

## THE INFLUENCE OF BEHAVIORAL INTENTION ON MOBILE BANKING USE BEHAVIOR AMONG BCA CUSTOMERS IN JAKARTA (Case Study in Indonesia)

Batara Adinda br. Tampubolon  
Trisakti School of Management  
Kyai Tapa 20 Grogol Petamburan, 11440 West Jakarta, Indonesia  
Email: bataraadinda21@gmail.com

Vita Briliana  
Trisakti School of Management  
Jl. Kyai Tapa No.20 Grogol Petamburan Jakarta, Indonesia  
Email: vita@stietrisakti.ac.id

### ABSTRACT

*Mobil banking M-banking is a new e-banking option that allows clients to directly contact with their bank and access financial services via their smartphones. Mobile banking is still in its infancy and needs further investigation, especially in emerging country where technology uptake is slow. The purpose of this study is to investigate the level of influence that perceived usefulness (PU), perceived ease of use (PEOU), trust (TR), perceived security (PS), perceived privacy (PPR), and technology competency (TC) have on the behavioural intention to use mobile banking (BI) as a mediating variable on use behaviour (UB) among BCA customers who use BCA mobile banking in DKI Jakarta. This research collects data from BCA customers and active BCA mobile banking users in DKI Jakarta. We used purposive sampling to select the sample for this research. A total of 257 individuals participated in the survey by handing out questionnaires to BCA customers and active BCA mobile banking users in DKI Jakarta. The statistical analysis used SmartPLS. The research findings show that BI impacts PU, TR, PPR, and TC through their respective effects. e is no correlation between the PEOU variable and the BI variable. There is no correlation between the PS variable and the BI variable. The business intelligence variable has an effect on the UB mobile banking service for BCA customers in DKI Jakarta.*

Keywords: Perceived Usefulness, Perceived Ease of Use, Trust, Perceived Security, Perceived Privacy, Dan Technology Competency, Behavioral Intention to use m-banking, Use Behavior

### INTRODUCTION

The increase in Indonesia's population is supported by a growing number of people from all regions of Indonesia, including DKI Jakarta. Presently, Jakarta has experienced a swift and substantial increase in its population. The Central Statistics Agency reports that the population of DKI Jakarta has attained 10.64 million individuals. The upward trend in DKI Jakarta's population necessitates individuals to meet various living needs to support their daily activities, including clothing, food, shelter, and more. Moreover, the internet has become a primary necessity for Indonesian society, supporting daily life activities. This is evidenced by the Indonesia Digital Report from We Are Social, which indicates that the number of internet users in Indonesia as of January 2023 reached 23 million. The Covid-19 pandemic in 2019 has significantly influenced individuals to engage in online transactions through the use of the internet and technology. This includes purchasing products on e-commerce platforms, ordering rides through online transportation services, buying food and beverages, paying bills, tuition fees, and more, all done online.

The ease of internet connectivity and the continuous advancement of technology have led to changes in people's behavior towards cashless transactions, necessitating individuals to adapt to online transactions. Furthermore, in the post-pandemic era, online transactions do not require direct contact between buyers and sellers, making it advantageous and less strenuous. Various types of payments, including mobile banking, facilitate these online transactions. Mobile payment refers to the application of advanced information technology to enable financial transactions via mobile devices. Mobile payment behavior refers to the use and adoption patterns of consumers who replace conventional payment methods, such as cash and credit cards, with mobile payment systems (Trütsch, 2016).

Mobile banking, widely regarded as a critical component of mobile financial services, has already been adopted and implemented by new generation banks and other financial institutions around the world (Haider, Changchun, Akram, & Hussain, 2018). Today, mobile banking has become essential in people's daily lives. This is due to the increasing time constraints faced by individuals who seek convenience anytime and anywhere with banking services. Therefore, the presence of mobile banking addresses the needs of the community, including the increasingly massive usage by Generation Z since the Covid-19 pandemic hit Indonesia in March 2020, as reported by ATM Bersama's official website.

One of the mobile banking applications in Indonesia is BCA Mobile Banking, a product of PT Bank Central Asia Tbk (BCA), accessible to customers through smartphones. BCA Mobile Banking (m-BCA) has provided many conveniences to its customers, including time savings by eliminating the need to go to the bank and queue for banking transactions, as well as real-time monitoring of transactions and account balances. The existence of BCA Mobile Banking has made banking transactions more practical, fast, and easy. According to Theresia Agatha and Fakhri Rezy as published on Voi.id, Bank BCA recorded a transaction volume of 6.9 billion in the first quarter of 2023, a 27.3 percent increase compared to the same period in 2022. This was due to the expansion of online channels through consistent investment in multi-channels and the growth of the customer base. As reported on the bca.co.id website, the transaction volume of BCA Mobile Banking reached more than 3 billion transactions in the first two months of 2023, a 54.4 percent year-on-year growth. This indicates that BCA Mobile Banking meets the community's needs for banking transactions. BCA's ability to maintain product and service quality, thus enhancing customer loyalty, has helped BCA win

awards given by Infobank Magazine and Marketing Research Indonesia (MRI) on January 25, 2023, at the SLE Awards 2023 (Satisfaction, Loyalty, & Engagement Awards 2023).

Based on data from ICSA, BCA has maintained its position from 2013 to 2017 in the mobile banking product category. However, in 2022, the m-BCA Top Brand Index experienced a decline but still managed to achieve the highest score compared to its competitors. Eventually, in 2023, the m-BCA Top Brand Index rose again to a TBI score of 47.90 percent. Compared to m-BCA, BRI Mobile showed an increase in brand index from 2021 to 2023 consecutively. To address this, BCA must resolve issues with the BCA Mobile Banking application system and improve its services to retain its customers. The decrease in m-BCA's brand index in 2022 was due to several factors identified by the author. The first factor is the system errors in m-BCA. According to Alinda Hardiantaro as published online through Kompas.com on October 2, 2022, BCA customers faced difficulties in accessing BCA Mobile Banking, even unable to transact using it. The same complaints were voiced by BCA Mobile Banking users, as reported by Bambang Ismoyo through Tribunnews.com on December 27, 2022, stating that customers complained about BCA Mobile Banking services experiencing disruptions indicated by the red indicator in the m-BCA application, preventing transactions such as money transfers. These complaints were conveyed by BCA Mobile Banking users via the social media platform Twitter.

Another factor is the various complaints and decreased ratings of BCA Mobile Banking (BCA Mobile) on the Google Play Store. This is due to numerous complaints from customers, ranging from inability to transact with BCA Mobile Banking, failed online registration processes, frequent application maintenance, failures of the BCA Mobile Banking application in facial recognition scans, and more. These complaints have persisted into 2023, with similar grievances related to difficulties faced by customers as m-BCA users in conducting transactions using BCA Mobile Banking. Ensuring customer satisfaction is essential for BCA. Responding promptly to complaints, improving services facing challenges, ensuring smooth transaction activities, and having advanced technology are factors that customers consider when using the services offered. Thus, customer satisfaction and loyalty to the services can be achieved.

