Exploring Customer Satisfaction To Use Mobile Banking: An Extension Of UTAUT Framework

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Abstract

The highest population and percentage of internet users on the island of Java are found in the West Java Province. This phenomenon should be consistent with West Java Province's relatively high GRDP level, where the potential for banking is also quite high. However, there is still a challenge for finance, especially banking in the West Java region, namely finding ways to balance, optimism, and pursue innovative opportunities that can aid the adult population of Indonesia who have not yet used digital banking services. In this study, the variables that may affect West Javans' acceptance and usage of mobile banking services are identified. The goal of this study is to identify the variables that influence West Javans' adoption of mobile banking services. The modified UTAUT approach will be used, and the performance expectancy (PE), effort expectancy (EE), social influence (SI), facilitating condition (FC), behavioral intention (BI), and use behavior (UB) variables will be added. 400 respondents who use mobile banking in West Java made up the sample for this study. employing a non-probability sampling approach, such as quota sampling, to gather responses. PLS-SEM with SmartPLS 3.2.9 software was the analytic method used in this investigation. The findings show that levels of performance expectation, effort expectancy, social influence, and enabling circumstances all favorably affect the desire to embrace mobile banking, but perceived danger has the opposite effect. The desire to use mobile banking has been proven to have a favorable influence on utilization, which in turn affects customer service.

Keywords: Customer Satisfaction, Mobile Banking Intention, Usage Behaviour, Extension of UTAUT Framework, West Java.

Introduction

The importance of technology in human existence is expanding, and it has also quickly altered the manner of world civilization, one of which is via the usage of the internet in the global economy. Information technology, which was previously only accessible reaching its end customers in the latter half of the twentieth century, has now because of the growth of the internet, it has become a necessary component of modern cellphones and human existence (Tamilmani et al., 2021).

One way that knowledge improves human existence is in the interests of banks, which employ information and technology to better serve their clients. Customers' use of information and technology is crucial (Giri et al., 2019).

Through numerous current digital advances, financial inclusion has more potential for development in the current digital revolution (Gabor & Brooks, 2017). However, the fact that just 49% of Indonesia's adult population has a bank account shows that there is still room to grow in terms of the use of financial services (Windasari et al., 2022). This generation is used to using smartphones to make online credit and debit transfer payments, according to Kurnianingrum et al. (2023), since the majority of people in the productive age group have an easier time absorbing digitalization waves.

The banking sector has taken advantage of the potential offered by advancements in computing and networking for interpersonal interaction (ICT) by creating mobile banking applications that can conduct online transactions via the internet (Carranza et al., 2021). This allows for greater flexibility when checking accounts, transferring books, transferring money between accounts, and paying bills (Jain et al., 2020). In Indonesia itself, the usage of mobile banking is expanding pretty quickly (Purwanto et al., 2020). Data and mobile banking users in Indonesia are very compelling, whereas throughout the last three to five years both the number of users and the amount of transactions using mobile banking have increased (Prastiawan et al., 2021). For consumers and their users, mobile banking is a rather useful financial service. Customers or users don't need to go to an ATM to conduct transactions since this service may be accessed from anywhere using a communication device (mobile phone) that is linked to the operator's network (Rana et al., 2022). Security and convenience are presently

supported by mobile banking, which allows users to conduct transactions via bank-provided apps on cellphones (Mogaji et al., 2021). With a mobile banking application that can be accessed on a mobile device rather than a PC, the bank reacts to consumer demands (Hassan & Farmanesh, 2022).

According to Hanif & Lallie (2021), mobile banking has eliminated geographical restrictions from routine banking tasks and allowed users to conduct their transactions whenever and wherever they choose. You may also make deposits, withdrawals, payments, and general account inquiries, making this a convenient and time-saving alternative to visiting a physical bank (Lee et al., 2020). Mobile banking offers banks a platform that is lucrative, cost-efficient, and capable of offering clients high-quality financial services (Omarini, 2022). However, compared to other7 mobile apps, the number of mobile banking users in Indonesia is still very low (Purwanto & Mutahar, 2020). Alalwan et al. (2017) claim that mobile banking services are still not widely used in poor nations. Data from each bank's annual report reveals that certain Mobile Banking users are still in the minority in relation to the total number of bank customer accounts in Indonesia (Tjondro et al., 2022).

According to the Qamruzzaman (2023), digital innovation in banking services can promote business competition, benefit the national economy by increasing per capita income and employment, and give unbanked people access to financial inclusion opportunities. The comparatively huge population of Indonesia presents a client acquisition opportunity for banking businesses.

There are 196.71 million internet users in Indonesia, and the country ranks sixth in the world for the most mobile payments (Rintaningrum, 2021). Additionally, West Java Province was identified by the BPS

(Central Statistics Agency) as having the highest population and proportion of internet users on the island of Java (Kharisma et al., 2021). This phenomenon should be consistent with the West Java Province's relatively high GRDP level, where the potential for banking is also quite high (Walujadi et al., 2022). According to Sharma et al. (2020), mobile banking facilitates the extension of banking sector services and products to boost their use and engagement. In contrast to other mobile apps, mobile banking use in Indonesia is still quite low (Firmansyah et al., 2021). One issue is that 51% of Indonesia's adult population, or 91.29 million individuals, still do not have a bank account (Kharisma et al., 2022). However, financial institutions, particularly banks there, still face difficulties in finding ways to balance, optimise, and seek out new innovation opportunities can assist enterprises and the 91.3 million individuals in Indonesia who have not utilised financial services in entering the digital economy.

