and their level of confidence in one another. This research insights into the intricate interplay of technological and psychological factors influencing user intentions by examining how users assess potential risks related to mobile banking and the importance of trust in allaying their concerns.

2. Literature Review and Proposed Hypotheses

Technology has brought about innovations in retail banking. Mobile banking is considered to be one of the most useful ways to offer financial services to the customers. Both customers as well as banks are benefited from the mobile commerce application as it allows customers to access their banking financial services through their mobile phones [9].The banking industry has given close attention to m-banking due to their efficiency and cost-effectiveness in addressing large number of customers. Many enablers and inhibitors have been considered and examined in their studies, investigating into m-banking adoption behaviour. Key facilitators include perceived utility, compatibility, perceived ease of use, enabling, subjective norms,

perceived behavioral control, perceived advantages and attitude [10].

The retail banking sector has seen a paradigm shift as a result of mobile banking by offering distinctive features including localization and ubiquity [7] [8] [11]. While localization entails offering financial services that are specific to a given location, mobile banking widespread availability guarantees that services are available whenever and wherever needed. Because of its distinctiveness, mobile banking is now a tactical weapon for obtaining an edge over competitors in the retail banking market [12]. Customers are able to perform banking services with mobile banking, which is an extension of internet banking, using their smartphones, benefiting banks and customers in equal measure.

Models like the Unified Theory of Acceptance and Use of Technology (UTAUT I & II), ,Technology Acceptance Model (TAM), Innovation Diffusion Theory (IDT), and Theory of Planned Behaviour (TPB) have been used to investigate the theoretical underpinnings of mobile banking adoption behavior [13].

2.1 Mobile banking

Customer's regular contact with financial organizations has changed from traditional internet banking to a new paradigm by utilizing mobile banking services offered by the commercial banks. The entire focus on offering mobile banking features increases consumer benefits and supports the bank's competitive advantage. Due to its interactive nature and instant access to banking data, mobile banking streamlines financial transactions quickly. Additionally, in reach at all times and from any location, mobile banking offers the customer more benefits [14]. Mobile banking speeds up information processing and enhances operational efficiency as well.Through cost-saving measures, cross-selling, and value-added mobile services, it also promotes greater consumer delight [15]. In e-commerce applications like mobile banking, technology support has to be made more accessible and convenient [16].

2.2 Theory of Planned Behaviour Model

The Theory of Reasoned Action (TRA) has been evolved from the TPB model. The TPB model predicts consumer adoption intentions by integrating internal and external controls, producing more accurate results. The study [17] states that a person can act based on intents or intentions only when that individual has got control over his actions. The TPB affirms that the motive behind one's behavior is a necessary element of human activity, is influenced by attitude, subjective norm, and perceived behavioral control. Consumer acceptance or rejection of the item at hand is referred to as attitude. Previous research studies have explained its significant relation to customer preferences in the business area [18] [19]. Subjective norm (SN) refers to the social or organizational pressure that a person intending to participate in the behavior feels. The normative norm about what other people ought to demand of themselves form the foundation of the subjective norm. It has to do with how they perceive the presence of factors within their control that may facilitate or obstruct their ability to carry out the action [20].

H1: The intention to use the mobile banking services provided by the banks is positively impacted by their attitude.

H2: A person's intention to use the banks' mobile banking services is positively impacted by subjective norms.

H3: PBC has a favorable impact on people's intentions to utilize the banks' mobile banking services.

2.3 Technology Acceptance Model

TAM explains an individual's behaviour while using technology. The theory of reasoned action (TRA, or ToRA), served as a major contributor for the TAM. According to TRA, an individual's behaviour would be determined by their attitude, subjective norm, eagerness and reasoned assessment. Despite its rapid development and integration into individual's personal as well as professional life, there is ongoing concerns about whether the impact of technology will be welcomed or rejected. To determine the elements influencing individuals' inclination to accept or reject a technology, the TAM model has emerged as an important model [21] . Perceived usefulness (PU) and perceived ease of use (PEOU) are the factors of the TAM. Past literature have contribute that consumers' intentions to use certain new technologies are affected by perceived usefulness of design [22] [23].
H4: The perceived usefulness of mobile banking has a favorable impact on a person's inclination to utilize it.
H5: Perceived ease of use has a positive influence on a person's intention to utilize mobile banking services offered by the banks.

