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An Empirical Study on the Factors Affecting the Usage of Digital Banking in Generation Z

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Abstract. The rapid growth of the Indonesian digital banking industry and the change in customer behavior due to technological development urge the importance of understanding recent customer perspectives. In addition, generation Z has the largest population in Indonesia and is commonly used as the main target market in digital banking. Therefore, this study examines factors influencing Gen Z intention and use behavior in digital banking. The sample size used in this paper is 391 respondents. The collected data was then analyzed using structural equation modelling techniques supported by SmartPLS 4.0. This research finding shows that performance expectancy, effort expectancy, and trust significantly impact attitude towards using digital banking. Moreover, social influence and habit significantly influence behavior intention. However, performance expectancy, effort expectancy, facilitating condition, and price value have insignificant influence on behavior intention. Thus, behavior intention is found to have a significant effect on the use behavior of digital banking in Gen Z. This research contributes by developing an appropriate model and providing empirical evidence related to factors affecting the use of digital banking in a developing country. Besides, utilizing the result helps the industry to focus more on factors affecting Gen Z digital banking adoption to improve the quality of digital banking, attract new customers and retain loyal customers.

Keywords: Digital banking, Meta-UTAUT, UTAUT 2, Gen Z

1. Introduction

The rapid technological developments stimulate the use of technology to improve productivity and business competitiveness, resulting in various new applications and tools, which change the business models and competition to focus more on technological innovation in developing products or services per customer needs.(Mehdiabadi et al.,2020) Emerging technology, the internet, and modern mobile devices equipped with mobile bandwidths such as 3G and 4G in more affordable prices as in recent years (Nguyen et al., 2020) forced organizations to digitize their business process due to the switching habits and tendency of consumers behavior. Companies that are not updated a digital transformation to their business models, streamlined operations, or achieved customer satisfaction will not survive and compete with the competitors. (Adityawan et al., 2023) Technological advancements massively impact both the manufacturing and financial services sectors. These technologies boost the industry's efficiencies which show great potential as catalysts for sustainable development. (Rajan et al., 2022)

In the banking sector, technology is crucial for bank operational activities and customer services to enhance the effectiveness and efficiency of its business model by reducing business operating expenses, such as reducing the inefficiency of paper-based documents for bills, card statements, receipts, and others. (Ahn & Lee, 2019) also provides users with a practical and easy-to-use banking experience. Rapid growth in the Indonesian banking industry drifts intense competition among banks. Therefore, to increase business competitiveness and fascinate customers, recent bank institutions have developed more advanced models, such as providing a new utility service known as digital banking. (Nguyen, 2020)

Digital banking services are more extensive than semi-digital or electronic banking services such as internet banking and mobile banking due to their ability to provide a fully digital banking services experience and serve as a digital wallet. (Windasari et al., 2022; Nguyen, 2020) Digital banking also operates entirely virtual without physical branches and offers various services.

In addition, restrictions on physical interaction and Covid-19 transmission in the "new normal" also increase public demand for digital services in banking industry. Therefore banks as financial sectors should improve company business processes by fully digitizing their products and services regarding current conditions. (Windasari et al., 2022). Pandemic restrictions also made digital payments that were once convenient change their status to necessary. (Tafti et al., 2020)

Rapid advancement in mobile technology and an increasing number of smartphone users also introduce digital banking as a new way of banking. (Suhaimi & Hassan, 2018) The value of digital banking transactions in Indonesia in April 2022 increased sharply by 71.4% (YoY) to Rp5,338.4 trillion (Bank Indonesia, 2022). In 2021 digital bank accounts registered in Indonesia were the second largest in the world, with 47,722,913 accounts or 25% of the Indonesian population. (Indonesian Ministry of Finance, 2022) This shows the interest in using digital channels for banking transaction purposes. Seeing the prospects of digital banking led to increased competition between financial institutions.

Indonesian population census in 2020 indicated that Generation Z dominates the total population by 27.94% (Kata Data, 2021). Generation Z is also the main target segment for digital banking services. (Windasari et al., 2022) This generation is known as technology-savvy and has different consumption behavior from previous generations. (Francis & Hoefel, 2018) Gen Z is a new generation of financial institution customers. In addition, most of the current bank customers are categorized as young and middle-aged groups with distinct expectations and preferences from previous generations. With the change in customer behavior, it is vitally important to explore the use of digital banking specifically for Gen Z customers to be well-received by customers and prospective customers.

However, there are some research gaps regarding recent digital banking, especially considering the number of studies examining digital banking in Indonesia is still very limited. In addition, most research that studies digital banking is yet to separate digital banking from electronic banking services such as mobile banking. Therefore, the result might indicate differently. Besides, studies utilizing Meta-

UTAUT are still very limited, considering Meta-UTAUT is a recently discovered method found in (Dwivedi et al., 2019). In regard, this study was conducted to fill the research gap by providing empirical insight into factors influencing attitudes toward using technology, then affecting behavioral intention and the usage behavior of digital banking for Generation Z (17-25 years old) in 5 major cities in Indonesia, namely Jakarta, Bogor, Depok, Tangerang, and Bekasi using a combined method of Meta-UTAUT and UTAUT2.