This study will pinpoint the variables that may affect West Javans' acceptance of and usage of mobile banking services. Merhi et al. (2020) assert that interest in user behaviour and the advantages of mobile banking technology affect the spread of mobile banking in a major way. According to Giri et al. (2019)'s study on online banking, banks employ information technology to better serve their clients, hence consumer acceptance of banking technology usage is a crucial factor. The Unified Acceptance and Use of Technology (UTAUT) framework will then be used to illustrate the issue of how the general public may accept and use Mobile Banking services to the maximum extent possible. According to Venkatesh (2022), the UTAUT model has a high degree of measurement in predicting intentions in the adoption and use of information technology.

Developing nations with strong internet penetration rates, like Indonesia, nonetheless have poor acceptance rates for mobile banking, despite Internet banking's global prominence and the trend towards it. Alalwan et al. (2018); Martins et al. (2014); Shankar et al. (2020); Tam & Oliveira (2016); Zhu et al. (2013) have all tried to explain the slow uptake of mobile banking by pointing fingers at various variables and hypotheses. According to studies on mobile banking, developed nations are the main target of research (Chaouali et al., 2016; Malaquias & Hwang, 2016; Tarhini et al., 2016).

Problem Formulation

Particularly few studies have looked at the use of mobile banking technologies in underdeveloped nations to gauge consumer satisfaction. To fill this gap, this research will investigate how the use of mobile banking, based on the UTAUT paradigm, affects customer satisfaction among people. Rehman et al. (2020) point out that deterrents to behaviour get little attention from academics. Previous research has mostly focused on driver or predictor factors. Because of this, the UTAUT model in this research also includes Perceived Risk. Academic studies examining customer satisfaction surveys as they pertain to online banking have also paid little attention to this topic (Almaiah et al., 2022; Kumar et al., 2020; Mer & Virdi, 2021). Customer Satisfaction was included in the UTAUT model to fill this gap. This architecture is added to the UTAUT model in an effort to improve prediction accuracy (Sharma et al., 2020).

This research offers a novel association between customer satisfaction and perceived risk as a predictor variable and a modified UTAUT to describe consumer acceptance behaviour intentions for technology-based services. Performance expectation (PE), effort expectancy (EE), social influence (SI), facilitating condition

(FC), behavioural intention (BI), and use behaviour (UB) are the variables employed in the UTAUT model of this research. Customer satisfaction (CS) and perceived risk (PR) are the next new factors. Before accepting a technical advance, a person may have reservations, which are expressed by the perceived risk variable. Perceived risk (PR) is an adequate and relevant component in determining the adoption behaviour towards mobile banking, according to prior studies.

Literature Review

Modified UTAUT (Unified Theory of Acceptance and Use of Technology), based on the theoretical framework of Sharma et al. (2020); Venkatesh et al. (2016) developed a modified UTAUT research model. As the foundation for the UTAUT theory (V. Venkatesh et al., 2012), Sharma et al. (2020)'s study employs the variables effort expectation (EE), performance expectancy (PE), social influence (SI), facilitating circumstances (FC), Mobile banking intention (BI), and use behaviour (UB). The additional variables are customer satisfaction (CS) to assess user views after the adoption of Mobile Banking services and perceived risk (PR) to forecast online behaviour in adopting Mobile Banking services.

Customers' expectations about the benefits they would reap from using technology to do certain activities is called performance expectation (PE) (Venkatesh et al., 2012). That is, those who think computer technology has advantages would utilise it to do financial operations (Lutfie & Marcelino, 2020).

Effort Expectancy (EE) is a metric used to evaluate how simple it is to use the system (Catherine et al., 2017). According to Merhi et al. (2020) study, if people think that mobile banking services are straightforward to use, they are more likely to use and personalize them.

The term "social influence" (SI) describes the degree to which customers believe that important people think they should use a certain piece of technology (Hsu & Lin, 2016). This includes relationships with one's family, friends, coworkers, the media, and social media, all of which have a big impact on how people perceive and act (Prastiawan et al., 2021).

Facilitating Conditions (FC), according to Catherine et al. (2017), as mobile banking is a new technology, users need help from banks in the form of instruction on how to use it securely and efficiently or customer care if they run into cellular banking issues.

Perceived Risk (PR), according to Mer & Virdi (2021), is the consumer's uncertainty about the losses they would incur in order to obtain a goal. According to Sharma et al. (2020), the choice to embrace electronic services is crucial for all clients since it will have long-term effects, which elevates the significance of risk.

Behavior Intention (BI), according to Mer & Virdi (2021), behavioural intention is the frequency with which an individual plans to make use of a certain piece of technology going forward. Venkatesh et al. (2012) also described behavioural intention as a major and advantageous determinant of technology using behaviour. Alalwan et al. (2018) assert that behavioural intention has a significant role in deciding how and if customers would utilise and adopt technology.

Use Behavior (UB), according to Farzin et al. (2021), using systems and technology effectively is described as a real state.

Customer Satisfaction (CS), according to Sharma et al. (2020), customer satisfaction (CS) is a psychological phenomenon. According to study by Alolayyan et al. (2018), consumers' implicit or explicit evaluations of a product or service's level of

fulfillment are what make up customer satisfaction (Sharma et al., 2020:4).