The urgency of this research lies in the changing interests and behaviors shaping the habits of using BCA Mobile Banking in DKI Jakarta. This is because of the increasingly sophisticated technology meeting human transaction needs and introducing various features and service products in mobile banking that are more diverse and user-friendly.

This research is a development of the concept from the study conducted by Akhter et al. (2020) titled "Exploring customer intentions to adopt mobile banking services: evidence from a developing country," which identified factors influencing customers' intentions to use mobile banking. However, the study did not show the effects on mobile banking usage in the future. Yet, according to the study by Koksai (2016), emphasizing the importance of conducting future studies that also measure the causality between behavioral intention to use mobile banking and use behavior. Since that study did not measure the causal relationship between behavioral intention to use and use behavior, this research expands the concept by adding a new variable, which is use behavior from Penney et al. (2021) study titled "Understanding Factors That Influence Consumer Intention to Use Mobile Money Services: An Application of UTAUT2 With Perceived Risk and Trust." Companies must be able to assess the influence of factors such as perceived usefulness, perceived ease of use, trust, perceived security, perceived privacy, and technology competency on behavioral intention, as well as the influence of behavioral intention on use behavior, so companies can see how committed individuals are to continue using a technology referring to usage quality.

Research emphasizes the importance of examining the adoption intentions of M-banking across various cultures, especially in developing nations like Indonesia that have many archipelagic regions. Few studies have examined the uptake and use of M-banking, with most focusing on internet banking (Chawla and Joshi, 2017). However, most literature on M-banking focuses on external factors rather than consumer behavior (Goswami, 2017), emphasizing the necessity to study behavioral determinants of adoption intention. This research aims to investigate the correlation between the behavioural intention of BCA mobile banking users to use the service (BI), and the impact of variables such as trust (TR), perceived security (PS), perceived privacy (PPR), perceived ease of use (PEOU), and technology competency (TC) on the use behaviour (UB) of BCA customers in DKI Jakarta. It adds to what is already known about the links between behavioral intentions and the actual use of mobile banking services, as well as the elements that influence customers' intentions to do so.

## **LITERATURE REVIEW**

Widespread use of mobile payment systems increases the likelihood of consumers pursuing these systems. An individual's intention to use, also known as behavioural intention, refers to the likelihood that they will act in a particular way due to their desire and resolve (Ajzen, 2002). The literature used the terms "intention to use" and "behavioral intention" interchangeably. Davis (1989) advances the idea that one's intent to use something directly influences their subsequent actions. Most research in technology adoption relies on TAM as a theoretical framework; hence, it is an essential part of the literature on information technology adoption. Technology Acceptance Model (TAM) developed out of the theory of the diffusion of innovations (Rogers, 2003). TAM is a theoretical model developed to identify and analyze an individual's perception in accepting technology, which will then influence them to use that technology. According to Buabeng-Andoh (2018), there are two belief constructs in TAM: perceived usefulness and perceived ease of use, which are perceived to influence users' intention to use technology (Behavioral Intention). Although users may perceive a technology as useful, they may also perceive it as difficult to use. In other words, the performance benefits of technology outweigh the effort required to adopt it. This study applies the Technology Acceptance Model (TAM) to investigate the impact of customer intentions on the adoption of mobile banking services, as well as the relationship between behavioral intentions and usage behavior.

### **Use Behavior**

Use behavior refers to the intensity of technology usage by a user. The emergence of user interest results from an individual's perception of technology's ability to enhance their job performance, which consequently impacts their decision to use that technology (Venkatesh et al., 2012). According to Venkatesh et al. (2003), use behavior is defined as an individual's positive or negative feelings when using a system. Use behavior is defined as the integration of information involving physical and mental

actions and is stored in an individual's existing knowledge base (Wilson, 2000). In this study, "use behavior" refers to the actions customers take to utilize mobile banking services after evaluating specific factors.

### **Behavioral Intention to use m-banking**

Chan et al. (2022) define behavioral intention to use as the probability of customers engaging in online transactions via mobile devices. Jiang et al. (2000) define behavioral intention to use as the user's intention to utilize a system prior to actual usage and its forecast for future utilization. Additionally, behavioral intention refers to the users' perceived probability of utilizing something in a specific context (IOM, 2002). Understanding the new system, its functionalities, advantages, and the opinions of others about it are crucial factors that influence users' decision to accept or reject it (Wang et al., 2006). In this study, behavioral intention refers to the strength of an individual's intention to engage in a given behavior.

### **Perceived Usefulness**

An important factor in the banking industry's adoption of technology is its perceived usefulness. The common assumption is that people will embrace a new technology if they find it beneficial (Premkumar et al., 2008). According to McLean et al. (2020) perceived usefulness is the extent to which an individual views the technology system used as capable of enhancing task efficiency and productivity in their daily activities in a timely manner. In other words, perceived usefulness is defined as the extent to which system users are optimistic that their work productivity and effectiveness can be improved through system usage (Kabir, Saidin, and Ahmi, 2017).

### **Perceived Ease of Use**

Perceived ease of use refers to the extent to which an individual believes that technology will necessitate less effort for utilization (Venkatesh and Davis, 2003). If an individual perceives a mobile payment application as user-friendly, they are more likely to attempt its use. The increased propensity to utilize mobile payment stems from the anticipation that it offers greater ease and advantages to the user. Numerous empirical studies in the literature illustrate the positive impact of digital convenience and usefulness on behavioural intention or intention to use. Rivera et al. (2015) demonstrated that perceived usefulness and ease of use significantly influenced timeshare owners' intentions to utilize a mobile application. Furthermore, research identifies perceived ease of use as the primary factor influencing technology adoption (Bonn et al., 2016). The argument and findings substantiate the Technology Acceptance Model (TAM), which posits an indirect relationship between perceived ease of use and behavioral intention, as proposed by Davis (1989).

### **Trust**

As defined by Jang and Kim (2023), trust is the willingness of one party to depend on another's actions, predicated on the belief that the latter would address their requirements, notwithstanding the absence of visibility or control. Trust encompasses the reliability, veracity, robustness, and capacity of an individual's assessment of a person or organization (Castelfranchi and Falcone, 2000). Clients tend to trust electronic banking channels when they perceive conventional banking methods as reliable (Hongyoun Hahn and Kim, 2009). A principal obstacle to customer acceptance of electronic banking services is the deficiency of trust concerning system security, which is a crucial factor affecting users' attitudes and behavioral intentions to adopt e-services. Trust comprises three tiers: trust in banks, trust in the internet, and trust in mobile banking information (Yousafzai et al., 2003). In these study Trust is defined as "the extent to which one party is willing to empathize with another, believing that, despite constraints in oversight and regulation, the other party will perform the actions that the trustor values most."