2. Literature Review and Hypothesis Development

2.1 Digital Banking

Digital banking (known as digital-only banking, virtual banking, internet-only banking, and branchless banking) is a type of virtual bank that accommodate entire banking activities online to help customers conveniently access traditional banking activities such as applying for financial products, account management, deposits, transfers, payment, loan management, investment in mutual funds, and other integrated services. (Ahmed & Sur, 2021) The digital bank offers numerous benefits for banking institutions and customers. For organizations, digital banks reduce operating costs, save time, risk management, and optimize organization monitoring. Digital bank also offers products and services with enhanced quality. As for customers, digital banking benefits by reducing the transaction time, offering secure transactions, and being accessible in remote areas without time limitations. (Kitsios et al., 2021)

In terms of internet dependence, there are two forms of electronic banking services. The first type is traditional offline banks with additional online channels (mobile banking or internet banking) to its customers; the second type is the digital bank that fully relies on online access to please consumers who desire to have access to their banking activities through the internet, without the need to visit physical bank branches. (Ahn & Lee, 2019) In traditional banking with mobile banking or internet banking features, customers need to visit branch offices to verify documents or conduct certain transactions. Whereas digital banks fully rely on digital infrastructure to serve customers without providing physical branches, therefore, the entire banking activities such as registration or account opening, transactions (cash withdrawals, transfers, and payments), account closing, and obtaining information such as financial advice and other financial needs of customers are carried out online without physical customer attendance. Digital banking also benefits customers by providing broader banking services, such as virtual cards, e-wallets, investments, and supplementary flexible savings. (Sha & Mohammed, 2017) With these advantages, digital banking offers convenience for its customers by providing more sophisticated service without the constraints of time and place.

2.2 Generation Z Behavior in Using Digital Banking

Generation Z (Gen Z or also referred to as Gen Zers, iGen, Home-landers, or digital Natives) are defined as individuals who were born between 1997 and 2012. Generation Z is a true digital natives because Gen Z has been familiar with the internet, social networks, and mobile devices since their youth. This results in a highly comfortable hypercognitive generation that gathers and cross-references information from multiple sources and integrates virtual and offline experiences. (Francis & Hoefel, 2018) Rapid technological growth is a fundamental catalyst for transforming Gen Z behavior and values. (Pichler et al 2021).

Gen Z is a new generation of financial institution customers. This generation started their financial journey much earlier than the previous generation. Gen Z is more likely to be interested in their first savings accounts at a young age, while the older generations are interested in mortgages, loans, and insurance. (Kaabachi, et al., 2022) This generation makes decisions in a very analytical and pragmatic way. This behavior affects how Gen Z perceives their consumption and brand relationship. Organizations have to adapt to three implications for Gen Z: consumption viewed as access rather than ownership, consumption viewed as the expression of individual personality, and consumption as a matter of ethical value. (Francis & Hoefel, 2018)

Young customers frequently open accounts in multiple banks, th3fore it is easy for customers to compare each bank's services and switch to what they think provides the best services, motivating banks to offer more exclusive services. (Windasari et al., 2022) Financial institutions were suggested to have continuous interaction with its end-user and entrust consumers in charge of the process where customers intended to employ digital banking much the same as social media, which can be used anywhere, anytime, and in any conditions. (Dootson et al., 2016)

2.3 Development of Unified Theory of Acceptance and the Use of Technology (UTAUT)

There is a prominent model in examining factors of public acceptance of technology, namely UTAUT, as explained in (Venkatesh et al., 2003). Then, it was further developed into the UTAUT2 (Venkatesh et al., 2012), which not only focuses on the context of organizations but also takes into account the technology acceptness of consumers (Nguyen et al., 2020). UTAUT2 is still using the same variable as UTAUT: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions to predict Behavior Intention. However, UTAUT2 eliminates the supporting variables of Voluntariness of Use and adds three main construct variables to the UTAUT 2, specifically: Hedonic Motivation, Price Value, and Habit. (Venkatesh et al., 2012)

Furthermore, a meta-analysis of 162 UTAUT empirical studies then modified the UTAUT model, later referred to meta-UTAUT model (Dwivedi et al., 2019). Meta-UTAUT uses attitude as an additional mediation variable between its independent variables to behavior intention and use behavior as the final dependent variable. This model provides a direct and mediation effect of attitudes toward use behavior and proves its compatibility as a pivot construct in the technological adoption model (Dwivedi et al., 2020). Meta-UTAUT is also relatively new and has not been widely used to test individual acceptance in information systems and technology usage.

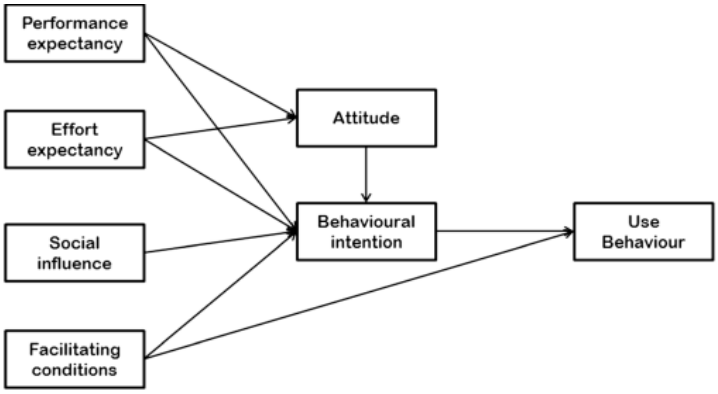

Fig. 1: Meta-UTAUT (Dwivedi et al., 2019)

2.4 Hypothesis Development

Performance Expectancy is the rate at which technology will offer advantages to consumers in accomplishing a specific activity. (Venkatesh et al., 2012; Patil et al., 2020) Digital banking is an essential service to help customers' banking activities. Therefore meeting customer expectations of digital banking usefulness determines the positive attitude and consumers' intention to adopt technology. Studies exploring the effect of performance expectancy on digital banking usage, especially in Indonesia, are still very limited.