Hypothesis Development

Performance expectation refers to the ease, customisation, accessibility, efficiency, time, and effort savings via innovative channels (Venkatesh et al., 2020). Those who think computer technology is useful will utilise it for banking (Catherine et al., 2017). Individuals' sense of progress using BI measures (Lutfie & Marcelino, 2020). Among the many aspects impacting BI's decision to implement and make use of IS/IT systems, PE stands out (Al-Adwan et al., 2022) in general and BI in particular. According to Venkatesh et al. (2012), consumers rationally compare the advantages and utility of technology to the cost of utilising it. Thus, this research hypothesises:
H1: West Java mobile banking intention is positively and significantly affected by performance expectation.

Effort expectation (EE) measures system usability (Venkatesh et al., 2012). Of course, not everyone who uses BI is tech-savvy. We expect these users to adjust quickly and have fewer problems as a result (Catherine et al., 2017). EE and perceived ease of use Alalwan et al. (2017) have been shown to influence customers to adopt innovative channels in BI research. Alalwan et al. (2018) suggests that people may make a cognitive tradeoff between the effort needed to use technology and its rewards. The study suggested that perceived simplicity of use might motivate BI to utilise technology by enhancing perceived usefulness. BI research have corroborated this claim (Merhi et al., 2020). Therefore, this research provides a second theory:
H2: West Java mobile banking intention is positively and significantly affected by effort expectation.

Social groups such friends, family, classmates, and seniors/superiors may readily encourage people to embrace BI (Prastiawan et al., 2021). The SI dimension measures how much people anticipate them to adopt the new system (Venkatesh et al., 2020). This concept predicts BI (Venkatesh et al., 2012). Customers may raise knowledge and influence IT/IS use intentions (Alalwan et al., 2017). Hsu & Lin (2016) found that SI is the biggest determinant in BI. SI is less significant than personal innovativeness but more dynamic (Lutfie & Marcelino, 2020). SI boosts BI, which encourages BI adoption (Wulandari et al., 2022). Thus, the following hypothesis made:
H3: West Java mobile banking intention is positively and significantly affected by social influence.

Environments that make BI easier to use also inspire people. FC refers to how much an individual believes the organization and its technology infrastructure back the system's utilization (Venkatesh et al., 2012). One must have access to the internet, devices that can access the internet (such as tablets, laptops, and PCs), the appropriate software, and system expertise in order to use BI. User with access to demos, BI lessons, or live-chat assistance will utilise more. An person needs certain skills, technology, and resources to use BI services (Alalwan et al., 2018). Given the support services and resources, clients will be more inclined to use BI. FC positively affects BI and using behaviour (El-Masri & Tarhini, 2017; Merhi et al., 2020). Therefore, we hypothesise:
H4: West Java mobile banking intention is positively and significantly affected by facilitating conditions.

People see risk as uncertainty that might lead to undesirable outcomes while utilising a service or product (Mer & Virdi, 2021). That is, buying a product or service inhibits behaviour because people anticipate to lose (Pappas, 2016).

Customers have long deemed online transactions dangerous (Fortes et al., 2017). This caused PR to be the biggest obstacle to users adopting computerised services, particularly monetary ones. Sharma et al. (2020) said the situation's relevance determines risk consequences. All clients must decide whether to use electronic services since it has long-term effects. Sharma et al. (2020) noted that this model focuses on negative variables that inhibit BI acceptance, unlike previous theories and models. The absence of human connection in the BI domain, together with its heterogeneity, intangibility, ambiguity, and high uncertainty, has piqued the attention of researchers in this issue (Mer & Virdi, (Mer & Virdi, 2021). This research assumes the following hypothesis:

H5: West Java mobile banking intention is negatively and significantly affected by perceived risk.

Usage behaviour is the visible reaction to a target in a certain scenario (Venkatesh et al., 2012). It is an instant result of BI and indicates an individual's preparedness to act. BI and UB have been linked in information technology adoption research (Wulandari et al., 2020). This link has been extended to BI (Alalwan et al., 2017; El-Masri & Tarhini, 2017; Merhi et al., 2020; Sharma et al., 2020; Tarhini et al., 2016). Thus, it is believed that:

H6: Mobile banking intention can influence customers in using mobile banking services (usage behavior) positively and significantly in West Java.

Customer pleasure is psychological. It's the customer's view of how well items or services meet implied, expressed, or mandated performance (Hammoud et al., 2018). CS is the disparity between customer 'expectation' and product or service 'experience' (Venkatesh et al., 2012). Customers will be happy if perceived service performance surpasses or equals expectations. Customers will be unhappy if this doesn't happen (Alolayyan

et al., 2018). Few studies have examined the link between UB and CS (Sharma et al., 2020). Many scholars have examined the opposite link between CS and sustained intention. Gupta et al. (2018) showed that system utilisation frequency positively correlates with CS. Therefore, we hypothesise:

H7: Usage behavior can influence mobile banking customer satisfaction in using mobile banking services positively and significantly in West Java.

Research Methodology

In order to test hypotheses that have already been proposed, this study takes use of numerical data and statistical calculations, which are hallmarks of quantitative research methods. Any link between variables that results in changes in one variable without the possibility of an opposing impact is said to be causal (Patel & Patel, 2019).

PLS, or partial least squares, was employed in this study's data analysis. While PLS is better suited for making predictions, partial least squares is an indetermination factor. The PLS method makes the assumption that all variance measurements are variances that may be used to explain anything. As a linear combination of indicators, the strategy to estimating latent variables can avoid the issue of indeterminacy and offer a clear specification of the score components (Wong, 2019).

The Likert scale is the measuring scale used in this study, and the variables to be assessed are converted into variable indicators (Bairagi et al., 2019). The creation of instrument items, which may take the form of statements, is then initiated using these indications as a starting point. This research surveyed mobile banking users from BRI, Mandiri, BCA, and BNI banks to identify factors influencing mobile banking usage.