### **Perceived Security**

Chellappa & Pavlou (2002) define perceived security as the individual's subjective probability that their personal information will remain unseen, unrecorded, unaltered, or unaccessed by unauthorised persons. Ha and Phan (2018) revealed that perceived security is an individual's perception of security when using a website for transactions. According to Belanche-Gracia et al. (2015), Suh et al. (2015), and Kumar et al. (2018), the essence of felt security is not a fixed evaluation of threat but rather an ever-changing interplay between agency, susceptibility, and faith. A person's expectations, shared narratives, and prior experiences shape the lens through which they view and engage with technological systems. The degree to which "customers" feel protected from these "threats" is known as their perceived security (Yousafzai, Pallister, & Foxall, 2003). "Perceived security" refers to a consumer's perception of the safety of using a specific mobile payment method (Shin, 2009).

### **Perceived Privacy**

According to Cheung and Lee (2001), perceived privacy is defined as a user's perception of a provider's ability to protect the personal information collected from their electronic transactions or usage. According to Yousafzai et al. (2003), perceived privacy is an individual's perception of their ability to control and monitor their personal information. According Zhang, Lu, and Kizildag (2018), perceived privacy is an individual's ability to control their collected and used personal information in transactions. In order to use the core features of certain mobile payment apps, users may be required to divulge personally identifiable information. According to Wottrich et al. (2018), app value has a greater impact than privacy concerns. Based on these findings, it appears that the advantages of sharing personal information through mobile payment apps far outweigh any potential drawbacks, such as concerns about data privacy. As a result, users' personal data is now the primary means of exchange for mobile payment apps, as well as for other types of mobile applications including social media, messaging, and entertainment (Wottrich et al., 2018).

## Technology Competency

According to Akhter et al. (2020), technology competency is the extent to which an individual learns well about efficiently utilizing information technology media to handle and manage information. According to Ganievich, Yusup, and Akmal (2021), technology competency is defined as an individual's adequate literacy about technology and their ability to use technology to solve problems and adapt to changes. Based on the above definitions, it can be concluded that technology competency is a person's capability to understand and utilize technology well in managing information. Customers with a higher level of self-confidence tend to be more open to adopting and utilizing technological applications and services. Additionally, this category of customers demonstrates a greater degree of optimism and a willingness to adopt and utilize technological products and services compared to individuals who possess a lower level of confidence in technology (Akhter et al.,2020).

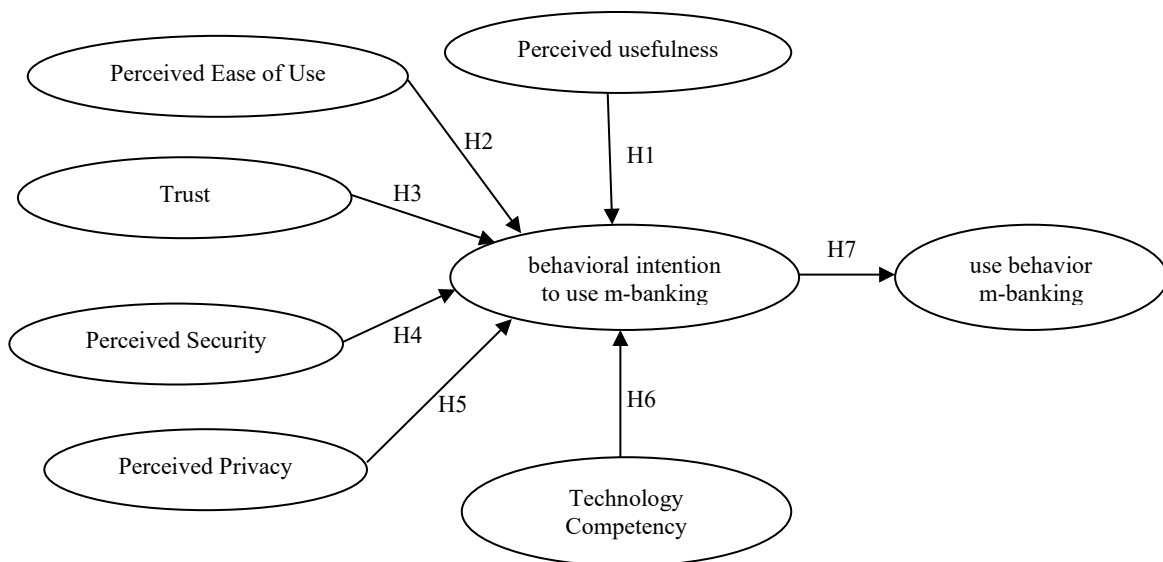


Figure 1. Conceptual framework

### The influence of perceived usefulness on behavioral intention to use m-banking

Due to its unique advantages compared to conventional offline banking services, mobile banking has been considered one of the most efficient methods for conducting banking transactions in recent years. Mortimer et al. (2015) revealed that, customers who use mobile banking can enjoy faster transaction speeds, avoid waiting times, receive personal service 24 hours a day, have more information transparency, convenience, and no location restrictions. Perceived usefulness is a critical component in shaping consumers' behavioral intention that the primary reason people use mobile banking systems is because they find the system useful for their banking transactions (Jimmy Rajalie and Briliana 2014). Consumers feel that internet platforms will improve their shopping experience by offering more convenient options, a larger selection of products, and competitive pricing. This perception of usefulness reflects their overall opinion of various channels (Briliana, 2024). Customers seem more motivated to use and adopt new technology if they find it beneficial and useful in their daily lives (Le-Hoang, 2021). In the context of mobile financial services, Alsajjan and Dennis (2010), Hanafizadeh et al. (2014), and Mohammadi (2015) have all demonstrated that consumers' assessments of the utility of a service influence their likelihood to utilize it.

#### *H1. Perceived usefulness has a positive impact on behavioral intention to use m-banking*

### The influence of perceived ease of use on behavioral intention to use m-banking

One of the most important factors in mobile banking's popularity is the widespread belief that it will make customers' lives easier. Akhter et al. (2020) revealed that perceived ease of use has the potential to show the level of user expectation about easy-to-use mechanisms. Furthermore, perceived ease of use is crucial in depicting an individual's reaction to different technologies. The design of mobile banking services should prioritize user-friendliness and customer-centricity to facilitate quick adaptation and adoption (Koksal, 2016). Azad (2016) reveals that the most effective determinant of consumers' willingness to accept and embrace mobile banking is perceived ease of use. Prior studies demonstrate that perceived ease of use positively affects customers' intention to utilize mobile applications (Zhang et al., 2018) and their loyalty to these applications (Ozturk et al., 2016). In the service context, the ease of use of mobile innovation is crucial for engaging customers in the co-creation of service experiences (Zhang et al., 2018).

