

Investigating Drivers of Digital Banking Acceptance: Insights from Indonesian Financial Consumers

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Abstract. The progress of technology has resulted in the introduction of diverse cutting-edge goods and services in the banking sector. Hence, implementing IT-based business strategies is essential for attaining a competitive edge and prevailing in business competition. The growing need for convenient transactions at any location and time, along with the transition from physical currency to electronic transactions, has led to substantial expansion in digital banking activities in Indonesia. Nevertheless, the process of digitizing banking services is perceived as somewhat sluggish in comparison to technology-driven financial services or fintech. The degree of consumer acceptance is a crucial concern as it is a decisive role in the system's performance. The objective of this study is to examine the components within the UTAUT 3 model that impact the adoption of digital banking in Indonesia. Additionally, the study will incorporate the McLean Delone method to enhance its analysis. Furthermore, the inclusion of the security system variable will be used to evaluate the effectiveness of digital banking security. The study was statistically conducted utilizing PLS-SEM data analysis with SmartPLS 4 and online questionnaire distribution. The study conducted on 424 respondents found that several proposed hypotheses, including Social Influence, Security System, Intention to Use, and Use, were statistically significant and accepted. However, seven other hypotheses, namely Performance Expectancy, Effort Expectancy, Habit, Personal Innovative, Information Quality, Service Quality, and System Quality, were found to be statistically insignificant and rejected. The characteristics that are accepted have a significant impact on an individual's intention to use, which ultimately determines the amount of user happiness. Nevertheless, the discarded hypotheses indicate that they do not exert the primary influence on an individual's evaluation. The moderate variable in this study did not yield statistically significant results and so cannot be utilized as a benchmark for evaluating satisfaction or acceptability of digital banking.

Keywords: digital banking, UTAUT 3, Satisfaction, Acceptance, Security System

1. Introduction

The digital world has experienced substantial transformations across multiple domains. This encompasses the shift from utilizing human resources to integrating robotics, as well as other components that have initiated the journey of digital transformation (Lawson, 2013). Exemplary instances can be observed in the automotive industry, where a growing number of vehicles are incorporating autopilot systems, which provide additional functionalities to improve the driving experience. Without a question, the advent of the digital age has led to substantial changes in worldwide banking services. The exponential growth of financial services, namely in Indonesia, exemplifies a prevailing tendency that is becoming more prevalent among the general population. This also indicates a shift in the manner in which individuals engage with financial institutions. Hence, organizations within the banking industry are engaged in fierce competition to acquire substantial volumes of data and automate its processing for the purpose of advancing their company operations. Several banks are implementing automation in order to streamline their back-office processes for managing transactional activities. The proliferation of extensive data is facilitated by the substantial population of individuals worldwide who possess cellphones, computers, laptops, tablets, or other devices that enable this transformation (Skinner, 2014). The competition for data compels banks to undertake digital transformation in their business operations. The banking industry must undergo digital transformation to align with the growing presence of financial technology services that pose competition. This is crucial for the continued success of banking organizations. The banking industry has prioritized digital transformation as a key element in shaping the company's business strategies (Robin, 2021). Financial service providers have experienced a lasting improvement in efficiency due to the smart and inventive use of digital technologies. An evident change in banking services that has been observed by the majority of the public is the facilitation of actions such as transferring funds, making bill payments, and accessing account information (Safitri, 2020). Nowadays, all of this content is accessible through digital platforms or can be accessed via electronic services. E-service refers to actions, efforts, or activities that take place through the use of information technology (Rowley, 2006). This revolution has taken place gradually, progressing from conventional banking to the implementation of online banking, which then developed into mobile banking. Presently, there is a shift towards a completely digital environment, characterized by the rise of digital banks that differentiate themselves from mobile banking by carrying out the entire process digitally, from sign-up to banking operations, utilizing smartphones. This efficiency can be achieved by reducing operational costs, marketing and product costs, and minimizing paper usage, hence promoting environmentally friendly or eco-green operations (Simatupang, 2021). The inception of digital banks can be traced back to 2016 when Bank BTPN introduced Jenius digital bank. However, the first response from clients towards Jenius was rather low. As digital banks lacked their own regulatory framework, they were subject to the same regulations as commercial banks. Additionally, the OJK did not provide a specific list of digital banks. Consequently, digital banks providing banking services to the general public surfaced. The digital banks that have emerged between 2021 and 2022 include Jago by Bank Jago, Seabank by Bank Seabank Indonesia, TMRW by Bank UOB, Blu by Bank BCA, Neobank by Bank Neo Commerce, Digibank by Bank DBS Indonesia, and Wokee+ by Bank Bukopin, Allo Bank Indonesia, BRI Agroniaga, Bank Capital, Bank QNB Indonesia, and KEB Hana Bank. According to a research published by Databoks in 2023 and statistics from the Financial Services Authority (OJK), the banking industry has experienced substantial growth as a result of the transition to the digital era. This expansion is seen not only in the rising user base, but also in the surge of capital funds amassed by digital banking customers. These findings demonstrate that users of digital banking are not only opening accounts without utilizing them; rather, they are actively reaping the advantages resulting from the implementation of the digital banking paradigm. Despite the emergence of numerous new digital banks, their quantity remains relatively limited in comparison to traditional banks (ojk.go.id, 2020). Hence, this study was undertaken due to the nascent nature of digital banks, resulting in a limited pool of individuals inclined to become digital bank patrons, despite the steady

growth in client base for each digital bank within Indonesian society. Since the onset of the epidemic in 2021, there has been a consistent and substantial growth in the number of digital bank users for six consecutive quarters. Furthermore, it is uncertain whether all users are content with this digital bank's growth, as indicated by the ratings of individual applications. Many users have switched to competing banks, making it difficult to determine which banks are most suitable for use. It is possible that users are merely utilizing all digital banks without considering them as their primary transaction medium.