Results

Outer Model Outcomes. Indicator-latent variable relationships are specified by the outer model. Validity and reliability tests must be performed on the indicators used in order to assess the measurement model (external model) (Wong, 2019). SmartPLS 3.2.9 was used for the testing. This study's outer model is shown in the following image.
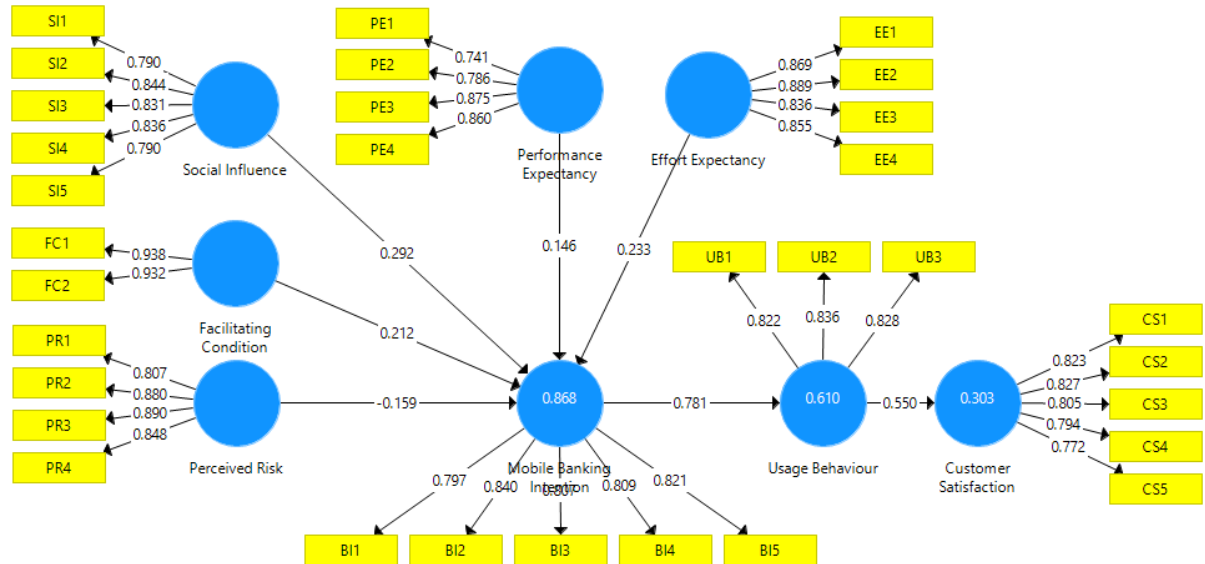
Figure 1 Outer Model SEM
Source: Data Processed (2023)

We may say that discriminant validity is present if the value of the latent variable's correlation with all other latent variables is greater than the square root of the AVE (Sarstedt & Cheah, 2019). In the table below, each latent variable's correlation value is tinted according to its square root of the AVE, which may be derived from the measurement model test.

Table 1. Fornell Lacker Criteria Test Results

	CS	EE	FC	BI	PR	PE	SI	UB
Customer Satisfaction (CS)	0.804							
Effort Expectancy (EE)	0.581	0.862						
Facilitating Condition (FC)	0.564	0.782	0.935					
Mobile Banking Intention (BI)	0.604	0.772	0.832	0.815				
Perceived Risk (PR)	-0.589	-0.686	-0.608	-0.724	0.857			
Performance Expectancy (PE)	0.476	0.763	0.776	0.704	-0.555	0.818		
Social Influence (SI)	0.597	0.765	0.778	0.778	-0.669	0.778	0.819	
Usage Behaviour (UB)	0.550	0.759	0.654	0.781	-0.635	0.674	0.743	0.829

Source: Researchers Processed, 2023

According to the data in the table above, there is a positive relationship between the square root of the AVE and the correlation value of a latent variable with other constructs. In order for the Fornell and Lacker criterion for latent constructs to provide a reliable discriminant validity value in the study of discriminant validity (Wong, 2019). The Heterotrait-Monotrait Ratio (HTMT) correlation test is another

option for assessing discriminant validity. If the HTMT number is less than 0.9, as shown in the table below, we may conclude that the test was accurate (Sarstedt & Cheah, 2019).

Table 2. Heterotrait-Monotrait Ratio (HTMT) Correlation Test Results

	CS	EE	FC	BI	PR	PE	SI	UB
Customer Satisfaction (CS)								
Effort Expectancy (EE)	0.665							
Facilitating Condition (FC)	0.656	0.797						
Mobile Banking Intention (BI)	0.691	0.789	0.760					
Perceived Risk (PR)	0.668	0.778	0.703	0.826				
Performance Expectancy (PE)	0.559	0.787	0.721	0.741	0.651			
Social Influence (SI)	0.684	0.782	0.797	0.603	0.761	0.709		
Usage Behaviour (UB)	0.666	0.820	0.805	0.651	0.774	0.842	0.704	

Source: Researchers Processed, 2023

Previously conducted discriminant validity studies suggest that 32 statement items are suitable for usage as research instruments. Good discriminant validity is shown by this number for the indicators included in this investigation. If there is a good connection between the scores received from instruments assessing ideas or measuring concepts using various approaches, then convergent validity has been shown. One way to determine whether a measurement model is legitimate is to examine the correlation between indicator scores and variable scores (Voros et al., 2018). One way to evaluate the precision of a test or group of tests is via the concept of convergent validity (Wong, 2019). Factor loading (FL) will serve as the study indication (Ghozali, 2021). The measurement is considered reliable if the FL value is more than 0.7 (Sarstedt & Cheah, 2019). According to Villalva (2021), convergent validity is established when an item's variable's AVE (Average Variance Extracted) value is greater than 0.5. In addition, the reliability test is the distance at which two measurements of the same item get the same results (Atmowardoyo, 2018). Composite Reliability and Cronbach's Alpha are two options for doing a reliability analysis in Partial Least Square (PLS). To be deemed trustworthy, each variable has to have a Cronbach alpha value more than 0.60 and a composite reliability value greater than 0.70 (Evermann & Tate, 2016). We ran a convergent validity and reliability test using SmartPLS version 3.2.9; the findings are shown below.