## ***H2. Perceived ease of use has a positive impact on behavioral intention to use m-banking***

### **The influence of trust on behavioral intention to use m-banking**

In banking transactions and other services, consumers typically choose to carry out monetary or nonmonetary activities, such as check deposits and funds transfers, using mobile technology. The assessment of the initial encounter between customers and banks significantly impacts the establishment of trust in the institution. The prevalence of mobile technology enables virtual consumers to acquire and utilize services online, thereby heightening transactional risks. Trust plays a vital role in creating an increased level of behavioral intention to use mobile banking through reducing security issues and fraud-related dangers in the technology-based mobile banking atmosphere (Afshan and Sharif, 2016). Extant studies have demonstrated that trust in the service provider facilitates customers' attitudes and intentions to purchase additional services (e.g. banking services) in the mcommerce context (Hanafizadeh et al., 2014; Koksal, 2016; Oliveira et al., 2014). Koenig-Lewis et al. (2010) suggested that there is an indirect relationship between trust and customers' behavioral intention to use mobile banking, Hanafizadeh et al. (2014) found evidence for the direct effect of trust on mobile banking adoption.

## ***H3. Trust has a positive impact on behavioral intention to use m-banking***

### **The influence of perceived security on behavioral intention to use m-banking**

Security is a fundamental yet complex concept important to the modern digital experience. This specifically pertains to consumers' perceptions of the security landscape of emerging platforms like mobile banking (Salah and Ayyash, 2024). According to Merhi, Hone, and Tarhini (2019), the measure of perceived security is the individual's likelihood, where targeted customers believe that information will not be contaminated, engineered, or exposed to others as a means of future exploitation. Security is considered a pressing concern when conducting financial transactions both online and electronically. Therefore, the perceived security can significantly hinder the behavioural intention to use mobile banking, as it raises the risk of critical financial information being disclosed by other fraudulent parties. Researchers find that the security process in mobile banking applications positively influences individuals' willingness and tendency to use them (Changchit et al., 2020). There is a strong correlation between mobile money, knowledge, and perceived security, according to the research by Qatawneh et al. (2024).

H4. Perceived security has a positive impact on behavioral intentions to use m-banking.

### **The influence of perceived privacy on behavioral intention to use m-banking**

In the banking sector, the inherent features of mobile devices have a direct bearing on how customers view their privacy when using such devices. One reason is that lots of people store sensitive information on their phones, tablets, and other portable electronic devices, including financial details (such as account numbers and routing codes) and behavioral identifiers (such as addresses and phone numbers). Perceived privacy influences the processing, storage, and distribution of electronic information, which in turn impacts users' adoption intention of mobile banking privacy (Finn et al., 2013). When associated with financial transactions, privacy becomes crucial in influencing an individual's behavioral intention to use as it affects their privacy, behavior and actions, communication, data and images, thoughts and feelings, location and space, and associations (Finn et al., 2013). Thus, it is crucial to have a secure online system that protects customers' privacy in order to increase their faith in the company that is enabling their purchase and consumption (Jackson, 2013). Researchers Zhang et al. (2018), and Morosan and DeFranco (2014) discovered a positive correlation between Perceived Privacy and customers' propensity to use mobile devices.

## ***H5. Perceived privacy has a positive impact on behavioral intention to use m-banking***

### **The influence of technology competency on behavioral intention to use m-banking**

According to Akhter et al. (2020), customers with higher levels of self-confidence in their technology competency are more likely to accept and embrace technology applications and services. In essence, higher levels of technology competency allow mobile users to understand that mobile banking will be more convenient and easier for them to operate and transact with (Yang, 2010). Consumers' mood positively correlates with their adoption of technology, subsequently influencing their propensity to use it (Lien et al., 2018). According to Farah et al. (2018), a person's propensity to adopt suggests that they may engage in a specific behavior. Similarly, consumers' propensity to use shapes their perceptions, leading to their actual use behavior (Arahita and Hatammimi, 2015). Furthermore, studies have demonstrated that people's inclinations to behave in certain ways are the primary drivers of technology use (Venkatesh et al., 2012).

## ***H6. Technology competency has a positive impact on behavioral intention to use m-banking***

### **The influence of behavioral intention to use m-banking on use behavior**

According to Penney et al. (2021), behavioral intention is the perceived likelihood of users to utilize something in a specific situation. Essentially, knowledge of a new system, its operation, the quality of benefits, and individual opinions regarding the new system are critical issues affecting users' behavioral intention to adopt or not adopt a new system and use it (Lin and Wang, 2006). Therefore, when behavioral intention to use mobile banking arises, it will impact the use behavior of the user. M-banking represents a logical advancement of e-banking, allowing clients to carry out both financial and non-financial transactions through mobile devices such as mobile phones, smartphones, or tablets (Shaikh and Karjaluto, 2015). M-banking is a form of self-service technology enabling clients to access diverse financial services anytime and anywhere using their mobile devices (Tam and

Oliveira, 2017). These apps offer considerable advantages for both clients and financial institutions. The applications enable users to verify account balances, engage in retail transactions, review account details, transfer funds, settle debts, access bank statements, and execute stock investments (Farah et al., 2018).

#### **H7. Behavioral intention to use m-banking has a positive impact on use behavior**

### **RESEARCH METHODOLOGY**

SmartPLS structural equation modelling (SEM) is used in this work as a statistical test to look at the structural relationships between the proposed constructs. The 257 participants whose demographic information was compiled for this study were all active BCA mobile banking users in DKI Jakarta who filled out the online survey that was sent out to all BCA customers. At least one year of BCA mobile banking use was required for participation. The respondents must also use BCA mobile banking out of necessity, not for salary purpose and routinely carry out transactions using BCA mobile banking at least twice in the last month.

### **RESULT AND DISCUSSION**

The demographic profile of the responses indicates an age range of 17 to 26 years, with 61.8 percent falling within the 20 to 25-year age bracket. Female participants constitute around 52.5 percent of the whole sample. Approximately 24.5 percent of the respondents are college students and employees. All participants indicated that they used BCA mobile banking out of necessity, with 59.9% indicating daily or constant usage.

We conducted validation testing using the Average Variance Extracted (AVE) test. The AVE value for each variable in this study satisfies the validity criteria, as the resulting value exceeds 0.5. The reliability test, utilizing Cronbach's alpha and composite reliability scores, yielded results greater than 0.7. Therefore, we can conclude that the employed research instrument satisfies the necessary reliability criteria.