A study was undertaken to analyze the factors influencing the acceptability of digital bank technology. The modified UTAUT 2 approach was employed, incorporating the security variable into behavioral intention. The findings revealed that only two criteria had a significant impact on the intention to use digital banking. The limited awareness and utilization of digital bank services among the public can be attributed to the recent emergence of digital banks in the financial landscape (Ansor, 2022). Additionally, in a separate study titled "Analysis of Variables Influencing Attitudes Towards Utilizing Mobile Banking" According to Kusumaningtyas and Wardani (2019), the application of the TAM model, together with the inclusion of the belief variable, revealed that the characteristics of utility, ease, and trust have the ability to impact the intention to utilize mobile banking services. A further investigation carried out by Mufarih in Yogyakarta revealed that the utilization of digital banks is significantly influenced by elements such as risk and trust, whereas the impact of social image, simplicity of use, and friendliness is very restricted. Agus Rofi'i's research on mobile banking acceptance highlights the significance of Performance Expectancy, social influence, service quality, and information quality, while noting a lesser influence from effort expectation, facilitation circumstances, and system quality.

This research intends to examine the elements that influence the acceptability of digital banks in Indonesia, specifically among digital bank consumers. The study will focus on the factors that impact user satisfaction levels. Another compelling rationale for this research is the emergence of the digital banking trend, which is currently gaining traction among the general public. This digital innovation has not yet been thoroughly evaluated for its overall societal acceptance. This study utilized the UTAUT 3 model, which incorporates the McLean method, to investigate technology adoption. Specifically, it focused on the relationship between system quality and user satisfaction, while considering the moderator variables of user location (urban or rural), age, gender, and duration of digital banking use. The research builds upon previous studies in this area. The next part provides an overview of the theoretical foundation and the formulation of hypotheses. Section 3 outlines the methodology. Section 4 presents the findings and analysis of the study, while Section 5 presents the study's conclusion.

2. Literature Review

2.1. Digital Banking

Digital Banking, as defined by Celent, pertains to ensuring that customers have a uniform experience throughout all channels and interactions when utilizing financial industry data. Its execution necessitates modifications in information technology, products and services, and human resources, with an emphasis on analytics and process automation, in order to attain maximum economic value. Digital banking, also referred to as digital banking services, is defined in Indonesia as banking services/activities conducted through bank offices using electronic/digital facilities owned by the bank and/or digital means operated independently by customers. These activities enable bank customers and prospective customers to communicate, register, open, and close bank accounts, as well as obtain additional information and conduct transactions.

2.2. Performance Expectancy

The variable performance expectancy in the context of digital banking acceptance in Indonesia refers to the user's expectation of positive performance from using digital banking services. This includes the user's belief that using the service will increase efficiency, productivity, and overall performance.

Studies on the acceptance and use of mobile banking applications in Indonesia show that performance expectancy is one of the factors that influence the adoption and use of these services. Furthermore, other studies also show that performance expectancy affects the intention to use digital banking, where users have the expectation that using the service will provide positive benefits and performance (Rafikha, 2022)

H1 : Performance Expectancy influences Intention to Use significantly.

H1a : The influence of performance expectations on intention to use is substantial, with gender serving as a moderating factor.

H1b : Age moderates the effect of performance expectation on intention to use, which is substantial.

H1c : Performance expectation has a substantial impact on intention to use, with live location (city/village) serving as a moderating factor.

H1d : Performance expectation has a substantial impact on intention to use, with experience serving as a moderating factor.

2.3. Effort Expectancy

The variable "effort expectancy" in the context of digital banking acceptance in Indonesia refers to the perceived ease of use of digital banking services. Research using the Unified Theory of Acceptance and Use of Technology (UTAUT) model indicates that effort expectancy is one of the factors influencing customer satisfaction and acceptance of digital banking services. This suggests that the lower the level of effort expected by customers in using digital banking services, the higher the likelihood of their acceptance and satisfaction with the services. (Evelyna, 2021)

H2 : Intention to Use is significantly influenced by Effort Expectancy.

H2a : The impact of effort expectation on intention to use is substantial, with gender serving as a moderating factor.

H2b : Age moderates the effect of effort expectation on intention to use, which is substantial.

H2c : The impact of effort expectation on intention to use is substantial, with live location (city/village) serving as a moderating factor.

H2d : Experience moderates the effect of Effort Expectancy on Intention to Use, which is significantly influenced by the former.

2.4. Social Influence

The variable social influence in the context of digital banking acceptance in Indonesia refers to the impact of social and normative behavior that influences users' decisions to adopt and use digital banking services. This includes factors such as social perspective, community willingness, and positive social policy perceptions towards technology use. Studies on the acceptance and use of mobile banking applications in Indonesia show that social influence is one of the factors that influence the adoption and use of these services. Furthermore, other studies also show that social influence affects the intention to use digital banking, where users have the expectation that using the service will provide positive benefits and performance.

H3 : Social influence has a major impact on intention to use.

H3a : Social influence has a substantial impact on the intention to use, and this impact is influenced by gender.

H3b : Social influence has a large impact on intention to use, with this impact being modulated by age.

H3c : Social influence has a substantial impact on the intention to use, and this impact is tempered by the live location (city/village).

H3d : Social influence has a substantial impact on the intention to use, and this impact is mitigated by experience.

2.5. Habit

Habit is a variable that aims to explore the factors that influence satisfaction and acceptance of digital banking in Indonesia. Previous studies have shown that habit and security are factors that influence customers' intention to use digital banking. The UTAUT2 model, which includes habit as a factor, has been used to assess the acceptance of digital banking. Habit refers to the tendency of individuals to perform certain behaviors repeatedly (Supriyadi,2023).

H4 : Habits have a substantial impact on the intention to use.

H4a : The impact of habits on the intention to use is substantially influenced by gender.

H4b : The impact of habit on intention to use is substantially influenced by age.

H4c : The impact of habits on the intention to use is substantially influenced by the individual's live location, whether it is in a city or a village.

H4d : The impact of habits on the intention to use is substantially influenced by experience.