2.4 Product knowledge

Product knowledge is the culmination of an understanding of a product's attributes, such as quality, pricing, market value, and other related information, that influences a customer's decision to purchase it. Customers' intent to purchase a product can be influenced by their knowledge about it. Experts agree that many variables influence consumers when choosing product choices and will be consistent with their decisions [24]. Product knowledge is required for the study of consumer behavior. Understanding a product or services by the customers is based on their memories or general consumer knowledge [20]. The study claims that consumer trust in a product or their awareness of it depends on their level of knowledge about the product.
H6: Product knowledge influences an individual's intention to utilize the banks' mobile banking services positively.

2.5 Security and privacy

Security and privacy in electronic banking are characterized as any kind of loss caused to an individual due to happeining of some frauds or some breaching the security of an online bank. Financial transactions are the primary activity involved in online banking. customers often fear that some criminal acts may be completed quickly and without any physical interaction while they carry out some financial transactions via digital banking services [25]. A common cause of customers' reluctance to utilize digital banking services is security and privacy concerns. When it comes to security and privacy concerns, some of the the customers have more confidence on following conventional banking practices.Concerns about privacy and security are the primary objections that some consumers have while using internet banking [26]. When analyzing already existing research on security and privacy, it is the foremost significant variable that obstructs customer use of fintech services [27].
H7: A person's intention to use the mobile banking services provided by the banks is positively impacted by security and privacy

2.6 Risk perception

Mobile banking deals with open access to internet customers in many situation feels that there is technical risk associated with the services[28].Mobile banking applications have made a significant contribution in saving lives and enabling customers to make transactions at their fingers without physically visiting banks during pandemic situations [29]. Customers utilizing mobile banking should consider their level of trust because they wish to be continuously connected to this sort of service [30].
H8: Risk perception influences a person's decision to utilize the banks' mobile banking services favorably.

2.7 Government support

Depending on the level of assistance, the government may be able to affect how quickly new technologies are adopted [31]. The diffusion of innovation can be influenced and led by the support of the government. It is feasible to gauge how much help people believe they are receiving. The more support that a person feels from the government, the more probable it is that they will use Internet banking. Government's drive to encourage cashless transactions. The initiative intends to make digital payments more prevalent in everyday financial transactions for every citizen, small business owner, and merchant. This ultimately helps the government to have a well-financially disciplined economy [30].
H9: People's intents to utilize the banks' mobile banking services have positive impact by the government support.

2.8 Trust

In many consumer buying interactions, trust has been a driving force that can give consumers high hopes for fulfilling their relationships with the sellers [32]. According to previpous studies, trust is essential to understand the social behavior and economic transactions of customers. In many studies, one of the greatest challenges to the banking sector is to gain customer trust especially over the problems related to security issues [33].
H10: Trust has a positive effect on a person's intention to use mobile banking services offered by the banks.

2.9 Compatibility

The level to which the prospective adopter's values, experiences and needs to which an innovation is involved is referred to as perceived compatibility [34]. When an individual's demands and technology innovation are more compatible this enables innovation to be understood within a more familiar context.Perceived compatibility is considered to be the most accurate perception-based measure of attitude towards online transactions. Because of this, the study anticipates that consumers would view mobile banking as suitable for their choices and way of life. As a result of this more customers will likely to utilise mobile banking to complete their financial services [5] .
H11: A person's intention to use the banks' mobile banking services is positively impacted by compatibility.