Research conducted by (Patil et al., 2020) on mobile payments adoption in India found a significant impact on the relationship between performance expectancy to attitude toward using technology. In addition, Research (Vinitha, K., 2020; Nguyen, O.T., 2020), who examined online banking and digital banking services using TAM, found a significant effect in alternative constructions, namely perceived usefulness to consumer attitudes.

The digital banking system is designed to provide benefits in conducting various financial or bank transactions for users. When customers experience the usefulness of digital banking, users have a tendency to use it anytime they need it. Research (Venkatesh et al., 2012) found that performance expectancy is the main predictor of consumers' intention to adopt certain technologies. A study by (Tarhini et al., 2016) found that performance expectancy significantly affects behavior intention in internet banking adoption in Lebanon. Research (Nguyen et al., 2020) also found a significant effect of performance expectancy on behavior intention in digital banking users in Vietnam.

Effort Expectancy is the extent of ease in using a certain technology, which can reduce the effort, including time and energy, to complete certain tasks. (Venkatesh et al., 2003) The existence of digital banking affects the customer effort in conducting banking activities. Customers need to understand how to use digital banking to help customers banking activities without wasting time and energy to generate transactions at ATMs or branch offices. Therefore effort expectancy can affect the attitude and intentions of digital banking users.

According to (Patil et al., 2020), effort expectancy significantly influences attitude toward mobile payment adoption in India. Previous researchers on digital banking generally only conducted studies that analyzed the alternative construct. Thus, the relationship between these variables still needs to be studied. Several examples of studies that use construct variables, namely perceived ease of use to attitudes using digital banking as in a study constructed by (Vinitha, K., 2020), initiate that perceived ease of use has a significant influence on the attitudes of digital banking users in Chennai, India.

The digital banking system is designed to be as straightforward for customers to carry out banking activities and other financial transactions. With the ease of digital banking, users tend to increase the intention and intensity of using digital banking. Based on (Nguyen et al., 2020), effort expectancy significantly influences the behavioral intention of digital banking users in Vietnam. Additionally, some studies examine the relationship of its alternative construct variable, perceived ease of use. Research (Suhaimi & Hassan, 2018) found a significant effect of perceived ease of use in Malaysian branchless digital banking acceptance. Research conducted by (Windasari et al., 2022) also found that perceived ease of use has a significant influence in intention to use digital-only banking in Indonesian generations Y and Z.

Social Influence refers to the social pressures from an individual external environment, such as opinions from family, relatives, friends, and acquaintances, that can influence the perception and behavior of individuals in carrying out certain actions. This is because the uncertainty will greatly influence consumers in certain technological innovations, which will further pressure the person to interact with the social environment around the individual to discuss the adoption decision that the individual will make. (Tarhini et al., 2016) Based on the research (Tarhini et al., 2016) found that social influence significantly affects behavioral intention in the adoption of internet banking in Lebanon. The finding aligns with (Windasari et al., 2022), which examined the digital-only banking user experience in Indonesian generations Y and Z.

Facilitating Conditions is a level to measure the degree to which individuals believe that the existence of adequate facilitation must support the use of certain systems. (Patil et al., 2020; Venkatesh et al., 2012) This can be interpreted that the availability of adequate infrastructure owned by individuals, including networks, internet, and compatible devices, as well as adequate facilities provided by digital bank providers, will increase the use of digital banking, especially after witnessing the excessive use of smartphones, internet access, and other technologies in the daily activities of generation Z that can boost the use of digital banking. Based on (Iskandar et al., 2020) facilitating conditions significantly affect behavior intention in Indonesian mobile banking usage. A similar finding was found by (Tarhini et al., 2016), which examined m-banking usage in Lebanon. Research (Patil et al., 2020) also found a significant influence of facilitating conditions on Indian mobile payment adoption behavior intention.

Price value is the consideration between costs incurred in using certain technology and the benefits obtained. Price value is considered positive if the benefits exceed its price value. (Venkatesh et al., 2012) The price value can also affect people's intentions and behavior in using digital banking. Seeing the many technological innovations, specifically in the digital financial sector, both banking and non-banking sector (such as e-payments and e-wallets) that are increasingly competitive, offer attractive promotions and various service fees. Based on research (Kwateng et al., 2018) price value is included as the main motivation in the m-banking adoption in Ghana. Based on (Windasari et al., 2022), the economic value of digital-only banking indicates significant influence on digital-only banking in generation Y and Z behavior intention.

Habit is defined as how users use certain technology in their daily lives. Consumer habits and preferences are changing, along with the advancement of mobile devices, the internet, and other technologies. Consumers are increasingly adapting to digitalization by interacting using online media to find and share information, online shopping, online payment, and others, raising the habit of accessing a certain technological system. Digital banking generally has integrated digital payment systems in e-commerce, e-wallets and offers various financial services, making users increasingly accustomed to digital banking. This will increase the intention of user behavior in using digital banking. Research (Widodo et al., 2019) shows that habit has the most substantial effect on Behavior intention on digital wallet usage in Indonesia. The research (Nguyen et al., 2020) also supports the study which found that habit have a significant influence on behavioral intentions of digital banking use in Vietnam.