2.6. Personal Innovativeness

The Personal Innovativeness (PI) variable is a concept that describes the extent to which an individual tends to accept and adopt new innovations. In the context of testing the factors of satisfaction and acceptance of digital banks in Indonesia, PI can influence the attitudes and behaviors of users towards technological innovations, including digital banks. Several recent journals relevant to this topic discuss the effect of PI on the adoption of mobile payments and e-learning services, as well as its effect on performance expectations and technology usage intentions. However, no specific journal has been found that links PI to testing the factors of satisfaction and acceptance of digital banks in Indonesia.

H5 : Personal innovativeness has a strong impact on intention to use.

H5a :The level of personal innovativeness has a considerable impact on the intention to use, with this relationship being influenced by gender.

H5b : The level of personal innovativeness has a considerable impact on the intention to use, and this relationship is influenced by age.

H5c : Personal innovativeness has a substantial impact on intention to use, with this relationship being mitigated by the live location (city/village).

H5d :The level of personal innovativeness has a major impact on the intention to use, with this relationship being influenced by one's level of experience.

2.7. Information Quality

The Information Quality (IQ) variable in the context of testing the factors of satisfaction and acceptance of digital banks in Indonesia refers to the level of reliability, sufficiency, and accuracy of information provided by digital banks to their users. High-quality information can enhance user satisfaction and acceptance of digital banks. Although no specific recent journals were found that specifically discuss the IQ variable in this context, various studies have shown that information quality plays a significant role in influencing user satisfaction and acceptance of digital banking services (Alaina,2022).

H6 : The quality of information has a major impact on the intention to use.

H6a : The quality of information has a considerable impact on the intention to use, and this impact is influenced by gender.

H6b : The quality of information has a considerable impact on the intention to use, and this impact is influenced by age.

H6c : The quality of information has a considerable impact on the intention to use, and this impact is tempered by the live location (city/village).

H6d : The quality of information has a considerable impact on the intention to use, and this impact is tempered by experience.

2.8. System Quality

The System Quality (SQ) variable in the context of testing the factors of satisfaction and acceptance of

digital banks in Indonesia is related to the quality of the system provided by digital banks to users. This system quality can influence user satisfaction and acceptance of digital banks. Relevant studies have shown that system quality has a significant influence on customer satisfaction with digital banking services. The variables in the model include Transaction Quality, Responsiveness Quality, and Trust and Access Control as part of System Quality(Wiryawan,2022). Other relevant variables that affect customer satisfaction and loyalty in digital banking services include Information Quality, Service Quality, and Convenience (Kumalasari,2022).

H7 : The quality of the system has a substantial impact on the intention to use it.

H7a : The quality of the system has a substantial impact on the intention to use it, and this impact is influenced by the gender of the user.

H7b : The quality of the system has a substantial impact on the intention to use it, and this impact is influenced by the age of the user.

H7c : The quality of the system has a substantial impact on the intention to use, and this impact is influenced by the live location (city/village).

H7d : The quality of the system has a substantial impact on the intention to use it, and this impact is influenced by the user's level of experience.

2.9. Service Quality

The Service Quality (SQ) variable in the context of testing the factors of satisfaction and acceptance of digital banks in Indonesia is related to the level of service quality provided by digital banks to users. This service quality can influence user satisfaction and acceptance of digital banks. This variable aims to understand how the services provided by digital banks to users, through digitalization, affect service quality, which in turn affects user satisfaction ratings. Several relevant studies have shown that service quality plays an important role in influencing user satisfaction and acceptance of digital banking services.

H8 : The level of service quality has a substantial impact on the intention to use.

H8a : The level of service quality has a substantial impact on the intention to use, and this impact is influenced by the gender of the individual.

H8b : The level of service quality has a substantial impact on the intention to use, and this impact is influenced by the age of the individual.

H8c : The level of service quality has a substantial impact on the intention to use, and this impact is influenced by the live location (city/village) of the individual.

H8d : The impact of service quality on intention to use is greatly influenced by experience.

2.10. Security System

Security is a crucial factor in the realm of digital banking. Cybersecurity encompasses the actions implemented to safeguard confidential customer data and transactions from unauthorized access, theft, or fraudulent activities. Security is a crucial component in assessing the service quality of digital banking, alongside materiality, accessibility, complexity, competence, support, and connectivity. Furthermore, it has been discovered that security plays a crucial role in shaping client happiness and loyalty towards digital banking services. In order to guarantee security in digital banking, it is advisable to utilize encryption, make use of proper network segmentation, and implement multi-factor authentication. Organizations can offer concrete security measures to clients, such as disguised DTMF tones, to increase their feeling of safety when dealing with sensitive information such as payment details. In digital banking, security is a vital factor that significantly affects service quality, client satisfaction, and loyalty. Organizations should give utmost importance to implementing security measures in order to safeguard client information and transactions, hence ensuring the maintenance of customer trust in digital banking services.

H9 : The security system has a considerable impact on the intention to use.

H9a : The security system has a large impact on the intention to use, and this impact is tempered by

gender.

H9b : The security system has a substantial impact on the intention to use, and this impact is influenced by age.

H9c : The security system has a substantial impact on the intention to use it, and this impact is moderated by the live location (city/village).

H9d : The security system has a considerable impact on the intention to use, which is moderated by experience.

2.11. Intention to Use

Intention to use pertains to an individual's inclination or preparedness to utilize a specific technology or service. Within the realm of digital banking, the term "intention to use" pertains to a customer's inclination to utilize digital banking services, such as mobile and online banking. Gaining insight into the determinants that impact the inclination to utilize digital banking services is crucial for providers in order to enhance customer acquisition and retention. Multiple research have examined the determinants that impact individuals' inclination to utilize digital banking services. The technology acceptance model (TAM) is a prevalent theoretical framework that elucidates the aspects that impact user acceptance of technology, encompassing digital financial services. The Technology Acceptance Model (TAM) posits that customers' attitudes and intentions towards utilizing digital banking services are primarily influenced by their perception of utility, convenience of use, and enjoyment. Additional variables that have been discovered to impact the inclination to utilize digital banking services encompass security, ease, dependability, and accessibility. Customers are more inclined to utilize digital banking services if they believe them to possess a high level of security and reliability. Likewise, the convenience and accessibility of digital banking services significantly impact clients' inclination to utilize them. Intention to use is a crucial feature in the realm of digital banking. By comprehending the elements that impact it, digital banking providers may enhance their ability to attract and retain customers.