Table 3. Result of Outer Model Test

Variable	Constructs Statement	Validity Test			Reliability Test		
		Loading Factor	AVE	Result	Cronbachs Alpha	Composite Reliability	Result
Performance Expectancy (PE)	I may utilize internet banking services to do my chores.	0.741	0.668	Valid	0.833	0.889	Reliable
	I could get my work done faster using online banking services.	0.786		Valid			
	My productivity would rise if I used online banking.	0.875		Valid			
	I could do better if I used online banking.	0.860		Valid			

Variable	Constructs Statement	Validity Test			Reliability Test		
		Loading Factor	AVE	Result	Cronbachs Alpha	Composite Reliability	Result
Effort Expectancy (EE)	I'd have a simple and comprehensible experience with online banking.	0.869	0.744	Valid	0.885	0.921	Reliable
	I could easily pick up the skills necessary to use online banking.	0.889		Valid			
	I would find it simple to utilize online banking.	0.836		Valid			
	I believe I could easily learn how to utilize online banking.	0.855		Valid			
Social Influence (SI)	I've heard from people I trust that I should utilize online banking.	0.790	0.670	Valid	0.877	0.910	Reliable
	I should utilize online banking, according to those who have control over my decisions.	0.844		Valid			
	In my community, people who utilize online banking services are more respected than those who do not.	0.831		Valid			
	People who utilize online banking services in my community are well-known.	0.836		Valid			
	In my circle, using online banking services is a sign of prestige.	0.790		Valid			
Facilitating Condition (FC)	I have everything I need to use online banking.	0.938	0.874	Valid	0.856	0.933	Reliable
	I am equipped with the knowledge required to use online banking.	0.932		Valid			
Perceived Risk (PR)	Internet banking would be dangerous to use.	0.807	0.734	Valid	0.879	0.917	Reliable
	Using online banking might be risky.	0.880		Valid			
	I believe that adopting online banking would introduce a lot of uncertainty.	0.890		Valid			
	By using online banking, I run a general risk.	0.848		Valid			
Mobile Banking Intention (BI)	In the next months, I'll be using online banking.	0.797	0.664	Valid	0.874	0.908	Reliable
	I anticipate using online banking in the next months.	0.840		Valid			
	In the next months, I want to utilize the online banking system.	0.807		Valid			
	I'm going to use online banking to check my account's balance.	0.809		Valid			
	I want to send money via the online banking system.	0.821		Valid			
Usage Behaviour (UB)	My account is often managed using online banking.	0.822	0.686	Valid	0.772	0.868	Reliable
	I often send and receive money via online banking.	0.836		Valid			
	I often make payments using online banking.	0.828		Valid			
Customer Satisfaction (CS)	My expectations were not met by internet banking.	0.823	0.647	Valid	0.864	0.902	Reliable
	I am pleased with my whole online banking experience.	0.827		Valid			
	I have been happy with my whole online banking experience.	0.805		Valid			
	Overall, my experience with utilizing online banking has been positive.	0.794		Valid			

Variable	Constructs Statement	Validity Test			Reliability Test		
		Loading Factor	AVE	Result	Cronbachs Alpha	Composite Reliability	Result
	The whole experience of utilizing online banking has been wonderful.	0.772		Valid			

Source: Researchers Processed, 2023

Table 3 shows that when considering the factors of Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, Perceived Risk, Mobile Banking Intention, Usage Behaviour, and Customer Satisfaction, the average value achieved is more than 0.5. After ensuring that each research indicator item has a loading factor score > 0.7 and the AVE value for every study variable > 0.5, convergent validity has been established. The 32 valid statement items have therefore passed the criteria for convergent validity and may be utilised as research instruments. Furthermore, the data

has good reliability since Every variable has a Composite Realibility and Cronbach's Alpha value above 0.70 and 0.60, respectively, as shown in the table above. All responses to the research questionnaire's variables were declared to be credible or consistent.