The proposed model for understanding the intention to use mobile banking encompasses a framework that explores the relationships among the variables (**Fig. 1**). The model propose that attitude, subjective norm and perceived behavioral control exert direct influences on individuals' intention to use mobile banking services (H1,H2 and H3, respectively). Expanding beyond direct effects, the model introduces the concept of intervening variables such as attitude and perceived behavioral control. The model acknowledges the pivotal role of attitudes in shaping this intention, wherein perceived usefulness (H4), perceived ease of use (H5), product knowledge (H6), security and privacy considerations (H7), and risk perceptions (H8) directly impact individuals' attitudes. These effects underscore the importance of various psychological and perceptual factors in shaping individuals' overall attitudes which provides an indirect effect on the intention to use mobile banking.Government support (H9), trust (H10), and compatibility (H11) are identified as important factors that indirectly influence individuals' intention to use mobile banking through perceived behavioral control.
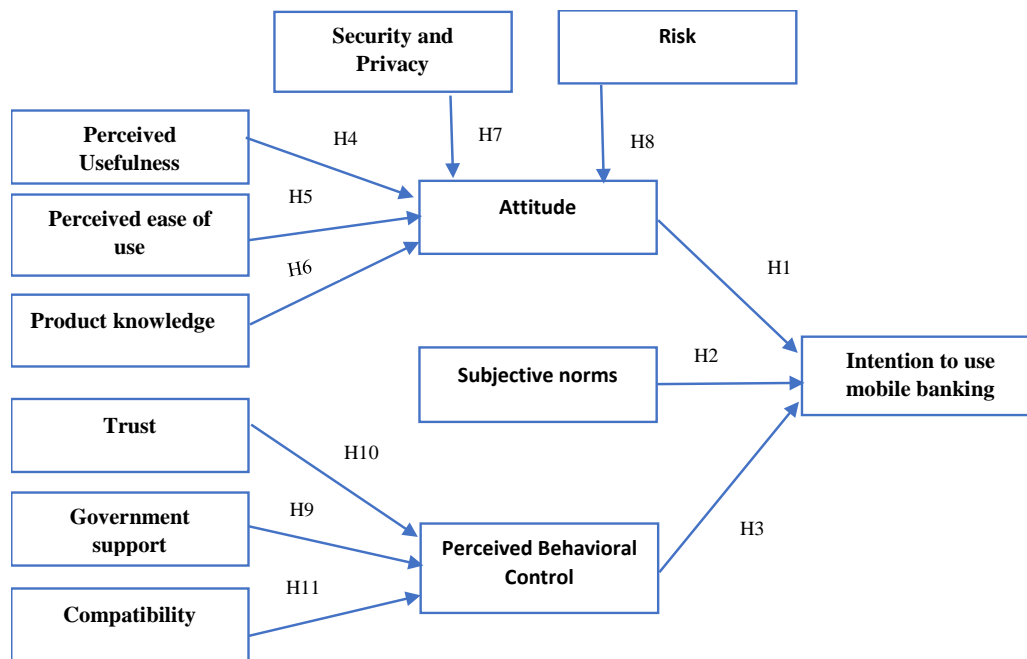

Fig. 1. Proposed research model

3. Research Methodology

The current study has been conducted among Indian bank customers who utilises the mobile banking services. Since many customers did not consent to the disclosure of certain information, convenience sampling technique was used. Additionally, commercial banks did not disclose information regarding their customers to maintain confidentiality and to gain a competitive edge against other commercial banks. The study used primary data, collected utilizing questionnaires that were sent directly to the respondents. Google forms was also used to create the online surveys, which were then shared via internet platforms.

Convenience sampling was used since random sampling seemed challenging to carry out. The final questionnaire was distributed to 950 respondents nationwide, and 904 of those responses were utilised in the study after being edited to account for the missing number. Males and females made up almost equally of the sample. Data was gathered from 60 respondents for a pilot research. The robustness of the scale was explained by the Cronbach alpha value of 0.70.

4. Empirical Analysis and Discussion of the Results

The structural equation modeling (SEM) method of data analysis has been applied in this study. SEM is a multivariate statistical technique that establishes both the direct and indirect relationships between the variables by using both the empirical data and the fundamental model. Using the partial least squares route modelling technique, structural equation model is performed using the statistical tool known as Smart PLS, which has a graphical user interface. In SEM, a model is first checked to determine the accuracy of the measurements by running a Measurement Model, and then the Structural Model analysis is run to determine how the variables interact.
As SEM is a comprehensive statistical tool for testing hypotheses, structural equation modeling (SEM) has several applications in a variety of industries, including finance, marketing, operations management, etc.