H10 : The intention to use has a major impact on actual usage.

H10a : The intention to use has a considerable impact on actual use, and this impact is influenced by gender.

H10b : The intention to use has a considerable impact on actual use, and this impact is influenced by age.

H10c : The intention to use has a considerable impact on actual usage, and this impact is tempered by the live location (city/village).

H10d : The intention to use has a substantial impact on actual use, and this impact is influenced by the level of experience.

2.12. User Satisfaction

Digital banking customer happiness is clients' overall satisfaction with electronic banking services. Banks must maintain a competitive edge and client loyalty. Multiple studies have shown that service quality, security, reliability, responsiveness, and user-friendliness affect digital banking consumer satisfaction. Customer satisfaction is vital for digital banking services because it boosts a bank's competitiveness. Service quality in banking is measured by how well it meets client expectations. This evaluation compares clients' original expectations with their subsequent service performance perceptions. Thus, efficacy, system uptime, satisfaction, secrecy, communication, and promptness affect e-banking client satisfaction. Furthermore, empirical research shows that e-banking service quality greatly impacts consumer happiness. This shows how responsiveness, dependability, system availability, and speed boost customer happiness and loyalty. The findings demonstrate the importance of service quality factors in digital banking customer satisfaction. Customer satisfaction with digital banking depends on quality, security, reliability, and response. Banks must understand and manage these elements to satisfy customers and be competitive in digital banking.

2.13. Prior Research

Mufarih's prior research examined the determinants of customers' adoption of digital banks in Yogyakarta, Indonesia. The study employed a TAM-based model, incorporating other characteristics such as social image, perceived risk, and trust. The Technology Acceptance Model (TAM) is a prevalent paradigm utilized for the analysis of technology acceptance. The findings of this study suggest that risk and trust concerns have a significant impact on the adoption of digital banking services. Conversely, the use of digital banks is not significantly influenced by social image characteristics, perceived ease of use, or perceived friendliness. (Mufarih et al., 2020)

The study conducted by Agus Rofi'i et al. (2023) examined user acceptability of mobile banking applications using the UTAUT and Delone & McLean model. The findings revealed that Performance Expectancy had a notable impact on user acceptance. The study additionally discovered that user acceptability is influenced by social influence, service quality, and information quality, whereas effort expectancy, facilitating conditions, and system quality had no impact.

In a recent study by Singh and Singh (2022), the researchers examined the adoption of mobile banking applications in India through the lens of the Unified Theory of Acceptance and Sustainable Use of Technology Model (UTAUT). The findings revealed a favorable correlation between user happiness and the utilization of these applications in emergency situations.

By conducting research that has almost the same model based on modified moderating variables, research (Chang et al., 2019) entitled Factors Influencing Online Hotel Booking: Extending UTAUT2 with Age, Gender, and Experience as Moderators. The aim of this research is to investigate the factors that influence the intention to use and behavioral intention to book inline hotels with the proposed model which has assimilated factors from UTAUT2 which are moderated by the variables Age, Gender and Experience. Data collection in this research was carried out by conducting a field survey in the form of a questionnaire filled in by 488 valid respondents with a population of research participants who were customers of 17 international hotels located in Taipei City, New Taipei City, Taichung City and Kaohsiung City. Hypothesis testing analysis uses PLS-SEM and is carried out using Warp PLS 4.0 which is related to principal component regression. This research shows that behavioral intentions are significantly and positively influenced by performance expectations, social influence, facilitating conditions, hedonic motivation, price value and habitual behavior. Usage behavior is positively influenced by facilitating conditions and hedonic motivation. Meanwhile, for moderators, gender moderates the relationship between performance expectations, social influence, and behavioral intentions.

A study was undertaken to analyze the factors influencing the acceptability of digital bank technology. The modified UTAUT 2 approach was employed, incorporating the security variable into behavioral intention. The findings revealed that only two criteria had a significant impact on the intention to use digital banking. The limited awareness and utilization of digital bank services among the public can be attributed to the recent emergence of digital banks in the financial landscape (Ansor, 2022).

3. Method

3.1. Research Design

Based on the results of the distributed questionnaire, the data collected reached 424 respondents, and it was found that 420 respondents used the Bank Digital application. Then after further analysis it was found that the highest number of users were female i.e. 258 respondents and the other 162 respondents were male. Then, there were 2 people or 0.5% for those under 15 years old, 18 people or 4.3% for those between 15 and 17 years old, 120 people or 28.6% for those between 18 and 25 years old, 189 people or 45% for those between 26 and 35 years old, 78 people or 18.6% between 36 and 50 years old, and 13 people or 3.5% among those over 50 years old. And the final comparison is seen from the area of residence between urban and regional areas, which resulted in the composition of the number of

respondents in the capital was 365 people or reached 86.7%, while for those in the regions It was 55 people. or 13.3%. For the data obtained by distributing questionnaires, that is, 102 people or 24.4% have used it for less than 1 year, 189 people or 45.2% have used it for 1 or 2 years, 125 people or 29, 7% have used it for more than 3 years, and for the other 4 people there were those who had never used it or had only opened an account.