Trust is a personal belief that a party will complete its responsibilities. Trusts play an important role in electronic financial transactions and bank financial institutions. In digital banking, users are prone to mistrust and a sense of losing control over their assets. (Widodo et al., 2019) Digital banking especially requires customers to fill in sensitive personal information. In addition, unstoppable technological advances can lead users to suspect the possibility of attacks on digital banking systems or networks. Therefore, trust is crucial to strengthen long-term relationships with customers in the industry. Trust also provides subjective assurance that service providers give consumers a positive experience of honesty, ability, and good faith. (Patil et al., 2020) Researchers (Widodo et al., 2019) found that trust has a significant impact on the behavior intention of digital wallet adoption. In addition, based on (Nguyen et al., 2020) trust significantly affects digital banking behavioral intention.

Based on (Patil et al., 2020), attitudes have a more prominent role in the individual's intention to carry out underlying behaviors, especially in the early stages of technology adoption. This aligns with the recent implementation of digital banking in Indonesia. The results (Patil et al., 2020) show that attitude causes a significant effect on the behavior intention of m-banking adoption. This result is also supported by research (Vinitha, K., 2020) which found a significant effect of attitude on behavior intention of digital banking adoption.

Several previous studies have found evidence regarding the significant impact on the relationship of behavior intention to use behavior. (Venkatesh et al., 2003; Venkatesh et al., 2012) In banking context, (Tarhini et al., 2016) examined the use of m-banking in Lebanon and found a significant influence of behavior intention on m-banking use behavior. This is also in line with (Patil et al., 2020), who examined the adoption of m-payment in India.

Consequently, the following assumptions are formulated based on previous studies:

Hypothesis 1: Performance expectancy significantly influences Gen Z attitude toward using technology digital banking.

Hypothesis 2: Effort expectancy significantly influences Gen Z attitude toward using digital banking technology.

Hypothesis 3: Performance expectancy significantly influences Gen Z digital banking customers behavior intention.

Hypothesis 4: Effort expectancy significantly influences Gen Z digital banking customers behavior intention.

Hypothesis 5: Social influence significantly influences Gen Z digital banking customers behavior intention.

Hypothesis 6: Facilitating conditions significantly influence Gen Z digital banking customers behavior intention.

Hypothesis 7: Price Value significantly influences Gen Z digital banking customers behavior intention.

Hypothesis 8: Habit significantly influences Gen Z digital banking customers behavior intention.

Hypothesis 9: Trust significantly influences Gen Z attitude toward using technology digital banking.

Hypothesis 10: Attitude toward using technology digital banking significantly Influences gen Z digital banking customers behavior intention.

Hypothesis 11: Behavioral intention significantly Influences Gen Z digital banking customers use behaviour.

3. Research Methodology

The research was conducted using a quantitative method. Gen Z was selected as the target population considering this generation is familiar with technology, risk-taking, and access internet more frequently than other generations. The minimum age of 17 years was determined as the minimum age required to open a bank account in Indonesia. The sampling technique utilized in this paper is using purposive sampling with the following characteristics: 1) Individuals who are using digital banking; 2) Age 17-25 years old; 3) Domiciled in Greater Jakarta (namely Jakarta, Bogor, Depok, Tangerang, and Bekasi); 4) Have a minimum of six months registered as a digital banking customer.

The data used in this study is primary data. For research purpose, 34 items contained in the questionnaire to measured instruments and adopted the model utilized in the previous study (Venkatesh et al., 2003; Venkatesh et al., 2012; Widodo et al., 2019; Nguyen, T. T., 2020). The questionnaires were divided into two sections. First section was designed to capture demographic information and banking usage information. The other section consisted of items measuring each research variable: performance expectancy, effort expectancy, social influence, facilitating conditions, price value, habit, attitude toward using technology, behavior intention, and use behavior.

The questionnaire was designed to measure factors influencing digital banking behavior usage using the Likert scale to determine the respondent's perspectives and to measure the attitudes, opinions, and perceptions of a person or group of people regarding a social phenomenon (Ghozali & Latan, 2020). Using the Likert scale, respondents can choose one of five options indicating respondent approval regarding the given statement with a rating of 1 (strongly disagree), 2 (disagree), behavioral intentions 3 (neutral), 4 (agree), and 5 (strongly agree).

The data was obtained by distributing questionnaires to Gen Z digital banking customers who complied with the selected criteria. Based on the previous studies, an online survey questionnaire was adapted for this research purpose. Data collection in this study was carried out by distributing online questionnaires using google forms through social media such as Line, WhatsApp, Facebook, and Instagram. As for the unknown number of the study population, the authors used Cochran formula to determine the minimum research sample. Therefore, the minimum number of research samples based on Cochran formula was 385 respondents. (Sugiyono, 2019)

The survey was conducted in September and October 2022 and shared among individuals domiciled in greater Jakarta who utilizes digital banking app such as Allo Bank, Bank Aladin, Bank Jago, Blu, Jenius, Line Bank, Motion Bank, NeoBank, Nyala, Seabank, TMRW, and Wokee. On this basis, this

study collected a total of 405 responses and deducted by some replies that had to be discarded due to invalid data. Thus, a total of 391 respondents were considered feasible for analysis.