4.1 Measurement model

The measurement model is validated using three criteria. A measurement model evaluates the accuracy and reliability of data being gathered through questionnaires. The reliability of the data which is collected using the questionnaire is validated using Cronbach alpha, average variance extract (AVE) criteria and composite reliability (CR). The minimum acceptable threshold of Cronbach's alpha's is 0.7, that of CR is 0.7, and AVE's value is 0.5. The values supporting the reliability of the data are displayed in **Table 1** to assess the dependability of the various indicators by looking at the outer loadings of all construct. All the constructs with values ranging from 0.723 to 0.941 were cross- loaded. Cronbach alpha and CR were employed in the study to evaluate the constructs' reliability. Convergent validity is analyzed by looking at the correlation between loading factors and indicator scores. By analyzing the value of CR and Cronbach's alpha the reliability and also the internal consistency were assessed. The values supporting the reliability of the data are displayed in **Table 1**. With reference to the **Table 1**, it is evident that all Cronbach alpha values are higher than 0.07, which is the minimum threshold value. Internal consistency is demonstrated by the CR, which ranges from 0.857 to 0.95 for all latent variable values. The AVE ranges from 0.729 to 0.839 which is higher than the permitted threshold of 0.50. Since all AVE values are higher than correlations between the constructs of the suggested model, so the convergent validity of this study is recognized. From the above results, it is evident that the recommended measuring items like the values of Cronbach's alpha, AVE and CR proves to have an internal consistency. So, they are fit to evaluate the proposed conceptual framework and to evaluate the validity of the hypothesis.

The Fornell-Larcker Criterion is used to determine discriminant validity, and the results are presented in **Table 2**. Fornell and Larcker discriminant validity is assessed by comparing the square roots of each AVE value, which are bolded in **Table 2** (diagonal values), with the correlation coefficients of the constructs in the corresponding columns and rows.

Table 1. Result summary for measurement model

Latent Variables	Indicators	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Attitude	A1	0.723			
	A2	0.908			
	A3	0.903			
	A4	0.866	0.873	0.914	0.729
Risk perception	C1	0.930			
	C2	0.941			
	C3	0.917	0.921	0.95	0.864
Government support	GS1	0.867			
	GS2	0.892			
	GS3	0.910	0.869	0.919	0.791
Intention to use mobile banking	INU1	0.902			
	INU2	0.931			
	INU3	0.822	0.862	0.916	0.785
Perceived behavioral control	PBC1	0.796			
	PBC2	0.844			
	PBC3	0.863	0.783	0.873	0.697
Perceived ease of use	PEOU1	0.786			
	PEOU2	0.840			
	PEOU3	0.892	0.794	0.878	0.706
Product knowledge	PK1	0.738			
	PK2	0.890			
	PK3	0.890	0.797	0.879	0.710
Perceived usefulness	PU1	0.863			
	PU2	0.896			
	PU3	0.764			
	PU4	0.764	0.841	0.894	0.679
Subjective norm	SN1	0.917			
	SN2	0.770			
	SN3	0.903	0.835	0.899	0.750
Security and privacy	SP1	0.845			
	SP2	0.845			
	SP3	0.830	0.793	0.878	0.706
Trust	T1	0.844			
	T2	0.849			
	T3	0.811	0.788	0.874	0.697
Compatibility	TS1	0.746			
	TS2	0.817			
	TS3	0.883	0.752	0.857	0.668

Table 2. Fornell-Larcker criteria

	AT	RP	INT	PBC	PEOU	PU	C	SP	SN	TR	GS	PK
A	**.85**											
RP	.70	**.81**										
INT	.63	.54	**.89**									
PBC	.68	.68	.82	**.84**								
PEOU	.64	.58	.71	.73	**0.84**							
PU	.57	.50	.39	.52	.66	**.82**						
C	.51	.49	.47	.58	.35	.39	**.93**					
SP	.75	.60	.66	.70	.66	.44	.50	**.84**				
SN	.65	.68	.59	.64	.59	.59	.48	.55	**.87**			
T	.74	.69	.66	.68	.53	.41	.57	.69	.57	**.80**		
GS	.47	.53	.52	.57	.42	.36	.49	.48	.47	.50	**.89**	
PK	.40	.40	.39	.45	.40	.16	.46	.53	.33	.50	.25	**.80**

