IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN:2278-487X, p-ISSN: 2319-7668. Volume 25, Issue 5. Ser. IV (May. 2023), PP 54-65
www.iosrjournals.org

Analysis Of Technology Acceptance Model On The Use Of Mobile Banking In Students

Hasnah Rimiyati[1], Rita Kusumawati[2]
Universitas Muhammadiyah Yogyakarta

ABSTRACT
This study aims to analyze how consumers perceive behavioral intentions to use internet banking using the TAM framework. Determination of the sample using purposive sampling technique, with a total sample of 160 respondents. Data collection techniques using a questionnaire. The data analysis technique uses path analysis with the partial least square method with the help of Smart PLS software version 3.0. The results showed that perceived usefulness had a positive and significant effect on the attitude toward using; perceived ease of use has a positive and significant effect on attitude toward using; perceived usefulness has a positive and significant effect on intention to use; perceived ease of use has a positive and significant effect on intention to use; Attitude toward using has a positive and significant effect on intention to use. The results of the indirect effect test show that attitude toward using mediates the effect of perceived usefulness on intention to use; and attitude toward using mediates the effect of perceived ease of use on intention to use.

Keyword: *TAM framework, perceived usefulness, perceived ease of use, attitude toward using, intention to use.*

Date of Submission: 16-05-2023 Date of Acceptance: 26-05-2023

I. INTRODUCTION

Technological developments have a very big influence on human life, with technology everything becomes easier. This is also the case with the banking world, related to services to consumers who are required to make it easier, faster and more accurate. Banking needs to adjust services according to customer needs and lifestyle of customers. One form of service developed by banks is online banking services, banking transaction services that can be carried out by customers either from home, place of business or in other locations outside the office. The form of online-based banking services is an Automatic Teller Machine (ATM) or known as an automated teller machine. Apart from ATMs, electronic banking (e-banking) is also an online banking service that adapts technological developments to the lifestyles of today's customers who prioritize convenience and punctuality (Irmadhani & Nugroho, 2012). Online banking is a way to carry out banking transactions using the internet network which makes it easier for customers to transact electronically via the internet with computers/pc/laptops or with gadgets that are owned without being limited by time. Internet banking activities range from checking account balances, transferring funds between accounts, between banks, and paying regular monthly electricity, telephone and credit card bills.

Currently, one of the banking services that is currently booming in Indonesia is digital banking services, namely a broader form of service than online banking or mobile banking. Digital banking is all banking activities carried out via the internet. Digital banking customers can access banking data via desktop, mobile and ATM. Types of digital banking services range from mobile banking, internet banking, phone banking, and SMS banking. Mobile banking (m-banking) is a service that can be directly accessed using a smartphone application. The sophistication of this service is very high because customers can directly make transactions using an application on their smartphone. Mobile Banking is a banking transaction through mobile media, either in the form of a direct application or a mobile operator's default application. Users are greatly facilitated because they no longer need to carry and count cash. In addition, from a security perspective, it is guaranteed because it uses a PIN or secret code for entry. Internet banking, customers need to access a certain URL to be able to use this service, by utilizing the internet banking feature. Phone banking, is a banking service for customers by using the telephone, through the bank's contact center and interacting with the special staff available so that customers can make transactions. SMS banking, is a banking transaction service that can be accessed by customers by using the SMS feature aimed at a destination number determined by the bank.

Banking customers who belong to the millennial generation are important targets for online-based services. Including students in Yogyakarta, most of them are customers or users of banking services, and of course have various criteria that are considered in choosing the banking services used. They will choose banking services that are able to provide benefits as expected, including fast, easy, practical and safe, of course. The more customers feel the benefits of online banking, the more often online banking will be used. Likewise, if customers consider

online banking to be less useful, then customers tend not to want to use online banking services. However, not a few customers are not willing to use online banking services because they feel online banking is something complicated.

The existence of internet banking services provides benefits for customers and the bank itself. Customers do not need to queue at the bank which of course will also require extra staff. Using internet banking to make transactions is much cheaper than using an ATM machine. The features provided on the bank's website include checking balances, transferring accounts to transfers, making bill payments, clearing, opening and closing accounts, and so on as long as you have a connection to the internet.

The Financial Services Authority (OJK) revealed that there has been an extraordinary increase in mobile and internet banking users, this is in line with the increasingly massive digital transformation program in the banking industry. Mobile banking and internet banking transactions increased by 300% from 2016 to August 2021.