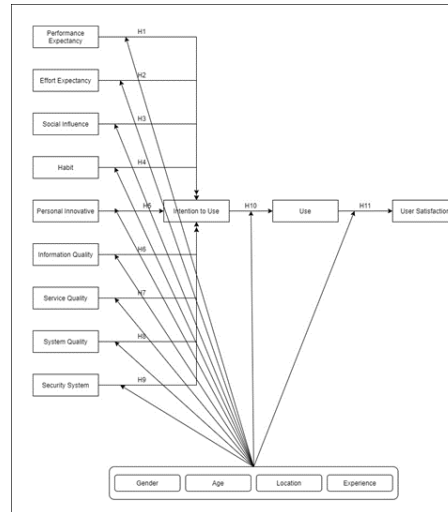


Fig 1. Research Model

3.2. Population and Sample

The sample size for this research was determined using the Slovin formula.

$$n = N / (1 + (N \times e^2))$$

Derived from the most recent data encompassing digital banking users, which totals 47,700,000 individuals, the ensuing outcome is ascertained through computation:

$$n = N / (1 + (N \times e^2))$$

$$n = 47.700.000 / (1 + (47.700.000 \times 0,05^2))$$

$$n = 399,996$$

The number of samples taken is 400 samples where the level of confidence is 95%, the level of precision is 5% and the maximum proportion of variance (p) is 0.5 using random sampling.

3.3. Measurement

This study was carried out by disseminating online surveys through Google Form to all those who utilize digital banking in Indonesia for their transactions. The distribution of this questionnaire was conducted using popular social media platforms like Instagram, Telegram, and WhatsApp. This questionnaire consists of three representative questions per category, which will be evaluated using a Likert scale.

Table 1. Questioner

Variable	Indicator		Question
Performance Expectancy (X1)	PE 1	Effectiveness	Does the existence of Digital Banking make you feel more assisted?

	PE 2	Motivation	Does the presence of Digital Banking make you more productive?
	PE 3	Efficiency	Does Digital Banking save you more time?
Effort Expectancy (X2)	EE 1	Complexity	Is it easy to operate the Digital Banking Application?
	EE 2	Perceived Ease of Use	Does Digital Banking facilitate the transaction process?
	EE 3	Ease of Use	Is the user interface provided by Digital Banking easy to understand?
Social Influence (X3)	SI 1	Influence of Closest People	Can close people influence you to want to use Digital Banking?
	SI 2	Influence of Important People	Can important or favored individuals influence your usage of Digital Banking? (For instance, if Celebrity A uses Jenius, does it make you interested in using Jenius as well for your primary Digital Banking?)
	SI 3	Influence of Promotion	Does extensive promotion influence you to use a specific Digital Banking?
Habit (X4)	HB 1	Consistency	How often do you use Digital Banking?
	HB 2	Awareness	Are you accustomed to the presence of Digital Banking?

	HB 3	Dependency	How reliant are you on using Digital Banking?
Personal Innovative (X5)	PI 1	Innovation Acceptance	Does new innovation affect your usage of Digital Banking?
	PI 2	Innovation Development	Does Digital Banking provide you with the opportunity to offer new innovations or opinions?
Information Quality (X6)	IQ 1	Detail	Is the information provided by Digital Banking complete?
	IQ 2	Timeliness	Is the information provided by Digital Banking relevant to the current conditions?
	IQ 3	Credible	Does Digital Banking provide trustworthy information?
Service Quality (X7)	SeQ 1	Responsiveness	Does Digital Banking provide accurate transaction information?
	SeQ 2	Assurance	Does Digital Banking offer the best assistance?
	SeQ 3	Service Guarantee	Does Digital Banking offer good service assurance?
System Quality (X8)	SQ 1	Maintainability	Does Digital Banking frequently update its system to cater to current needs?
	SQ 2	Response System	Is the Digital Banking system very responsive to user commands?
	SQ 3	Data Security	Does the Digital Banking application

			provide information according to user function and needs, for data security?
Security System (X9)	SS 1	Security	Is your data safe while using Digital Banking? (No double data or hacks)
	SS 2	Privacy	During your use of Digital Banking, are there frequent telemarketing or external disturbances?
	SS 3	Data Suitability	Does Digital Banking often request data that is not relevant to your needs and beyond the application? Intention to Use
Intention to Use (Y1)	IU 1	Intention of Use	I choose to use Digital Banking for my transactions.
	IU 2	Motivation	I hope to continuously use Digital Banking in the future.
	IU 3	Intention to Transition	I intend to shift all my transaction activities to Digital Banking.
Use (Y2)	U 1	Public Perception	According to you, is Digital Banking useful for future transactions, replacing Mobile Banking?
	U 2	Application Reliability	Can the Digital Banking Application be relied

			upon as a transaction medium in the future?
	U 3	Ease of Use	Is the Digital Banking Application easy to operate while you're using it?
User Satisfaction (Z1)	US 1	Perception of Service Value	Do you believe that Digital Banking is worthy of being used as a banking ?
	US 2	Intention to Recommend	Would you recommend Digital Banking to others?
	US 3	Public Acceptance	Are you convinced that Digital Banking is worthy of being accepted by the entire Indonesian society?

3.4. Data Analysis

The data analysis method to be used in this study is SEM-PLS (Structural Equation Modeling with Partial Least Squares). SmartPLS version 4.0 is used to assist in data processing and analysis. To facilitate data processing in SmartPLS, respondent data from the questionnaire will be summarized and tabulated using Excel. The authors will evaluate the accuracy of their proposed research model with the SEMPLS technique, which is based on the combination of dependence and interdependence to examine the link among multiple variables. In this study, data will be processed using SmartPLS 4.0, which has an interface with Excel, allowing data to be directly imported from an Excel file. SmartPLS will assist in mediating analysis, which is a model that tests the relationship between mediating and dependent variables. The results of this analysis will provide insights into the relationships among the variables examined in this study.