Note: Values in bold represent the square root of AVE.
Attitude- AT, Risk perception-RP, Government support-GS, Intention to use mobile banking- INT, Perceived behavioral control-PBC, Perceived ease of use- PEOU, Product knowledge- PK, Compatibility- Perceived usefulness- PU, Subjective norm- SN, Security and privacy- SP, Trust- TR

4.2 Structural model

Based on R^2, Q^2, and the significance value of the pathways, a structural model is accessed. From **Table 3**, the independent variables that is utilized in the study can explain for around 64.70 percent of the variation in attitude that influences a person's intention to use mobile banking, with an R^2 value of 0.647. Additionally, the independent variables such as trust, government support, and compatibility can account for 57.70 percent of the variation in an individual's perceived behavioral control, which influences their propensity to utilize mobile banking. About 68.60 percent of the variance may be measured by the total independent factors, such as attitude and perceived behavioral control that we employ to gauge a person's desire to use mobile banking. In Q^2, it is established that the endogenous constructs have predictive value. The proposed model is predictively relevant as the Q^2 value is bigger than zero. It is possible to deduce from the results that the constructions' prediction is significant.

Table 3. R^2 and Q^2

Variables	R^2	Q^2
Attitude	0.647	0.468
Intention to use mobile banking	0.686	0.533
Perceived behavioral control	0.577	0.400

4.3 Hypothesis Testing using Structural Equation Modelling and Discussion of Results

The result of structural equation modelling is presented in **Table 4**. To find the goodness of fit, hypothesis testing was carried out. H1 was evaluated to check whether the attitude has a significant impact on a person's intention to use mobile banking and the result totally supports the hypothesis. Hence H1 was supported. From the result of the study, it is evident that perceived behavioral control is significant and has got positive impacts on a person's intention to adopt to mobile banking services whereas Subjective norm does not contribute a significant effect, supporting H3 and rejecting H2. From the **Table 4**, the results of hypothesis testing depict that perceived ease of use, Perceived usefulness, Security and privacy, and risk has got a significant positive effect on the attitude of a person's intention to adapt to mobile banking. Hence H4, H5, H7 and H8 are supported. While the results do not show a significant relationship between attitude and product knowledge. Government support, trust, and Compatibility significantly contribute to the Perceived behavioral control of individuals. Hence H9, H10, and H11 are supported. Nine hypotheses of the study were supported, while two hypotheses were rejected. Thus H1(t value = 2.92, p value=.004) ,H3(t value =18.869 , p value=0) ,H4(t value = 7.741, p value=0) ,H5(t value =3.241 , p value=0.001) ,H7 (t value = 13.622, p value=0) ,H8(t value =3.927 , p value=0) ,H9(t value = 8.77, p value=0) ,H10(t value = 11.663, p value=09.668) ,H11(t value =9.668 , p value=0) are supported in the study. The Structural equation model is shown in **Fig. 2**.

Table 4. Result of Hypothesis Testing

Hypothesis & Relationship	Original Sample (O)	Standard Deviation (STDEV)	T - Statistics	P - Value	2.50 %	97.50 %	Decision
Attitude -> Intention to use mobile banking (H1)	0.097	0.033	2.922	0.004	0.026	0.152	Supported
Subjective norm -> Intention to use mobile banking (H2)	0.087	0.05	1.736	0.083	0.005	0.187	Not Supported
Perceived behavioural control -> Intention to use mobile banking (H3)	0.698	0.037	18.869	0	0.630	0.767	Supported
Perceived usefulness_ -> Attitude (H4)	0.215	0.028	7.741	0	0.159	0.264	Supported
Perceived ease of use -> Attitude (H5)	0.112	0.034	3.241	0.001	0.039	0.176	Supported
Product knowledges -> Attitude (H6)	-0.019	0.031	0.63	0.529	0.085	0.037	Not Supported