This research was then evaluated with Structural Equation Model using Partial Least Square (SEM-PLS) supported by SmartPLS 4.0 to perform the necessary statistical data tests and process the numbers on quantitative data consisting of measurement model (outer model) and structural model (inner model). First, using the outer loading to confirm the reliability. Second, composite reliability and cronbach's alpha are tested to assess internal consistency reliability. Third, convergent validity is used to assess the validity. The last step is measuring the discriminant validity using Fornell-larcker criterion. (Hair et al., 2013) Then, evaluate coefficient of determination (r-square) to define the ability of the independent variables to clarify the dependent variables variation. (Ghozali & Latan, 2020) The last, test the hypotheses using P-value. If P-value is below 0.05, the hypotheses are supported.

Figure 2 shows the theoretical framework used a total of 10 Variables, consisting of Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), Price Value (PV), Habit (H), Attitude towards using technology (Att), Behavior Intention (Int) and Use Behavior (Use). Following is the definition of each variable. Performance Expectancy refers to the rate at which technology will offer an advantage in completing a particular customer activity. (Venkatesh et al., 2003; Patil et al., 2020) Effort Expectancy is the level of ease in using a certain technology that assists in completing certain work. (Venkatesh et al., 2012) Social Influence defines as social pressures from the external environment, such as opinions of family, friends, relatives, acquaintances, or others that can influence the perception and behavior of individuals. (Tarhini et al., 2016) Facilitating Conditions is a level to measure the degree to which individuals believe that the existence of adequate facilitation support system usage. (Venkatesh et al., 2003; Patil et al., 2020) Price Value is the extent to which the costs have an impact on certain technological usage. (Venkatesh et al., 2012) Habit is defined as how users use certain technology in their daily lives. Trust is a personal faith that the party will complete its responsibilities. Attitude toward technology is an overall response regarding the evaluation of positive or negative in using technology. Behavior Intention refers to the extent to which users intend to use technology. The last, Use Behavior is defined as how often an individual uses certain technology (Venkatesh et al., 2012), in this is digital banking usage.

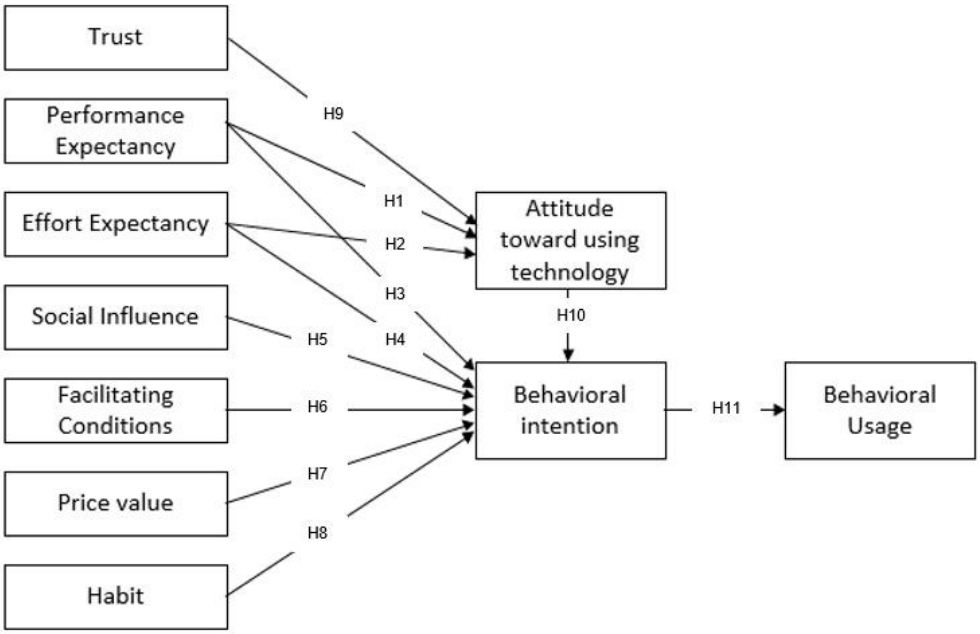

Fig. 2: Theoretical framework

4. Result and Discussion

Researchers have gathered a total of 391 respondents via Google Forms. Table 1 shows the data consists of several aspects to capture demographic information and banking services usage information such as age, gender, occupation, electronic banking services, length and frequency of usage, fund balance, and used features. Moreover, the items measuring each research variable are evaluated using the measurement and structural models.

4.1 Demographical Result

Table 1**:** Demographic Data

Category		Amount	Percentage
Age			
17 years old		8	2.05%
18 years old		67	17.14%
19 years old		92	23.53%
20 years old		60	15.35%
21 years old		28	7.16%
22 years old		36	9.21%
23 years old		41	10.49%
24 years old		32	8.18%
25 years old		27	6.91%
	Total	391	100%
Gender:			
Female		280	71.61%
Male		111	28.39%
	Total	391	100%
Occupation:			
Employees		105	26.85%
University Student		254	64.96%
Entrepreneurs		29	7.42%
Highschool Student		3	0.77%
		391	100.00%
Electronic Banking Service			
Digital banking		391	100.00%
Mobile banking		283	72.38%
Internet banking		43	11.00%
Phone banking		8	2.05%
SMS banking		4	1.02%
Most-Used Service			
Digital banking		212	54.22%
Internet banking		7	1.79%
Mobile banking		171	43.73%
SMS banking		1	0.26%
	Total	391	100.00%
Length of usage			
6 -11 month		192	49.10%
1 - 2 year		163	41.69%
3 - 4 year		25	6.39%
More than 4 year		11	2.81%
	Total	391	100.00%
Usage frequency			
1 - 2 times per month		81	20.72%