4. Result

4.1. Measurement Model (Validity and Reliability Result)

The results of the Convergent Validity test can be obtained by checking the loading factor value of each indicator on a variable and the Average Variance Sampling (AVE) value on each variable. (Hair et al., 2019) states that the minimum limit for the loading factor is 0,6 and AVE values for each variable in the validity test is 0.5 and this value is still practically significant. And then Reliability testing is a way of measuring the extent to which a measurement instrument, such as a questionnaire, is reliable or trustworthy. Each measuring instrument must be capable of producing largely reliable periodic measurements. Using Cronbach's Alpha coefficient, a reliability test was carried out. If the Cronbach's Alpha coefficient is less than 0.70, it indicates that the instrument is considered reliable. The following is a table of validity and reliability testing results :

Table 2. Validity and Reliability Testing

V a r i a b l e	Average Variance Extracted (AVE)	Loading Factor	Cronbach's Alpha	Composite Reliability
Performance Expectancy	0,649	0.804	0.732	0.847
PE 1		0.871		
PE 2		0.806		
PE 3		0.735		
Effort Expectancy	0.667	0.816	0.751	0.857
EE 1		0.814		
EE 2		0.851		
EE 3		0.785		
Social Influence	0.702	0.837	0.788	0.876
SI 1		0.831		
SI 2		0.877		
SI3		0.805		
Habit	0.688	0.829	0.773	0.869
HB 1		0.799		
HB 2		0.861		
HB 3		0.805		
Personal Innovative	0.778	0.882	0.714	0.875
PI 1		0.879		
PI 2		0.885		
Information Quality	0.673	0.820	0.757	0.861
IQ 1		0.816		
IQ 2		0.829		
IQ 3		0.816		
Service Quality	0.666	0.835	0.749	0.856
SeQ 1		0.810		
SeQ 2		0.855		
SeQ 3		0.841		
System Quality	0.698	0.815	0.784	0.874
SQ 1		0.788		
SQ 2		0.834		
SQ 3		0.824		
Security System	0.737	0.858	0.821	0.894
SS 1		0.810		
SS 2		0.882		
SS 3		0.839		
Intention To Use	0.743	0.861	0.826	0.896

IU 1		0.831		
IU 2		0.863		
IU 3		0.890		
Use	0.717	0.814	0.802	0.883
U 1		0.820		
U 2		0.850		
U 3		0.773		
User Satisfaction	0.665	0.846	0.747	0.856
US 1		0.841		
US 2		0.867		
US 3		0.830		

The research findings suggest that all indicators have outer loading values beyond 0.7, and all variables possess AVE values surpassing 0.7. Consequently, all indicators and variables are deemed valid. Discriminant validity testing is performed using two methods. Firstly, we may assess the Fornell Larcker Criterion value, which states that the correlation between a variable and itself should be greater than the correlation between that variable and other variables. Secondly, employing Cross Loading entails ensuring that the correlation coefficient of each indication inside a variable surpasses the correlation coefficient of that indicator with other variables. The results obtained indicate that all Fornell Larcker Criterion and Cross Loading values for each variable and indicator are valid, as shown in Table 1.

The study used Cronbach's Alpha and Composite Reliability to assess reliability. The recommended threshold for both measures is a value over 0.7, as suggested by Suharsimin (1998) and Niagara (2008). The findings demonstrate that the Cronbach's Alpha and Composite Reliability values for each variable exceed 0.7, indicating that all variables utilized in this study are considered reliable for future investigation.

4.2. R-Square Result

The measurement value R Square = 0.75 is classified as strong, R Square = 0.50 is classified as moderate and R Square = 0.25 is classified as weak (Hair et al, 2011). According to Table 7, the R Square variable value has a good coefficient effect.

Table 3. R-Square Result

	R-square	R-square adjusted
IU	0.754	0.726
U	0.641	0.633
US	0.341	0.339

on the results of the coefficient of determination (R-square) values generated by the research constructs as follows:

1. Contribution of Performance Expectancy, Effort Expectancy, Social Influence, Habit, Personal Innovative, Information Quality, Service Quality, System Quality, Security System, and moderating variables to the Intention to use variable is 0.754 or 75.4%. Meanwhile, the remaining 24.6% (100-75.4) is influenced by variables outside the scope of the study.
2. Contribution of the Intention to use variable to the Use variable is 0.641 or 64.1%. Meanwhile, the remaining 35.9% (100-64.1) is influenced by variables outside the scope of the study.
3. Contribution of the Use variable to the User Satisfaction variable is 0.341 or 34.1%. Meanwhile, the remaining 65.9% (100-34.1) is influenced by variables outside the scope of the study.

4.3. Hypothesis Testing

The main goal of hypothesis testing is to ascertain whether the path relationship to the hypothesis has a statistically significant effect. The value of the T-statistic is a benchmark against which the acceptance or rejection of the hypothesis is determined. By calculating the T-statistic, the significance of the path relationship in the hypothesis will be established. Acceptance of H0 and rejection of H1 occur when the T-statistic value is below 1.96. H0 is rejected in contrast; if the statistical value is greater than 1.96, H1 is accepted. And other goal is In the Hypothesis Test, a check is made on the effect of the dependent variable on the independent variable. If the effect is not significant, then the hypothesis can be categorized as rejected. On the other hand, if the effect is significant, then the hypothesis can be categorized as accepted. To assess the significant effect between variables, it can be done by using the P Value. The assessment criteria using the P Value are as follows:

1. If the P Value is <0.05 , then the hypothesis is categorized as having a significant effect and the hypothesis is accepted.
2. If the P Value > 0.05 , then the hypothesis is categorized as having an insignificant effect and the hypothesis is rejected.

Table 4. Hypothesis Result

Code	Hypothesis	Original Sample	T statistics	P values	Result
H1	Performance Expectancy -> Intention to Use	0.123	1.568	0.117	Rejected
H2	Effort Expectancy -> Intention to Use	-0.103	1.227	0.220	Rejected
H3	Social Influence -> Intention to Use	0.143	2.677	0.007	Accepted
H4	Habit -> Intention to Use	0.052	0.298	0.765	Rejected
H5	Personal Innovative -> Intention to Use	-0.124	1.345	0.179	Rejected
H6	Information Quality -> Intention to Use	0.019	0.105	0.917	Rejected
H7	Service Quality -> Intention to Use	0.182	0.889	0.374	Rejected
H8	System Quality -> Intention to Use	0.293	1.395	0.163	Rejected
H9	Security System -> Intention to Use	0.292	3.139	0.002	Accepted
H10	Intention to Use -> Use	0.799	14.039	0.000	Accepted
H11	Use -> User Satisfaction	0.584	11.691	0.034	Accepted

The table 4 presents the results of statistical analyses for various hypotheses related to the factors influencing the intention to use and actual usage of Digital Banks. Let's break down the key information:

1. Rejected Hypotheses (No Significant Impact):

Hypotheses H1 to H11 have been rejected, indicating that the corresponding variables do not have a statistically significant impact on either the intention to use or the actual usage of Digital Banks. These variables include Age, Effort Expectancy, Experience, Gender, Habit, Information Quality, Performance Expectancy, Personal Innovative, Service Quality, System Quality, and various interaction terms.