**Table 1: Measurement items of the study**

		<b>Factor Loading</b>
<b>Perceived Ease of Use (PEOU) - adapted from Akhter et al. (2020)</b>		
PEOU1	Learning to utilise BCA mobile banking is simple for me.	0.898
PEOU2	I find it simple to use BCA mobile banking to accomplish my banking needs.	0.830
PEOU3	My connection with BCA mobile banking is straightforward and understandable.	0.880
<b>Trust (TR) – adapted from Akhter et al. (2020)</b>		
TR1	I have faith in BCA mobile banking.	0.897
TR2	In my experience, BCA mobile banking has always delivered as promised.	0.823
TR3	In my opinion, BCA's mobile banking prioritizes the needs of its customers.	0.882
<b>Perceived Security (PS) – adapted from Akhter et al. (2020)</b>		
PS1	Utilising BCA mobile banking instills confidence in me that the current restrictions adequately safeguard consumers.	0.887
PS2	I am not concerned about the security of BCA mobile banking.	0.830
PS3	I am confident that my BCA mobile banking safeguards me against unauthorised charges.	0.839
PS4	I am certain that my transactions are secure.	0.896
<b>Perceived Privacy (PPR) – adapted from Akhter et al. (2020)</b>		
PPR1	I can say with absolute certainty that BCA's mobile banking	0.889
PPR2	I am certain that BCA's mobile banking solutions will keep all of my financial data secure.	0.781
PPR3	Using technology in my profession brings me joy.	0.723
<b>Technology Competency (TC) – adapted from Akhter et al. (2020)</b>		
TC1	My capacity to learn new technologies is excellent.	0.900
TC2	I'm constantly curious about new technology.	0.824
TC3	I appreciate dealing with technology.	0.876
<b>Behavioral Intention to use m-banking (BI) – adapted from Akhter et al. (2020)</b>		
BI1	I plan to continue utilising BCA mobile banking in the future.	0.867
BI2	I will continue to utilise BCA mobile banking in my daily life.	0.817
BI3	I intend to continue to use BCA mobile banking frequently.	0.848
<b>Use Behavior (UB) – adapted from Penney et al. (2021)</b>		
UB1	I frequently use BCA's mobile banking service to pay.	0.877
UB2	I frequently use the BCA mobile banking service to transfer and send money.	0.835
UB3	I frequently use BCA's mobile banking service to pay bills.	0.888

**Table 2. Reliability, convergence, discriminant validity and Fornell-Larcker Criterion**

	BI	PEOU	PPR	PS	PU	TC	TR	UB	Cronbach's alpha	CR	AVE	R Square	R Square adjusted
BI	<b>0.844</b>								0.798	0.881	0.712	0.446	0.433
PEOU	0.437	<b>0.837</b>							0.844	0.906	0.763	---	---
PPR	0.493	0.459	<b>0.863</b>						0.828	0.898	0.745	---	---
PS	0.414	0.437	0.379	<b>0.863</b>					0.886	0.921	0.745	---	---
PU	0.535	0.523	0.471	0.482	<b>0.858</b>				0.880	0.918	0.736	---	---
TC	0.540	0.434	0.542	0.448	0.494	<b>0.867</b>			0.834	0.901	0.752	---	---
TR	0.505	0.457	0.416	0.510	0.503	0.435	<b>0.868</b>		0.835	0.901	0.753	---	---
UB	0.538	0.462	0.460	0.493	0.535	0.486	0.468	<b>0.867</b>	0.834	0.901	0.751	0.290	0.287

**Table 3. Heterotrait-Monotrait Ratio (HTMT) Criterion Assessment**

	BI	PEOU	PPR	PS	PU	TC	TR	UB
<b>Behavioral Intention to use m-banking (BI)</b>								
<b>Perceived Ease of Use (PEOU)</b>	0,530							
<b>Perceived Privacy (PPR)</b>	0,605	0,548						
<b>Perceived Security (PS)</b>	0,490	0,503	0,443					
<b>Perceived Usefulness (PU)</b>	0,635	0,606	0,549	0,550				
<b>Technology Competence (TC)</b>	0,662	0,519	0,652	0,518	0,574			
<b>Trust (TR)</b>	0,617	0,544	0,500	0,592	0,586	0,521		
<b>Use Behavior (UB)</b>	0,657	0,551	0,553	0,574	0,621	0,583	0,562	

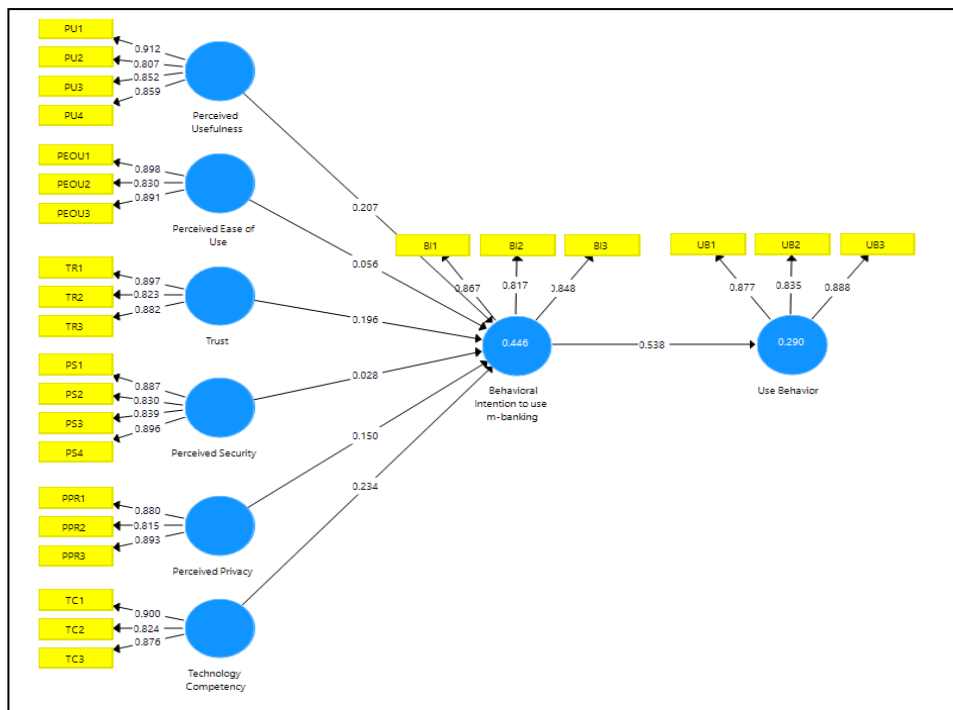


Table 4. Hypotheses Testing Results

Relationships		Original Sample	Sample Mean	Standard Error	t-Statistics	p-values	Supported
BI	→ UB	0,538	0,530	0,092	5,874	0,000	Yes
PEOU	→ BI	0,056	0,047	0,072	0,767	0,443	No
PPR	→ BI	0,150	0,154	0,070	2,152	0,032	Yes
PS	→ BI	0,028	0,033	0,052	2,545	0,006	Yes
PU	→ BI	0,207	0,210	0,067	3,092	0,002	Yes
TC	→ BI	0,234	0,229	0,086	2,715	0,007	Yes
TR	→ BI	0,196	0,196	0,062	3,164	0,002	Yes