Once per week	52	13.30%
2 - 3 times per week	102	26.09%
4 - 5 times per week	84	21.48%
Everyday	72	18.41%
Total	391	100.00%
Fund Balance		
Bellow 1.000.000 rupiah	189	48.34%
1.000.000 - 3.000.000 rupiah	71	18.16%
3.000.001 - 5.000.000 rupiah	55	14.07%
5.000.001 - 10.000.000 rupiah	56	14.32%
10.000.001 - 20.000.000 rupiah	17	4.35%
20.000.001 - 50.000.000 rupiah	1	0.26%
More than 50.000.000 rupiah	2	0.51%
Total	391	100.00%
Used Features		
Transfer fund	379	
Payment	225	
Financial record (history and detail transaction)	130	
Fund management using Sub-account	78	
Investment	67	
Deposit	56	
Paylater	16	
Reason to use		
Convenience in account opening	328	
Daily Transaction	290	
Promotion offered	170	
Free transfer fee and top-up	170	
Saving and deposit	137	
Quick and easy loan	33	

4.2 Measurement Model Evaluation

This study was conducted by first evaluating the measurement model. Researchers are assessing the reflective outer models to confirm reliability and validity. First, using the outer loading to confirm the readability of data. Outer loading above 0.70 indicates the indicator is valid. Table 2 shows the result of the outer loading value for each indicator. All items have outer loading values greater than 0.70, meaning all the indicators are supported.

Table 2: Convergent Validity

Construct	Item	Outer loading
Performance Expectancy (PE)	PE.1	0.767
	PE.2	0.768
	PE.3	0.761
	PE.4	0.706
	PE.5	0.713
Effort Expectancy (EE)	EE.1	0.793
	EE.2	0.764
	EE.3	0.777
	EE.4	0.815

	EE.5	0.739
Social Influence (SI)	SI.1	0.834
	SI.2	0.895
	SI.3	0.727
Facilitating Condition (FC)	FC.1	0.749
	FC.2	0.759
	FC.3	0.745
	FC.4	0.793
Price Value (PV)	PV.1	0.769
	PV.2	0.851
	PV.3	0.845
Habit (H)	H.1	0.859
	H.2	0.879
Trust (T)	T.1	0.876
	T.2	0.869
	T.3	0.861
	T.4	0.839
Attitude Toward Using Technology (Att)	Att1.1	0.893
	Att1.2	0.871
Behavior Intention (Int)	Int2.1	0.889
	Int2.2	0.878
Use Behavior (Use)	Use1.1	0.926
	Use1.2	0.873

Second, composite reliability and Cronbach's alpha are checked to assess internal consistency reliability. Cronbach's alpha and the composite reliability expected value is above 0.7, while a value of 0.6 is acceptable. (Hair et al., 2013) Higher values reveal a higher level of reliability. As shown in Table 3, all constructs are proven to have internal consistency reliability. Third, convergent validity is used to assess the validity. Convergent validity is supported if the average variance extracted (AVE) value is greater than 0.50. (Hair et al., 2013)

Table 3 shows the validity and reliability of this research model. As shown in Table 3, all composite reliability and Cronbach's alpha greater than 0.7 indicate good internal consistency reliability, except for habit with composite reliability and Cronbach's alpha above 0.60, which imply acceptable internal consistency reliability. Table 3 also shows that all variables have AVE exceeding 0.5, meaning the model is considered valid.

Table 3: Construct Validity and Reliability

Construct	Composite Reliability	Cronbach's Alpha	AVE
Performance Expectancy (PE)	0.798	0.803	0.553
Effort Expectancy (EE)	0.837	0.843	0.605
Social Influence (SI)	0.756	0.777	0.675
Facilitating Condition (FC)	0.759	0.761	0.580

Price Value (PV)	0.762	0.776	0.676
Habit (H)	0.676	0.679	0.755
Trust (T)	0.884	0.886	0.742
Attitude Toward Using Technology (Att)	0.715	0.718	0.778
Behavior Intention (Int)	0.719	0.720	0.781
Use Behavior (Use)	0.768	0.803	0.809

The last step is to measure the discriminant validity. The measurement is completed using Fornell-larcker criterion where AVE square root value above the correlation between latent constructs indicates a good discriminant validity. (Hair et al., 2013) Table 4 shows that each item has the highest loads on its associated construct thus, confirmed the discriminant validity has been verified.

Table 4: Discriminant Validity Using Fornell-Larcker Criterion

	Att	Int	Use	EE	FC	H	PE	PV	SI	T
Att	0.882									
Int	0.652	0.884								
Use	0.582	0.580	0.900							
EE	0.542	0.516	0.373	0.778						
FC	0.569	0.550	0.374	0.738	0.762					
H	0.682	0.628	0.571	0.492	0.581	0.869				
PE	0.635	0.570	0.493	0.615	0.672	0.628	0.744			
PV	0.618	0.543	0.460	0.529	0.589	0.618	0.515	0.822		
SI	0.508	0.498	0.503	0.420	0.470	0.501	0.487	0.471	0.822	
T	0.632	0.521	0.594	0.378	0.426	0.559	0.497	0.548	0.517	0.861

4.3 Structural Model Evaluation and Hypothesis Testing

Structural Model shows the estimated strength of relationships between constructs related to the proposed hypothesis. The model is assessed by evaluating coefficient determination (r-square) to determine independent variables' capacity to clarify its dependent variables variation. R-square equal to 0.75 demonstrates a solid model, 0.50 implies a moderate model capability, and 0.25 demonstrates a weak or frail model (Ghozali & Latan, 2013).