Inner Model Outcomes. It is important to evaluate the structural model before looking at the roles of other hidden variables (inner model). The results of the bootstrapping analysis in this investigation are as follows:
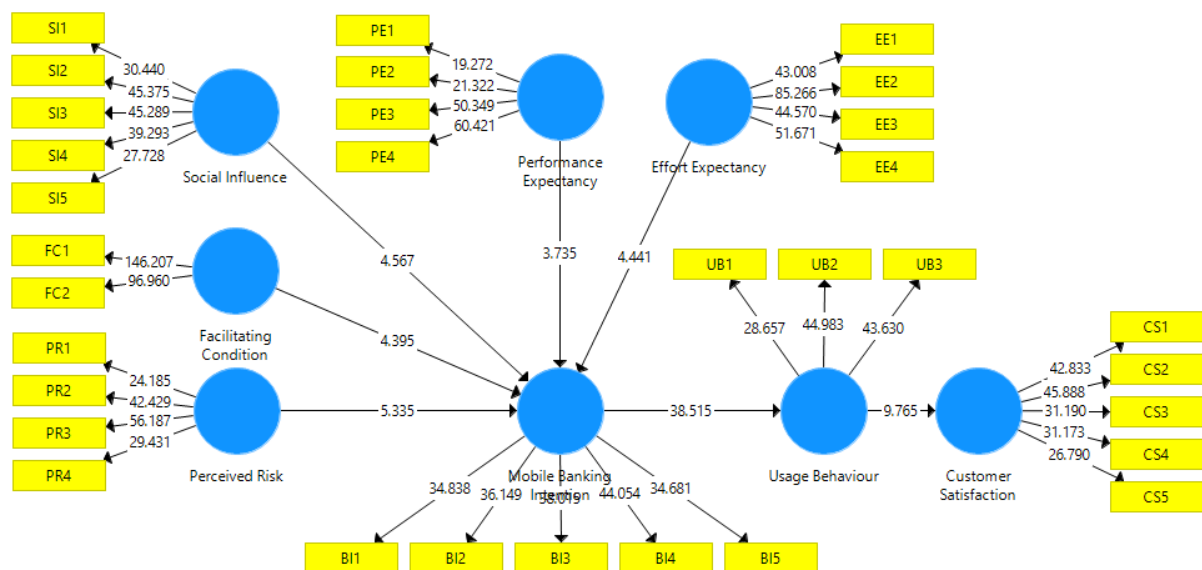

Figure 2. Inner Model Structural Equation Modelling
Source: Data Processed (2023)

Using the t-statistic value, an inner model is evaluated to see whether or not the observed impact is statistically significant. The t-statistic may be determined using the bootstrapping features of SmartPLS. The t-statistic value in the path coefficient table, which was produced using SmartPLS 3.2.9 software between the independent variable, the dependent variable, and the mediator variable, shows that the predictive model

was significant in the structural model test. The structural measurement evaluation reveals that the R-Square values of 0.868 for the mobile banking intention variable, 0.610 for the usage behaviour variable, and 0.303 for the customer satisfaction variable all fall into the strong, moderate, or poor categories, respectively.

As an additional metric for evaluating the PLS model's efficacy, the predictive importance of the Q-square for the built model was included in. The Q-squared statistic evaluates how well the estimated model and parameters match the observed data. For a model to be predictively relevant, its Q-square value must be more than zero, while a non-zero number indicates that the model does not have predictive relevance (Villalva, 2021). All three models have useful predictive values since Q^2 (predictive relevance) values of 0.193, 0.570, and 0.416 are all larger than 0 (zero).

There are three ways to assess the internal model. Examining the R^2, Q^2, and GoF data are the three stages. Goodness of Fit (GoF) analysis is the last step. The following formula (Tenenhau, 2004 in Ghozali & Latan, 2017) must be used by hand when looking for the GoF value in PLS. Small GoF = 0.1, medium GoF = 0.25, and big GoF = 0.38, as stated by (Evermann & Tate, 2016). The Goodness of Fit score is 0.6496

(big category in predictive models), therefore it can be stated that all indicators fulfil the conditions for providing consistent results. The robustness (strength and quality) of the generated model is established by R^2, Q^2, and GoF testing, allowing for hypothesis testing (Wong, 2019).

Evaluation of the structural model's predictive power may be done with the use of the t-value that indicates the relationship between the two variables. Patel & Patel (2019); Voros et al. (2018) state that in order to test the hypothesis, the t-statistic value (t0) must be compared to the t-table value (tα). When the value of time interval t0 is greater than the value of time interval tα, Hα is accepted as the alternative null hypothesis while H0 is rejected. To evaluate the structural model's efficacy, one may use the t-statistic value from the SmartPLS output's path coefficient table as a stand-in for the prediction model's significance.

Table 4. SEM's Inner Model Test Output

	Variable Relationship	Original Sample (O)	TStatistic (| O/STDEV |)	Critical Value	P Values	Conclusion
Performance Expectancy -> Mobile Banking Intention	PE → BI	0.146	3.735	1.65	**0.000**	**H1 accepted**
Effort Expectancy -> Mobile Banking Intention	EE → BI	0.233	4.441	1.65	**0.000**	**H2 accepted**
Social Influence -> Mobile Banking Intention	SI → BI	0.292	4.567	1.65	**0.000**	**H3 accepted**
Facilitating Condition -> Mobile Banking Intention	FC → BI	0.212	4.395	1.65	**0.000**	**H4 accepted**
Perceived Risk -> Mobile Banking Intention	PR → BI	-0.159	5.335	1.65	**0.000**	**H5 accepted**
Mobile Banking Intention -> Usage Behaviour	BI → UB	0.781	38.515	1.65	**0.000**	**H6 accepted**
Usage Behaviour -> Customer Satisfaction	UB → CS	0.550	9.765	1.65	**0.000**	**H7 accepted**

Source: Researchers Processed, 2023

The researcher in aku with 5% (one-way test, since this study model was already consistent and well-fit before its publication) and df(400) = 1.65. The t-table for this investigation was calculated to be

1.654. The null hypothesis (H0) is tested using the p value and accepted or rejected based on table above. Assuming the p-value is more than 0.05, we accept the alternative hypothesis (H1) and reject the null

hypothesis (H0) if it is less than 0.05. After the null hypothesis was rejected, all of the other hypotheses (H1, H2, H3, H4, H5, H6, and H7) put up in the study were validated.