2. Accepted Hypotheses (Significant Impact):

Hypotheses H3, H9, H10, H11, H1a and H11d have been accepted, suggesting that Intention to Use, Security System, Social Influence, Use, and the interaction between Location and Gender have a statistically significant impact on the intention to use Digital Banks.

3. Insights from Accepted Hypotheses:

The high p-values for H10 (Intention to Use -> Use) and H11 (Use -> User Satisfaction) indicate that these variables significantly influence each other, suggesting a positive relationship between intention to use and actual usage, as well as between usage and user satisfaction. H9 suggests that the Security System has a significant impact on the intention to use, emphasizing the importance of security features in users' decision-making.

4. Insights from Rejected Hypotheses:

The rejection of H1-H53 implies that factors such as age, gender, habit, and various quality measures (effort, information, performance, service, and system) do not play a significant role in influencing the intention to use or actual usage of Digital Banks in the context of this study.

In summary, these results indicate that specific factors like Security System, Social Influence, and the intention to use itself significantly impact users' decisions in adopting Digital Banks. However, demographic factors and certain quality measures do not show a significant influence in the examined context.

4.4. Implications

This study proves that external or environmental factors and the security of a banking application have a significant influence on the interest of potential digital banking users, which affects their satisfaction. With many users feeling satisfied with the existence of digital banks, their influence on others will increase, and digital banks will become more widely known among the general public. Moreover, with the improvement of digital bank security, users, especially the elderly, will feel comfortable switching to digital banking, and it can be said that digital banks can become the main banking media in the future. The intensity of usage will continue to increase among users.

4.5. Theoretical Implications

This research discusses the factors that influence interest in usage, which will affect digital banking acceptance factors in Indonesia for digital banking consumers, using UTAUT 3, the McLean Delone model, and supporting variables like application security. Five of 11 hypotheses had a substantial beneficial effect. Interest in Use (75%), has the broadest positive relationship. User interest increases the likelihood that this digital bank will replace conventional banks as Indonesia's major transaction medium. This study found that most respondents liked digital banking and were satisfied with the outcomes. The most essential user innovation indicator. Because users love trying new things, especially digital banking technologies. Digital banking technology that meets flexibility needs makes users pleased. High innovation increases user convenience and perceived benefits, according to Mohr & Köhl (2021). Previous research showed that Environmental Influence positively affects Intention to Use (Singh and Singh, 2022). Previous research shows that social influence, security, and user satisfaction all affect interest in use (Ansori, 2022 and Rofi'at et al, 2023) and the desire to continue using technology. Technology adoption increases when people feel it is accessible and beneficial. Thus, improving simplicity and usability can boost technology adoption (Shanmugavel & Micheal, 2022). This research confirms that security is the main factor in digital banking, which makes users comfortable and more likely to use it in every banking transaction than conventional banks. Seven constructs were rejected in this study, although they may be references in the future. This supports prior study (Ansori, 2022) that only two constructs affect user satisfaction and the rest are rejected. According to the primary constructs that affect this research's testing outcomes, service providers must retain user trust to enhance digital banking adoption. This research also shows that the UTAUT 3 model must focus on personal security and innovation to increase technology adoption. Digital banking allows account

opening, credit card use, mobile payments, fund transfers, bill payments, and other payments without visiting a branch or ATM. is flexible and ideal for today's users who demand fast-integrating technologies. Other technology simplifies banking payments for faster transactions. The most liked digital banking element is its appealing appearance. Real-time input and output transactions are another benefit of digital banking over physical banking. Usability and convenience of use will improve. Digital banking technology will gain trust. Bank digitization affects consumers, notably security, privacy, and risk, therefore continuous use is needed (Alkhowaiter, 2020; Windasari et al., 2022). Two-factor authentication and biometrics secure digital banking. Digital banking is also competent in handling personal data because it protects it according to government rules. Security guarantees improve customer perceptions of digital banking features and benefits and technology adoption. Thus, technology and products like digital banking require security. User trust is essential to increase acceptability and adoption, but features and convenience of use are crucial. More trust in digital banking increases with safer digital banking, notably security guarantees. To build digital banking user trust and sustainability, physical and system infrastructure must be strengthened regularly.

4.6. Practical Implications

The practical consequences for various stakeholders can be derived from the research results and previous investigations.

- a. Regarding digital banks in Indonesia:
 1. The research offers significant insights and acts as a reference for digital banks regarding the elements that impact customer happiness and the inclination of potential users to improve their digital apps.
 2. It provides data for digital banks to determine if their applications are accessible to the general populace or limited to urban regions.
- b. For companies intending to create digital banking applications:
 1. The study furnishes data to inform their planning sessions prior to the development of digital banking applications.
- c. For scholars:
 1. It provides a chance to get additional knowledge about the subject matter and research approach.
- d. For the general populace:
 1. The research aids in the comprehension of the aspects that impact customer satisfaction and user interest, as demonstrated by the proportion of user interest and usage patterns in digital banking applications.
 2. It offers valuable insights and empirical information regarding the extent of data security in the utilization of digital banking.

The research findings suggest that several aspects have a substantial impact on the inclination to utilize digital banks, including the Security System, Social Influence, and Intention to Use. Nevertheless, the demographic determinants and specific quality metrics do not exhibit a substantial impact in the environment under examination. Indonesia's digital banks should prioritize strengthening security measures and use social influence to encourage user uptake and satisfaction. Moreover, the research findings can provide valuable guidance to organizations in the creation of digital banking applications, ensuring that they effectively address the issues that impact customer acceptability and happiness.