This study aims to determine the influence of perceived usefulness (PU), perceived ease of use (PEOU), trust (TR), perceived security (PS), perceived privacy (PPR), and technology competency (TC) on behavioral intention to use m-banking (BI) as mediating variables on use behavior (UB) of BCA customers who use BCA mobile banking in DKI Jakarta. The results of this study indicate that PU, TR, PS, PPR, and TC have a positive and significant effect on BI. This finding is consistent with research on intention to use mobile banking by Akhter et al. (2020); Phuong Viet Le-Hoang; Mohamed Merhi, Kate Hone, dan Ali Tarhini (2019). PEOU variable has no influence on BI variable. This aligns with previous findings (Akhter et al. 2020). This suggests that the perceived ease of use of mobile banking influences users' intentions to use it. It's possible that people care more about other service application features than its ease of use. The level of user intention to continue using mobile banking technology directly affects usage behavior, seen in how often and regularly consumers use mobile banking in their daily activities. This situation highlights that mobile banking users perceive their privacy as preserved. Moreover, without a behavioral intention to use mobile banking services, users won't consistently engage with these technological offerings.

Indonesia presents a promising opportunity for digital banking due to its largely unbanked population and high mobile penetration rate. As a result, mobile banking providers must prioritize the provision of value-added services for mobile banking apps. An important stage in the adoption of mobile banking as a new technology is thoroughly researching the relevant factors and evaluating the perspective of mobile banking users. This analysis can provide useful information to all parties concerned.

This research sheds light on customer decision-making for M-banking adoption, offering practical guidance for bank marketing managers. Service providers must emphasize M-banking's rational benefits. The findings of this study can help bank marketing managers better understand their customers' motivations and decisions when it comes to the intention to use mobile banking. The logical advantages of M-banking should be the center of attention for service providers. Advertisers and marketers can make their messaging more accessible to all customers by focusing on the main benefits of M-banking. For consumers who would rather do their business from the comfort of their own homes, commercials emphasizing ease, quickness, and reduced processing times would be highly effective. Advertisers can also aim to raise client awareness by highlighting the benefits and efficiency of their services in the messaging they design for their target audience. Designers of m-banking apps should consider the lives of their customers. The design of these platforms should incorporate customers' ideas, values, lifestyles, and prior experiences to streamline and accelerate adoption. Additionally, banks should consider setting up training for M-banking employees, giving clients instructions on how to use the service, and helping them troubleshoot when they encounter issues. As an example, financial institutions can provide their clients with training classes or video tutorials on how to use M-banking.

The evolving behavioral intentions of mobile banking users towards technology constrain the study, while the nascent stage of mobile banking development further narrows its scope. Furthermore, it is crucial to highlight the limitations of the study. Firstly, the study collected data from diverse areas within the Indonesian province of Jakarta, potentially posing challenges to the generalizability of the results. To enhance sample representativeness and study generalizability, future studies should endeavor to gather larger samples from a broader spectrum of mobile banking users. Future studies may investigate demographic characteristics as possible moderating variables.

## REFERENCES

- Akhter, Ayeasha, Ahmed Al Asheq, Md Uzzal Hossain, and Md Mobarak Karim. (2020). "Exploring Customer Intentions to Adopt Mobile Banking Services: Evidence from a Developing Country." *Banks and Bank Systems* 15 (2): 105–16. [https://doi.org/10.21511/bbs.15\(2\).2020.10](https://doi.org/10.21511/bbs.15(2).2020.10).
- Ajzen, I. (2002), "Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior", *Journal of Applied Social Psychology*, Vol. 32 No. 4, pp. 665-683, doi: 10.1111/j.1559-1816.2002.tb00236.x.
- Alsajjan, B., & Dennis, C. (2010). *Internet banking acceptance model: Cross-market examination. Journal of Business Research*, 63(9-10), 957–963. doi:10.1016/j.jbusres.2008.12.014
- Arahita, C.L. and Hatammimi, J. (2015), "Factors affecting the intention to reuse mobile banking service", *International Journal of Research in Business and Social Science* (2147-4478), Vol. 4 No. 4, pp. 15-22.
- Azad, Md Abul Kalam. (2016). "Predicting Mobile Banking Adoption in Bangladesh: A Neural Network Approach." *Transnational Corporations Review* 8 (3): 207–14. <https://doi.org/10.1080/19186444.2016.1233726>.
- Belanche-Gracia, D., Casaló-Ariño, L.V. and Pérez-Rueda, A. (2015), "Determinants of multi-service smartcard success for smart cities development: a study based on citizens' privacy and security perceptions", *Government Information Quarterly*, Vol. 32 No. 2, pp. 154-163.
- Bonn, M.A., Kim, W.G., Kang, S. and Cho, M. (2016), "Purchasing wine online: the effects of social influence, perceived usefulness, perceived ease of use, and wine involvement", *Journal of Hospitality Marketing and Management*, Vol. 25 No. 7, pp. 841-869, doi: 10.1080/19368623.2016.1115382.