| Security and privacy -> Attitude (H7)	0.529	0.039	13.622	0	0.461	0.611	Supported
Risk perception-> Attitude (H8)	0.127	0.032	3.927	0	0.071	0.196	Supported
Government support -> Perceived behavioural control (H9)	0.213	0.024	8.770	0	0.161	0.26	Supported
Trust -> Perceived behavioural control(H10)	0.336	0.029	11.663	0	0.273	0.389	Supported
Compatibility -> Perceived behavioural control (H11)	0.335	0.035	9.668	0	0.259	0.398	Supported
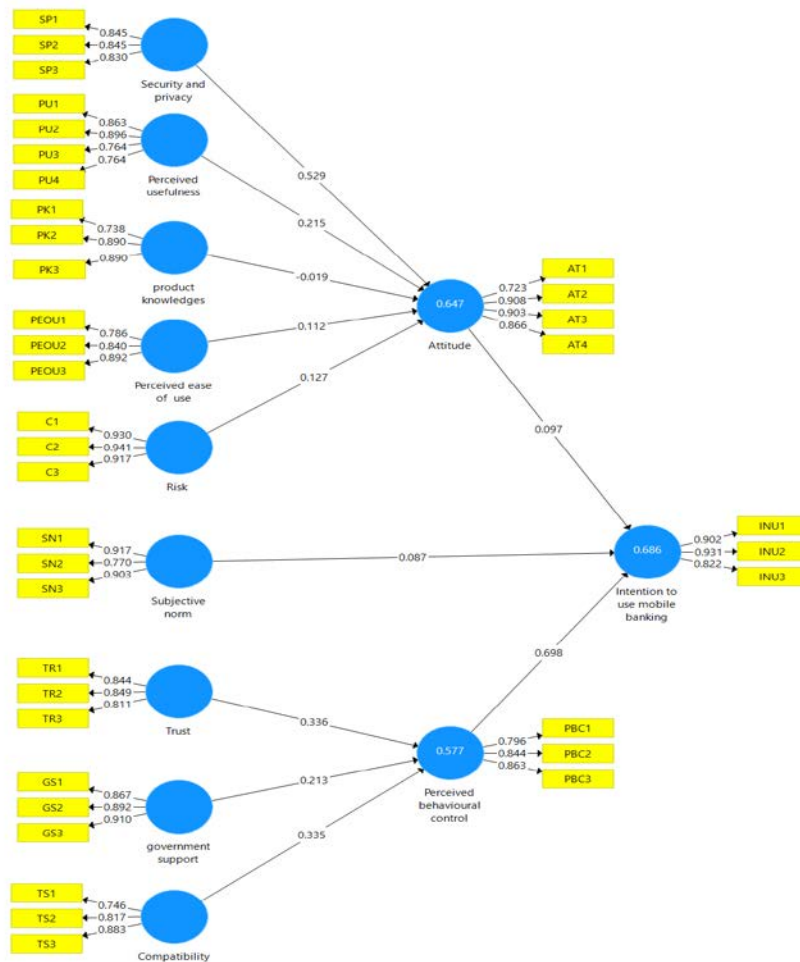
Fig. 2. Structural equation mod

5. Discussion

The main objective of the research is to determine the variables that significantly impacts an individual's intentions to adapt to mobile banking services. Some of the most well-known mobile banking models were examined to help build this one. The TAM, TPB model, and other elements that impacts the adoption of mobile banking, have been introduced in order to fulfil the objectives. To determine the variables that impact the usage of mobile banking services, a conceptual model was created. The association between the factors were then analysed, and questionnaires were distributed among 920 customers who uses mobile banking services. After the data cleaning process and removal of missing values, data from 904 respondents were selected for the study. SEM was used to assess the data that was acquired. The primary data obtained from the structured questionnaire were analysed using SEM. The variance in people's attitudes towards using mobile banking is significantly explained by their perceptions of security and privacy, perceived ease of use, perceived usefulness, and risk (R^2 = 0.647). The variables that were utilized in the study—government support, trust, and compatibility—can account for 57.70% of the variation in people's perceived behavioral control, which influences whether or not they intend to use mobile banking. The range of individual's intentions to use mobile banking is estimated to be 68.60 percent attributable to attitudes and perceived behavioral control factors.