Table 5: R-square Test

Construct	R-Square	R-squared Adj
Attitude toward using technology	0.560	0.556
Behavioral Intention	0.530	0.521
Behavioral Usage respectively	0.336	0.334

As shown in Table 5, the R-square value for Attitude toward using technology, Behavioral Intention, Behavioral Usage respectively 0.560 (R-squared Adj = 0.556), 0.530 (R-squared Adj =0.521), and 0.336 (R-squared Adj =0.334). This implied PE, EE, and T have explained about 56% variance in determining Attitude toward using digital banking. Meanwhile, PE, EE, SI, FC, PV, H, and Att explained 53% variance in determining behavior intention in using digital banking. Table 5 also implied that BI explained 33% variance in determining the use behavior of Gen Z digital banking customers, while other variables beyond the research model explained the remaining percentage.

Table 6: Path Coefficient and Hypotheses Testing

Constructs	Path coefficient	Mean	Standard deviation	T-statistics	P-value	Decision
PE -> Att	0.315	0.317	0.053	5.967	0.000	H1 Supported
EE -> Att	0.196	0.196	0.045	4.366	0.000	H2 Supported
PE -> Int	0.074	0.077	0.057	1.294	0.196	H3 Rejected
EE -> Int	0.086	0.085	0.064	1.355	0.176	H4 Rejected
SI -> Int	0.118	0.118	0.046	2.586	0.010	H5 Supported
FC -> Int	0.061	0.062	0.073	0.829	0.407	H6 Rejected
PV -> Int	0.062	0.065	0.055	1.131	0.258	H7 Rejected
H -> Int	0.217	0.215	0.061	3.558	0.000	H8 Supported
T -> Att	0.401	0.401	0.041	9.872	0.000	H9 Supported
Att -> Int	0.277	0.276	0.065	4.251	0.000	H10 Supported
Int -> Use	0.580	0.583	0.040	14.341	0.000	H11 Supported

Table 6 shows the results of Path coefficient, Mean, Standard deviation, T-statistics, and P-value. P-value below 0.05 and T-statistic greater than 1.96 means the hypothesis is supported, while P-value above 0.05 or T-statistic below 1.96 means the hypothesis is rejected. Therefore Table 5 indicate that H1, H2, H5, H8, H9, H10, and H11 are supported, meanwhile H3, H4, H6 and H7 are rejected. A positive value in Path coefficient reveals that all the relationships between variables are in positive direction, meaning each exogenous variable has a positive impact on the endogenous variables in PE -> Att, EE -> Att, SI -> Int, H -> Int, T -> Att, Att -> Int, Int -> Use. The result in Table 6 also shows that the strongest construct in predicting attitude toward digital banking technology is Trust. Moreover, the strongest construct in predicting gen z behavior intention is Gen Z attitude toward using digital banking followed by habit.

4.4 Discussion

Based on the result in Table 1, the most-used bank electronic services are digital banking (54.22%), mobile banking (43.73%), Internet banking (1.79%), and SMS banking (0.26%). The results indicate that Gen Z is familiar with and prefers to use more advanced banking services such as digital banking and m-banking, while Internet banking, SMS banking, and phone banking are rarely used. The data also shows a significant increase in digital banking users in the last two years, which is in line with the increased internet and phone users as in previous research. Besides, covid restrictions make digital payment more important. (Suhaimi & Hassan, 2018; Tafti et al., 2020)

Table 6 shows that H1 is supported, which means performance expectancy significantly influences Gen Z attitude toward using digital banking ($\beta = 0.315$ and $p < 0.05$). This result correlates with (Patil et al., 2020), which found a significant positive influence of performance expectancy on the attitude toward technology m-payment in India. In the same context, a study (Nguyen, 2020) found that an alternative construct, specifically perceived usefulness, significantly influence attitudes toward using digital banking in Vietnam.

H2 reports that effort expectancy significantly influences the attitude toward using digital banking technology. Based on Table 6, H2 assumption has been justified ($\beta = 0.196$, $p < 0.05$). A similar relation was also shown in (Dwivedi et al., 2019), which found that effort expectancy significantly affects attitude toward using technology. The result also supported research (Patil et al., 2020), which found a significant positive effect of effort expectancy on the attitude toward technology m-payment.

The third assumption (H3) is rejected, meaning performance expectancy does not significantly influence Gen Z behavior intention. Similar findings were revealed by the study (Nur & Gosal, 2021), however in M-banking and digital banking context, the result is opposed to those (Tarhini et al., 2016), (Iskandar et al., 2020) and (Nguyen et al., 2020). The possible reason is due to technological

advancements and the current situation where people are forced to utilize online media banking. Therefore, Gen Z no longer considers performance expectancy as a predominant factor in influencing behavior intention.

This study rejected H4, which means effort expectancy does not significantly influence Gen Z behavior intention. This study is in line with (Tarhini et al., 2016) and (Iskandar et al., 2020), who also found the same effect. However, this finding shows inconsistent with the previous studies (Venkatesh et al., 2003; Nguyen et al., 2020). Gen Z is considered a digital-savvy generation and already has access to the internet and digital technology from an early age. Therefore, Gen z is familiar with technology and can easily access digital banking. Furthermore, current internet and phone user experience are designed to be more user-friendly, reducing the concern about the effort needed in using digital banking.