- Briliana, Vita (2024), Why Does Indonesian Generation Z Use Food Delivery Order Apps (FDAs) Post-Covid-19?, *International Journal of Business, Economics and Law*, Vol. 32, Issue 1 (August), pp.50-57. doi: [https://ijbel.com/wp-content/uploads/2024/07/IJBEL32-ISU1\\_713.pdf](https://ijbel.com/wp-content/uploads/2024/07/IJBEL32-ISU1_713.pdf)
- Buabeng-Andoh, C. (2018). Predicting students' intention to adopt mobile learning. *Journal of Research in Innovative Teaching & Learning*. doi:10.1108/jrit-03-2017-0004
- Castelfranchi, C. and Falcone, R. (2000), "Trust is much more than subjective probability: mental components and sources of trust", *Proceedings of the 33rd Annual Hawaii International Conference on System Sciences, IEEE*, January, 10pp.
- Changchit, Chuleeporn, Tim Klaus, Ravi Lonkani, and Jomjai Sampet. (2020). "A Cultural Comparative Study of Mobile Banking Adoption Factors." *Journal of Computer Information Systems* 60 (5): 484-94. <https://doi.org/10.1080/08874417.2018.1541724>.
- Chan, Xin Yi, Muhammad Khalilur Rahman, Abdullah Al Mamun, Anas A. Salameh, Wan Mohd Hirwani Wan Hussain, and Syed Shah Alam. (2022). "Predicting the Intention and Adoption of Mobile Shopping During the COVID-19 Lockdown in Malaysia." *SAGE Open* 12 (2). <https://doi.org/10.1177/21582440221095012>.
- Chawla, D. and Joshi, H. (2017), "Consumer perspectives about mobile banking adoption in India: a cluster analysis", *International Journal of Bank Marketing*, Vol. 35 No. 4, pp. 616-636.
- Chellappa, Ramnath K., and Paul A. Pavlou. (2002). "Perceived Information Security, Financial Liability and Consumer Trust in Electronic Commerce Transactions." *Logistics Information Management* 15 (5/6): 358-68. <https://doi.org/10.1108/09576050210447046>.
- Cheung, Christy M K, and Matthew K O Lee. (2001). "Trust in Internet Shopping: Instrument Development and Validation Through Classical and Modern Approaches." *Journal of Global Information Management* July-Sept. Vol. 9. <http://www.idea-group.com>.
- Davis, F.D. (1989), "Perceived usefulness, perceived ease of use, and user acceptance of information technology", 15th World Conference on Earthquake Engineering (15WCEE), Vol. 13 No. 3, pp. 319-340, doi: 10.1016/S0305-0483(98)00028-0.
- Farah, M.F., Hasni, M.J.S. and Abbas, A.K. (2018), "Mobile-banking adoption: empirical evidence from the banking sector in Pakistan", *International Journal of Bank Marketing*, Vol. 36 No. 7, pp. 1386-1413.
- Finn, Rachel L., David Wright, and Michael Friedewald. (2013). "Seven Types of Privacy." In *European Data Protection: Coming of Age*, 3-32. Springer Netherlands. [https://doi.org/10.1007/978-94-007-5170-5\\_1](https://doi.org/10.1007/978-94-007-5170-5_1)
- Ganievich, Mahmudov Y., and Toshpulatov A. Kholmiraevich (2021) "The Concept of Technological Competence and Its Significance." *International Journal on Integrated Education*, vol. 4, no. 7, 2021, pp. 118-121, doi:10.31149/ijie.v4i7.2072.
- Goswami, S. (2017), "Are customers ready to use mobile technology for banking transactions? An investigation", *Journal of Internet Banking and Commerce*, Vol. 22 No. 8, pp. 1-13.
- Ha, H.-Y. and Pan, H. (2018), "The evolution of perceived security: the temporal role of SNS information perceptions", *Internet Research*, Vol. 28 No. 4, pp. 1055-1078. <https://doi.org/10.1108/IntR-02-2017-0047>
- Haider, M. J., Changchun, G., Akram, T., & Hussain, S. T. (2018). Does gender differences play any role in intention to adopt Islamic mobile banking in Pakistan? An empirical study. *Journal of Islamic Marketing*, 9(2), 439-460. <https://doi.org/10.1108/JIMA-11-20160082>
- Hanafizadeh, P., Behboudi, M., Koshksaray, A. and Tabar, M. (2014), "Mobile banking adoption by Iranian bank clients", *Telematics and Informatics*, Vol. 31 No. 1, pp. 62-78.
- Hongyoun Hahn, K. and Kim, J. (2009), "The effect of offline brand trust and perceived internet confidence on online shopping intention in the integrated multi-channel context", *International Journal of Retail & Distribution Management*, Vol. 37 No. 2, pp. 126-141.
- IOM (2002), *Speaking of Health: Assessing Health Communication Strategies for Diverse Populations*, The National Academies Press, Washington, DC, available at: <https://doi.org/10.17226/10018>
- Jackson, J.D., Yi, M.Y., Park, J.S., (2013). An empirical test of three mediation models for the relationship between personal innovativeness and user acceptance of technology. *Inf. Manage.* 50 (4), 154-161.
- Jang, Yumi, and Seongcheol Kim. (2023). "The Factors Influencing Users' Trust in and Loyalty to Consumer-to-Consumer Secondhand Marketplace Platform." *Behavioral Sciences* 13 (3): 242. <https://doi.org/10.3390/bs13030242>.
- Jiang, James J, Maxwell K Hsu, Gary Klein, and Binshan Lin. (2000). "E-Commerce User Behavior Model: An Empirical Study."
- Kabir, Muhammad Auwal, Siti Zabedah Saidin, and Aidi Ahmi. (2017). "The Influence of Perceived Usefulness and Perceived Ease of Use on the Continuous Intention to Use Electronic Collection System in Nigerian Hospitals: A Conceptual Approach Web Accessibility View Project Project Management View Project." <https://www.researchgate.net/publication/318018562>.
- Koksal, Mehmet Haluk. (2016). "The Intentions of Lebanese Consumers to Adopt Mobile Banking." *International Journal of Bank Marketing* 34 (3): 327-46. <https://doi.org/10.1108/IJBM-03-2015-0025>.
- Kumar, A., Adlakaha, A. and Mukherjee, K. (2018), "The effect of perceived security and grievance redressal on continuance intention to use M-wallets in a developing country", *International Journal of Bank Marketing*, Vol. 36 No. 7, pp. 1170-1189.
- Le-Hoang, Phuong Viet. (2021). "Intention to Use M-Banking Application: An Empirical Study in Ho Chi Minh City." *Independent Journal of Management & Production* 12 (2): 637-53. <https://doi.org/10.14807/ijmp.v12i2.1256>.
- Lien, C.H., Wu, J.J., Hsu, M.K. and Wang, S.W. (2018), "Positive moods and word-of-mouth in the banking industry: a moderated mediation model of perceived value and relational benefits", *International Journal of Bank Marketing*, Vol. 36 No. 4, pp. 764-783.
- Lin, Hsin Hui, and Yi Shun Wang. (2006). "An Examination of the Determinants of Customer Loyalty in Mobile Commerce Contexts." *Information and Management* 43 (3): 271-82. <https://doi.org/10.1016/j.im.2005.08.001>.
- McLean G., Frimpong K. O., Al-Nabhani K., Marriott H. (2020). Examining consumer attitudes towards retailers' m-commerce mobile applications – An initial adoption vs. continuous use perspective. *Journal of Business Research*, 106, 139-157.