Discussion

This study's results are likely to be both similar and distinct to those of other studies. The study's results, listed below, will be analysed in the context of the proposed hypotheses.

Banks should think about improving their present BI systems to provide users with more opportunity to improve their performance, since PE is a major and strong predictor of BI to embrace mobile banking. In other words, financial institutions should prioritise spending their resources where they would have the most impact on their clients. Banks should market their BI services with an emphasis on their efficiency, efficacy, and convenience (Venkatesh et al., 2012). In terms of convenience, personalization, accessibility, efficiency, time savings, and effort saved, the performance expectation is the set of benefits and utilities that may be achieved via the use of innovative channels (Venkatesh et al., 2020). In other words, those who value the convenience of digital banking report using it more often than those who do not (Lutfie & Marcelino, 2020). It is a reflection of how much progress people think they've made utilising BI metrics (Al-Adwan et al., 2022). Both in the context of BI (Alalwan et al., 2017; Sharma et al., 2020) and in general, Among the many elements that influence BI's decision to implement and make use of IS/IT systems, PE stands out. Catherine et al. (2017) state that consumers engage in a calculated evaluation of the value of the utilities and advantages they get from technology vs the cost they incur.

The adoption of BI in mobile banking was also shown to be influenced by EE. That is to say, the system's user-friendliness will have an effect on clients who perceive a higher risk in using BI. Due of BI's negative

public image, it's important for managers to stress how simple it is to implement. The effort expectancy measures how easy a system is to operate (Venkatesh et al., 2012). Users of BI vary in their proficiency with computers. Therefore, it stands to reason that these consumers will have a smoother transition and fewer issues overall (Alalwan et al., 2017). Previous studies with BI have shown the significance of EE (Martins et al., 2014; Merhi et al., 2020) coupled with the associated component of how user-friendly it is (Alalwan et al., 2017, 2018) in persuading clients to embrace new media. Merhi et al. (2020) hypothesizes that users may make a mental trade-off between the benefits they get from using the technology and the amount of work required to do so. According to Catherine et al. (2017), If BI's could see how easy it was to implement new technology, they may be more likely to do so. Several empirical investigations (Alalwan et al., 2017; Sharma et al., 2020) corroborate this idea within the framework of BI.

The importance of SI was also shown in this research. This shows how crucial the influence of peer pressure on the decision to embrace BI is for practitioners. Therefore, banks should emphasise BI's benefits among their marketing efforts, and highlight social media platforms. In addition, banks may utilise eWOM platforms like Facebook and Twitter to spread good news about BI. According to research by Prastiawan et al. (2021), BI is widely adopted because of the pervasive impact of others in one's social network. According to research by Venkatesh et al. (2012), the SI dimension measures how much people believe that others expect them to utilise the new system. Venkatesh (2022) find that this construct predicts BI. Customers may have a significant role in generating interest in and shaping plans for IT/IS (Alalwan et al., 2017). Hsu & Lin (2016) conducted a study in South Korea showing that SI is the most significant contributor to BI. When comparing SI to individual inventiveness, the former is less powerful while the latter is more fluid

(Alalwan et al., 2018). In addition, Sharma et al. (2020) found that BI adoption was favourably influenced by SI, which in turn boosted BI. Researchers by Wulandari et al. (2022) discovered that SI predicts and promotes BI via user friendliness and perceived utility. Based on their empirical research into the factors that motivate businesses to invest in BI services, Lutfie & Marcelino (2020) found that although Consumers' aspirations to adopt BI are indirectly influenced by SI and trust, while BI is not affected by EE. Several studies have shown that consumer BI is influenced by SI when it comes to using BI channels (Alalwan et al., 2017, 2018; Sharma et al., 2020).

It was discovered that FC is a variable that has a constructive effect on consumers' propensity to embrace BI. This demonstrates the significance of accessible support services and resources in shaping adoption intent. As a result, financial institutions should provide details on their websites concerning customer assistance options for Internet Banking in the event that customers have difficulties. Services like these often don't cost customers anything and include things like live chat, email, and a database of frequently asked questions and their answers. The existence of favorable conditions is another factor that motivates BI users. To what degree a user is certain that the system's usage is supported by the underlying organisation and IT is often referred as "functionality confidence" (FC) (Venkatesh et al., 2012). Each business intelligence (BI) user needs internet connectivity, a device that can connect to the internet (e.g., a tablet, laptop, or desktop computer), the appropriate software, and the know-how to use the system correctly. Providing users with helpful FC like demos, BI lessons, and live chat assistance increases their likelihood of adopting certain features. It takes a certain set of abilities, tools, and means to make full use of BI services (Alalwan et al., 2017). Providing customers with a wide range of useful products and services increases the

likelihood that they will utilize business intelligence. FC is correlated favourably with both BI and consumption patterns, as indicated by studies (El-Masri & Tarhini, 2017; Merhi et al., 2020; Tarhini et al., 2016).