In addition, H5 expects that social influence (SI) significantly affects gen Z behavior intention is confirmed ($\beta = 1.118$, $p < 0.05$). These findings align with research (Tarhini et al., 2016), which shows the significance of social influence on behavior intention in internet banking adoption in Lebanon, and a result (Windasari et al., 2022) examined the digital-only banking user experience in generations Y and Z.

This paper rejected H6 and found that facilitating condition does not significantly influence Gen Z behavior intention. The findings are similar to a study by (Nguyen et al, 2020) that found that Facilitating Conditions do not significantly affect the intention to use digital banking services in Vietnam. However, the result is inconsistent with preceding research by (Iskandar et al., 2020) that found a significant impact of facilitating condition on m-banking usage behavior intention in Indonesia. The result is possible considering Gen Z have compatible devices to access digital banking, especially with higher use of smartphones, internet access, and the emergence of other technologies. This is also supported by adequate facilities provided by digital bank providers to reduce the concern about facilitating condition that must be provided in using digital banking.

Likewise, this research also rejected H7, which means price value shows no significant influence on Gen Z behavior intention. The result supported (Nguyen et al., 2020) found that PV does not significantly impact digital banking behavioral intention in Vietnam and research by (Widodo et al., 2019), who examined digital wallet usage in Indonesia. However, this result is against (Kwateng et al., 2018), which found price value as the main motivation in m-banking adoption in Ghana. The result is possible considering the finance industry, specifically fintech, is experiencing intense competition in which institutions offer various attractive promotions. In addition, most institutions have the same administration and transaction fee rates. Therefore, it reduces the concern about the price that must be spent in using digital banking.

Moreover, the result accepted H8 ($\beta = 0.217$, $p < 0.05$), showing that habit affects Gen Z behavior intention in using digital banking. The same results were found in a previous paper conducted by (Widodo et al., 2019) in which habit has the most substantial effect on behavioral intention on the usage of digital wallets in Indonesia. In the digital banking context, (Nguyen et al., 2020) findings show that habit have a significant positive influence on the behavioral intention of digital banking use in Vietnam.

In addition, based on the result shown in Table 6, H9 is accepted ($\beta = 0.401$, $p < 0.05$), indicating trust significantly impacts attitude toward behavior intention in using digital banking. This outcome is consistent with the previous study (Widodo et al., 2019), which found that trust has a significant positive impact on behavior intention of digital wallet adoption. In the digital banking context, based on (Nguyen et al., 2020) trust also has a significantly positive effect on behavior intention.

Furthermore, H10 that expects attitude toward using digital banking affects Gen Z behavior intention is supported ($\beta = 0.277$, $p < 0.05$). This research finding is consistent with the previous studies. (Patil et al., 2020) shows that attitude causes a significantly positive influence on the behavior intention of m-banking adoption. This is also supported by research (Vinitha, K., 2020) which found a significant positive influence on attitude in behavior intention of digital banking adoption. (Patil et al., 2020) also

stated that attitudes have a more prominent role in the individual's intention to carry out underlying behaviors, specifically in the early stages of technology adoption. This study also supports attitude as the strongest construct in predicting behavior intention.

This research also accepted H11 indicating behavior intention has a significant effect on the use behavior of digital banking in Gen Z. The findings are relevant to the previous studies, which found evidence regarding the significant impact on the relationship of behavioral intention to use behavior as in (Venkatesh et al., 2003; Venkatesh et al., 2012). In context of banking industry, research by (Tarhini et al., 2016) found a significant positive effect on behavioral intention on use Behaviour or m-banking actual use in Lebanon. The findings also align with (Patil et al., 2020), who examined the adoption of m-payment in India.

Lastly, this research also revealed that attitude is the main predictor of behavior intention by mediating the influence of performance expectancy, effort expectancy, and trust, similar to studies by (Patil et al., 2020; Kaur & Malik, 2019). This indicates that the usefulness, ease of access, and individual's trust in digital banking influence customers' attitudes toward adopting digital banking.

5. Conclusion

This study aims to determine the factors influencing Gen Z intention and use behavior in using digital banking. Regarding research purposes, valid data were obtained from 391 Gen Z digital banking customers domiciled in major cities in Indonesia. This paper uses convenience sampling to assure that the participants are digital bank customers aged 17-25 years. The research models used in this paper is Meta UTAUT and UTAUT2 that are adjusted for digital banking context using constructs of performance expectancy, effort expectancy, social influence, facilitating conditions, price value, and habit, along with three endogen variable such as attitude toward digital banking technology, behavior intention and use behavior. The data was then analyzed using SEM-PLS. Based on the research findings, performance expectancy, effort expectancy, and trust significantly impact attitude toward using digital banking. Constructs of social influence and habit significantly influence behavior intention. In contrast, performance expectancy, effort expectancy, facilitating condition, and price value showed otherwise. Ultimately, behavior intention significantly impacts digital banking customer use behavior.

This research is essential to provide literature and evaluation materials for the banking industry, specifically in digital banking implementation, to explore more about factors that influence the use of digital banking in younger generation. In addition, research utilizing both digital bank and meta UTAUT is still limited and considered new as in today.

However, this study also has limitations. First, the data were collected using the purposive sampling method. Thus, the findings might not be generalized to the whole population. Subsequently, the models used in this study are classified to have a low to moderate effect on customer digital banking Adoption. Hence, future research should utilize other related variables to enhance the research model. Third, the participants in this research were dominated by females and students. Therefore, It is recommended that there should also be a comparison of gender and occupation differences, whether the behavior among different groups is significant or not.

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