- Mohammadi, H. (2015), "A study of mobile banking usage in Iran", *International Journal of Bank Marketing*, Vol. 33 No. 6, pp. 733-759.
- Mortimer, G., Neale, L., Hasan, S.F.E. and Dunphy, B. (2015), "Investigating the factors influencing the adoption of m-banking: a cross cultural study", *International Journal of Bank Marketing*, Vol. 33 No. 4, pp. 545-570
- Merhi, Mohamed, Kate Hone, and Ali Tarhini. (2019). "A Cross-Cultural Study of the Intention to Use Mobile Banking between Lebanese and British Consumers: Extending UTAUT2 with Security, Privacy and Trust." *Technology in Society* 59 (November). <https://doi.org/10.1016/j.techsoc.2019.101151>.
- Morosan, C. and DeFranco, A. (2016), "It's about time: revisiting UTAUT2 to examine consumers' intentions to use NFC mobile payments in hotels", *International Journal of Hospitality Management*, Vol. 53, pp. 17-29.
- Oliveira, T., Thomas, M., Baptista, G. and Campos, F. (2016), "Mobile payment: understanding the determinants of customer adoption and intention to recommend the technology", *Computers in Human Behavior*, Vol. 61, pp. 404-414.
- Ozturk, A. B., Nusair, K., Okumus, F., & Hua, N. (2016). The role of utilitarian and hedonic values on users' continued usage intention in a mobile hotel booking environment. *International Journal of Hospitality Management*, 57, 106–115. doi:10.1016/j.ijhm.2016.06.007
- Owusu Kwateng, K., Osei Atiemo, K.A. and Appiah, C. (2019), "Acceptance and use of mobile banking: an application of UTAUT2", *Journal of Enterprise Information Management*, Vol. 32 No. 1, pp. 118-151. <https://doi-org.ezlib.iium.edu.my/10.1108/JEIM-03-2018-0055>
- Penney, Emmanuel Kofi, James Agyei, Eric Kofi Boadi, Eugene Abrokwah, and Richmond Ofori-Boafo. (2021). "Understanding Factors That Influence Consumer Intention to Use Mobile Money Services: An Application of UTAUT2 With Perceived Risk and Trust." *SAGE Open* 11 (3). <https://doi.org/10.1177/21582440211023188>.
- Premkumar, G., Ramamurthy, K. and Liu, H.N. (2008), "Internet messaging: an examination of the impact of attitudinal, normative, and control belief systems", *Information & Management*, Vol. 45 No. 7, pp. 451-457.
- Qatawneh, N., Al-Okaily, A., Al-Okaily, M. and Ur Rehman, S. (2024), "Exploring the antecedent factors of continuous intention to use mobile money: insights from emerging markets", *Digital Policy, Regulation and Governance*, Vol. ahead-of-print No. ahead-of-print. <https://doi-org.ezlib.iium.edu.my/10.1108/DPRG-04-2024-0080>
- Rogers, E.M. (2003), *Diffusion of Innovations*, 5th ed., Free Press, New York, NY.
- Rivera, M., Gregory, A., Cobos, L., (2015). Mobile application for the timeshare industry: the influence of technology experience, usefulness, and attitude on behavioral intentions. *J. Hosp. Tour. Technol.* 6 (3), 242–257.
- Rajalie, Jimmy, and Vita Briliana. (2014), "Pengaruh Trust, Perceived Usefulness, Satisfaction Dan Perceived Enjoyment Terhadap Online Repurchase Intention." *Jurnal Bisnis dan Akuntansi*, vol. 16, no. 1, pp. 12-20, doi:10.34208/jba.v16i1.92.
- Shin, D. (2009). Towards an understanding of the consumer acceptance of mobile wallet. *Computers in Human Behavior*, 25(6), 1343–1354.
- Salah, O.H. and Ayyash, M.M. (2024), "Understanding user adoption of mobile wallet: extended TAM with knowledge sharing, perceived value, perceived privacy awareness and control, perceived security", *VINE Journal of Information and Knowledge Management Systems*, Vol. ahead-of-print No. ahead-of-print. <https://doi-org.ezlib.iium.edu.my/10.1108/VJIKMS-03-2023-0055>
- Shaikh, A.A. and Karjaluoto, H. (2015), "Mobile banking adoption: a literature review", *Telematics and Informatics*, Vol. 32 No. 1, pp. 129-142.
- Suh, Y.I., Ahn, T., Lee, J.K. and Pedersen, P.M. (2015), "Effect of trust and risk on purchase intentions in online secondary ticketing: sport consumers and ticket reselling", *South African Journal for Research in Sport, Physical Education and Recreation*, Vol. 37 No. 2, pp. 131-142.
- Shaikh, A.A. and Karjaluoto, H. (2015), "Mobile banking adoption: a literature review", *Telematics and Informatics*, Vol. 32 No. 1, pp. 129-142.
- Tam, C. and Oliveira, T. (2017), "Literature review of mobile banking and individual performance", *International Journal of Bank Marketing*, Vol. 35 No. 7, pp. 1042-1065.
- Trütsch, T. (2016), "The impact of mobile payment on payment choice", *Financial Markets and Portfolio Management*, Vol. 30 No. 3, pp. 299-336, doi: 10.1007/s11408-016-0272-x.
- Venkatesh V., Raman R., Cruz-Jesus F. (2023). AI and emerging technology adoption: A research agenda for operations management. *International Journal of Production Research*, 1–11.
- Venkatesh, V., Thong, J.Y. and Xu, X. (2012), "Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology", *MIS Quarterly*, Vol. 36 No. 1, pp. 157-178.
- Venkatesh, Viswanath, Michael G. Morris, Gordon B. Davis, and Fred D. Davis. (2003). "User Acceptance of Information Technology: Toward a Unified View." *MIS Quarterly: Management Information Systems* 27 (3): 425–78. <https://doi.org/10.2307/30036540>.
- Wei, Y., Gáti, M. and Simay, A.E. (2024), "How consumers' privacy perceptions influenced mobile payment acceptance during the COVID-19 pandemic", *International Journal of Bank Marketing*, Vol. ahead-of-print No. ahead-of-print. <https://doi-org.ezlib.iium.edu.my/10.1108/IJBM-04-2023-0245>
- Wottrich, V.M., van Reijmersdal, E.A. and Smit, E.G. (2018), "The privacy trade-off for mobile app downloads: the roles of app value, intrusiveness, and privacy concerns", *Decision Support Systems*, Vol. 106, pp. 44-52, doi: 10.1016/j.dss.2017.12.003.
- Yousafzai, S., Pallister, J., & Foxall, G. (2003). A proposed model of e-trust for electronic banking. *Technovation*, 23(11), 847–860.
- Wang, Y.S., Lin, H.H. and Luarn, P. (2006), "Predicting consumer intention to use mobile service", *Information Systems Journal*, Vol. 16 No. 2, pp. 157-179
- Wilson, T.D. (2000). *Human Information behaviour*. *Informing Science*, 3(2):49-55

- 
- Wottrich, V.M., van Reijmersdal, E.A. and Smit, E.G. (2018), "The privacy trade-off for mobile app downloads: the roles of app value, intrusiveness, and privacy concerns", *Decision Support Systems*, Vol. 106, pp. 44-52, doi: 10.1016/j.dss.2017.12.003.
- Yang, Kiseol. (2010). "The Effects of Technology Self-Efficacy and Innovativeness on Consumer Mobile Data Service Adoption between American and Korean Consumers." *Journal of International Consumer Marketing* 22 (2): 117-27. <https://doi.org/10.1080/08961530903476147>.
- Zhang, T., Lu, C., & Kizildag, M. (2018). *Banking "on-the-go": examining consumers' adoption of mobile banking services*. *International Journal of Quality and Service Sciences*. doi:10.1108/ijqss-07-2017-0067