The result shows that attitude influence a person's decision to use mobile banking. This aligns with the broader literature emphasizing the importance of attitude in shaping technology adoption intention [4]. The positive attitude on intention is a consistent finding in studies exploring users' perceptions of new technology, including mobile banking [6]. Subjective norm of the customers does not significantly affect individuals' intentions to adopt mobile banking. Some of the findings in the study deviate from the past literatures that have highlighted the social influence component as a significant determinant of behavioral intentions [23] [35].This implies that individual views and control may matter more in case of mobile banking than social norms. The study supports the effects of perceived usefulness, security and privacy, perceived ease of use, and risk on attitude, all of which are consistent with larger collection of already existing studies on technology acceptance [36] [37] [38], highlighting the importance of these elements in influencing users' attitudes towards embracing new technologies. The study supports the effects of trust, compatibility, and government support on perceived behavioral control. These results add to the existing body of literature by emphasizing the importance of external factors such as government support and trust in influencing individuals' perceived ability to control their adoption of mobile banking [6] [32].

5.1 Managerial implications

In light of continuous international problems that significantly alter how people behave in daily life around the globe, current study adds to the area of literature in the field of management science. The TAM integration model and TPB theory are also anticipated to benefit from this research. Practically, it is anticipated that the research findings will be beneficial for the banks to increase the satisfaction level of the customers and to retain their existing customers by identifying their needs and requirements and could bring about much more customized financial products to their valuable customers. The banks can thus reduce the customer retention cost and the customer acquisition cost. When more customers are inclined to utilize mobile banking services, the financial institutions including banks can have

much stronger financials as this can reduce the bank's operational costs. As mobile banking is a contactless process the bank can promote these services during some pandemic situations, which may increase the intention of the customers to utilize mobile banking services now and in upcoming days. Some of the features of mobile banking like small screen and keypads which is more compatible when compared to other online banking services positively affect the behaviour of the customer. Banks should regularly assess and improve the quality of their mobile banking services in order to effectively meet the needs of both current and potential mobile banking users.

5.2 Limitations and future research

As this research was conducted in an emerging economy like India, one of its drawbacks is that similar research of this kind must be conducted in developed nations in order to generalize the findings. By applying the same approach in both developed and developing countries, then comparing those outcomes, a significantly better result might be achieved. Another drawback is that the study did not give sufficient attention to the population's heterogeneity, which includes differences in age, gender, profession, educational background, and other factors. In the future, the research can be done by considering such factors as it may impact the selected variables that are used for current study.

6. Conclusion

This study has contributed valuable insights regarding the factors influencing individuals' intentions to use mobile banking. The proposed model, incorporates elements from the Technology Acceptance Model (TAM) and Theory of Planned Behaviour (TPB), demonstrated a robust fit with the data, emphasized the significance of perceived ease of use, perceived utility, security and privacy, and risk in shaping attitudes toward mobile banking. Government support, trust, and compatibility emerged as strong contributors to perceived behavioral control, while subjective norm appeared insignificant. The results of the study depicted practical implications for financial institutions as they contribute to increased customer satisfaction, retention, and possibility of offering tailored financial solutions. The study also highlighted the importance of promoting mobile banking as a contactless solution amid global crises, particularly pandemics, in light of the obstacles they provide. To ensure the accuracy and reliability of the results, the proposed research model underwent a systematic comparison with the past literature. The variation in individuals' attitude towards adopting mobile banking was substantially accounted for their perceptions of perceived ease of use, perceived utility, security and privacy, and risk ($R^2 = 0.647$). The variables like government support, trust, and compatibility contributed to 57.70% of the variability in customer's perceived behavioral control. The proposed model was able to encompass 68.60% customer's intentions to adopt mobile banking. While the study adds substantial insights to the field of technology and management science, it also acknowledged some limitations, such as the need for further research in diverse populations and more detailed examination of demographic factors. The call for detailed future studies in developed nations and by considering the population heterogeneity paves the way for a better comprehensive understanding of the dynamics surrounding mobile banking adoption. Ultimately, this research provides a strong foundation for ongoing exploration in evolving landscape of mobile banking practices.

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