Customer PR significantly predicted future business intelligence adoption, according to this research. Therefore, financial institutions must implement comprehensive security measures and guarantee their BI platform is technically sound to protect its clients. Financial institutions must pay close attention to security, confidentiality, and safety concerns. Financial institutions should do more to reassure prospective BI customers that using their services is safe. One way to do this is through raising awareness about the need of keeping sensitive data safe. In addition, financial institutions need to address customer worries about privacy invasion, cybercrime, and transaction errors. To resolve the issue, financial institutions may have to provide more funds to this sector. To further reassure their consumers about using the BI platform, banks can provide effective risk minimization methods including money return guarantees. The administration may institute policies to implement cutting-edge safety measures, as well. Banks should also think about implementing state-of-the-art steganographic and cryptographic methods for data and fund management. Individuals' sense of a service's or product's potential for unfavourable outcomes is known as "perceived risk" (Pappas, 2016). In other words, the prospect of financial loss influences a person's decision not to buy a product or service (Fortes et al., 2017). Consumers have always been wary of making even the most basic purchases online (Mer & Virdi, 2021), mostly due to the perceived security risks involved. As a result, it was hypothesised that public relations is the primary impediment to consumers' use of electronic services, particularly those that include financial transactions. According to Sharma et al. (2020), the significance of a given scenario

may be used to gauge the potential impact of hazards. All clients should carefully consider the long-term consequences of their choice regarding the use of technological services. This highlights the significance of risk even more (Mer & Virdi, 2021). Research using the PR framework abounds. In contrast to competing theories and models, Pappas (2016) approach places special emphasis on the barriers to BI acceptance. Because of the lack of human interaction and the fact that BI is characterised by heterogeneity, intangibility, vagueness, and high uncertainty, researchers have taken an interest in this aspect (Fortes et al., 2017; Mer & Virdi, 2021; Sharma et al., 2020)

According to Venkatesh et al. (2012), use behaviour is "the overt, observable response to a situation with respect to a target." It's a direct result of brain injury that shows how prepared someone is to do some kind of action (Sharma et al., 2020; Tarhini et al., 2016). A lot of studies on IT adoption have shown evidence between BI and UB (Alalwan et al., 2017; El-Masri & Tarhini, 2017; Merhi et al., 2020) all extend this connection to the BI setting.

Satisfaction as a customer is a term used to describe an emotional reaction. Customer satisfaction is defined as "the extent to which a product or service provides the benefits, features, or qualities described in the marketing materials" (Hammoud et al., 2018). Customers' satisfaction (CS) is measured by the gap between their expectations and their actual encounter with the service or product (Venkatesh et al., 2012). Customers will be happy if the quality of the service they get is either better than they expected or about the same. This is essential if you want to keep your customers happy (Alolayyan et al., 2018; Sharma et al., 2020). Despite the obvious importance of the link between mobile banking experience (CS) and UTAUT (UB), surprisingly little study has been conducted to give empirical proof of this connection (Gupta et al., 2018). Many researches have looked at the inverse link between CS and sustained intention (Alolayyan et al., 2018; Hammoud et al., 2018; Sharma et al., 2020). There is a positive correlation between CS and system utilization, as measured by use frequency, according to research by (Hammoud et al., 2018; Sharma et al., 2020) also conducted study in the e-learning setting and discovered a substantial correlation between UB and CS. The created conceptual model emphasized the significance of distinguishing between assessing the features of users in adopting m-banking services. It also focused entirely on users' experience as antecedents of m-banking adoption by UTAUT framework.

Conclusions

Finding out what factors determine the likelihood that people in West Java would utilize mobile banking services was the driving force for this study. Incorporating consumers' sense of security and happiness into the UTAUT model is an extension of that concept. Despite having one of Indonesia's highest internet penetration rates, West Java is only just beginning to prepare for broad adoption of mobile banking. With the help of 400 West Javanese participants, this study developed a conceptual model that explains 86.8% of the variance in the extended UTAUT model. The desire to use mobile banking was shown to be positively affected by the degrees of performance expectation, effort expectations, social influence, and enabling conditions, and negatively affected by perceived risk. Intention to use mobile banking was also shown to influence use behaviour, which in turn influenced customer service. This research has made theoretical and practical advances in our understanding of consumers' motivations for adopting mobile banking.

Implications

This research lends credence to the UTAUT framework in the context of today's consumers. The UTAUT model was greatly improved by the incorporation of PR and

CS. Customers' intentions to adopt BI's were shown to be significantly influenced by the impact of these two factors. This highlights the significance of adapting technology adoption strategies to specific user environments. In order to better understand factors that may impact the perspective on ideas in a variety of ways, it is crucial to test their generalizability with new research models and instruments (Giri et al., 2019; Sharma et al., 2020; Venkatesh et al., 2012). This is especially true when problems arise in previously held beliefs, since this might lead to the development of new insights.

Limitations

While the theoretical foundation upon which the suggested research paradigm is built is substantial, the study is not without its flaws. Please keep these disclaimers in mind as you evaluate the findings of this research. Due to the fact that convenience (non-probability) sampling was used in this research, it is important to proceed with care when extrapolating the findings. The sample is large and diverse, but the majority of respondents had advanced degrees even though this is not a requirement for participation. Another possible source of prejudice is clients with better technical expertise. Second, the scope of this research was limited to a single region (West Java, Indonesia). Different technology (such mobile banking) or international studies might be explored in future research. Third, despite this study extending the UTAUT model to add PR, the research model's explanatory power (76 percent) shows that further development is feasible.

Recommendations

Therefore, other factors (such as familiarity with the bank) may be included in future studies to boost the generalizability of the UTAUT model. All five of Hofstede's cultural dimensions might be taken into account in future research. Finally, although the study's goals and objectives were

accomplished and the quantitative research strategy was used, a mixed-method approach would have bolstered the results. Despite these caveats, this study's findings might shed light on the factors that impact individuals' choices to use business intelligence (BI) for marketing, banking, and academic purposes. The study's suggestions for future research provide scholars with daunting opportunities to advance the field in the years ahead.

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