5. Conclusion

This research provides a significant empirical contribution. This study contributes to the scholarly understanding of acceptance criteria within Indonesia's dynamic financial environment. This study explores the determinants of user satisfaction with digital banking applications and investigates the adoption of these applications among Indonesians, particularly those residing in non-urban areas, who

actively utilize and exhibit favorable attitudes towards digital banking. The findings indicate that factors such as environmental stimuli, security measures, and the extent of one's inclination to utilize digital banking services significantly influence an individual's propensity to use them. Age and area are not significant determinants of individuals' usage of digital banking services. Individuals that desire to utilize digital banking services typically persist in their usage and express contentment with their choice. While there is a dearth of thorough data on individual attitudes, this research demonstrates that there are multiple elements that impact the degree of individual interest and contentment with digital banks. In the future, researchers may direct their efforts towards conducting a more comprehensive analysis of younger and older demographics, investigating adoption rates in individual villages, and assessing the influence of digital banking on loan acquisition and other services by expanding the sample size to include individuals with substantial influence or data. This approach would yield more specific and tangible results. Moreover, they possess the capacity to go deeper into user experiences and research novel technologies like artificial intelligence (AI) and blockchain in order to enhance the caliber of digital banking. Evaluating an individual's preparedness for these advancements is crucial for the future of digital banking in Indonesia.

References

- Agus Rofi'i, Firdaus, D. R., & Moridu, I. (2023). The Analysis Of User Acceptance Using Utaut And Delone & Mclean Model: Study Case Of Banking Mobile Application. *Journal Of Information System, Technology And Engineering*, 1(1), 21–25. Doi: 10.61487/Jiste.V1i1.11
- Alaina Isti Fahma Noor. (2022). *Pengaruh Fitur Layanan Dan Kualitas Layanan Terhadap Kepuasan Mahasiswa Uin Walisongo Bertransaksi Menggunakan Mobile Banking Bank Syariah Indonesia*.
- Evelyna, F. (2021). Faktor Faktor Yang Mempengaruhi Nasabah Dalam Menggunakan Layanan Digital Bangking Dengan Menggunakan Model Unified Theory Of Acceptance And Use Of Technology (UTAUT) Pada PT. Bank Mandiri Cabang Kebumen. *Jurnal Bisnis, Manajemen, Dan Akuntansi*, 41. <https://doi.org/10.54131/jbma.v8i2.127>
- Kumalasari, R. A. D., Permanasari, K. I., Karismariyanti, M., & Munandar, D. (2022). Mobile Banking: System Quality, Information Quality, Service Quality, Customer Satisfaction and Loyalty. *Jurnal Ad'ministrare*, 9(1), 141. <https://doi.org/10.26858/ja.v9i1.33951>
- Lawson, C., Latsis, J. S., & Martins, N. (Eds.). (2013). *Contributions To Social Ontology*. Routledge. Doi: 10.4324/9780203607473
- Mufarih, M., Jayadi, R., & Sugandi, Y. (2020). Factors Influencing Customers To Use Digital Banking Application In Yogyakarta, Indonesia. *The Journal Of Asian Finance, Economics And Business*, 7(10), 897–907. Doi: 10.13106/Jafeb.2020.Vol7.No10.897
- Rowley, J. (2006). An Analysis Of The E - Service Literature: Towards A Research Agenda. *Internet Research*, 16(3), 339–359. Doi: 10.1108/10662240610673736
- Safitri, T. A. (2020). The Development Of Fintech In Indonesia. *Proceedings Of The 1st Borobudur International Symposium On Humanities, Economics And Social Sciences (Bis-Hess 2019)*. Doi: 10.2991/Assehr.K.200529.139
- Samartha, V., Shenoy Basthikar, S., Hawaldar, I. T., Spulbar, C., Birau, R., & Filip, R. D. (2022). A Study On The Acceptance Of Mobile-Banking Applications In India—Unified Theory Of Acceptance And Sustainable Use Of Technology Model (Utaut). *Sustainability*, 14(21), 14506. Doi: 10.3390/Su142114506

Setiadi, H. (2022). Analisis faktor-faktor yang mempengaruhi penerimaan dan penggunaan aplikasi mobile banking pada bank buku 4 di Indonesia dengan menggunakan model unified theory of acceptance and use of technology 2. *Fair Value : Jurnal Ilmiah Akuntansi Dan Keuangan*, 5, 1–8.

Supriyadi, F. T., & Darwanto, D. (2023). INVESTIGATING DRIVERS OF DIGITAL BANKING ADOPTION OF GEN Z IN INDONESIA. *Jurnal Ekonomi Bisnis Dan Kewirausahaan*, 12(2), 257. <https://doi.org/10.26418/jebik.v12i2.67212>

Tarhini, A., El-Masri, M., Ali, M., & Serrano, A. (2016). Extending The Utaut Model To Understand The Customers' Acceptance And Use Of Internet Banking In Lebanon. *Information Technology & People*, 29(4), 830–849. Doi: 10.1108/Itp-02-2014-0034

The Delone And Mclean Model Of Information Systems Success: A Ten-Year Update. (2003). *Journal Of Management Information Systems*, 19(4), 9–30. Doi: 10.1080/07421222.2003.11045748

Tomić, N., Kalinić, Z., & Todorović, V. (2023). Using The Utaut Model To Analyze User Intention To Accept Electronic Payment Systems In Serbia. *Portuguese Economic Journal*, 22(2), 251–270. Doi: 10.1007/S10258-022-00210-5

Urbach, N., & Müller, B. (2012). *The Updated Delone And Mclean Model Of Information Systems Success* (Pp. 1–18). Doi: 10.1007/978-1-4419-6108-2_1

Vally, K., & Shankar, D. (2020). Factors That Affect The Digital Banking Adoption In Hyderabad City-Utaut Model Approach.