The most favorite m-banking applications in Indonesia according to the Top Brand Index for 2022 are as follows: m-BCA (47.4%); BRI mobile (19.4%); m-banking Mandiri (12.9%); BNI-mobile (11.2%); CIMB Niaga Mobile (3.8%). This makes banks increasingly competing to update m-banking services in order to seize opportunities for the trend of shifting customer transaction styles from conventional to digital. But on the other hand there are still some customers who are still reluctant and have considerations in using m-banking, due to considerations of a sense of security in transactions, lack of obtaining complete information, causing distrust of a system.

There is a phenomenon of using m-banking for students via mobile phones of 72.4%, and laptops of 21.3%, it is necessary to conduct research on student acceptance of using the Shopee application with the Technology Acceptance Model (TAM) approach. TAM is one of the most commonly used theories to explain individual acceptance of new technology. TAM is an approach model to determine the correlation between a person and technology acceptance through the causality link between the variables of perceived usefulness, perceived ease of use, attitude to use, and intention to use (Davis et al., 1989).

Previous research that is relevant to the behavior of acceptance of new technology found that perceived usefulness, perceived ease of use, attitudes have a significant effect on acceptance/intention to use mobile banking among students, so it can be concluded that the variable perceived usefulness, perceptions of ease of use, attitudes, and intentions to use mobile banking have a significant effect on each other (Nurfiyah, 2019) and (Setyawati, 2020). Based on the description of the background above, it is interested in researching "Technology Acceptance Model Analysis on students in the Special Region of Yogyakarta who use mobile banking.

II. Literature Review and Hypothesis Development

The TAM concept is a theory that can be used to explain the factors that can influence the acceptance of a system and describe a system that is acceptable to users and the system is used by users to help their work. The TAM developed by Davis et al. (1989) adopted based on Theory of Reasoned Action (TRA) by Ajzen & Fisben (1975), is a theory about individual actions and perceptions of things to determine attitudes and intentions to behave (Oentario et al, 2017).

TAM is often considered a major research stream to explore the determinants of the behavior of accepting and using information systems technology. The purpose of TAM is to explain the determinants of acceptance of a technology which will then explain user behavior in various end-user computing technologies. Basically TAM tests two variables, namely perceived usefulness and perceived ease of use. These two variables will determine a person's behavioral intention towards a technology. One's perceived usefulness and perceived ease of use of a technology are influenced by factors known as external variables. Perceived usefulness and perceived ease of use in TAM are the most important constructs for predicting information system acceptance (Cheong & Park, 2005 in Kumala et al, 2020).

TAM has become popular because it fulfills the theoretical characteristics of being simple, supported by data, and applicable to predicting the acceptance and use of new technologies in various fields (Rauniar, Ralvski, Yang & Johnson, 2014 in Kumala et al, 2020).

Based on this description it can be concluded that TAM is a research model that is simpler and easier to apply in various fields of science that can explain user perceptions to determine user attitudes towards acceptance of new technology introduced by a researcher named Davis (1989) who developed a framework regarding user intentions. in using technology based on perceived usefulness and perceived ease of use (Subagio and Jessica, 2020).

Perceived Usefulness

Davis (1989) in Kumala et al. (2020) defines perceived usefulness as the level at which individuals believe that using technology can improve their job performance. Meanwhile, according to Devina (2016) in

Ashghar and Nurlatifah (2020) explains that the perception of usefulness is a measure where the use of a technology is believed to provide benefits for every individual who uses it.

Jogiyanto (2008) suggests that the perception of usefulness as an individual believes that using a technology will improve his job performance. If individuals think the media information is useful, then the individual will use it. Conversely, if the individual thinks that the media is less useful, then the individual will not use it.

Consumer who thinks that the system being developed is useful, of course they will feel that their expectations for the system are met, so that consumers tend to make a decision to use it (Arta and Azizah, 2020). Based on the descriptions of these experts, it can be concluded that the notion of perceived usefulness of internet banking is the user's belief that the use of internet banking can provide benefits to users who use it.

Perceived Usefulness Indicator

According to Davis (1989) in Kumala et al. (2020) stated that the indicators for measuring perceived usefulness are:

1) *Work more quickly*
   Using technology can help work faster, making the individual feel that the technology he is using is useful, conversely, if an individual using a technology cannot help get the job done faster, then the individual's trust in the technology he is using will decrease.
2) *Useful*
   Useful, that is, individuals who use a technology are beneficial to achieve their goals, conversely, if individuals who use a technology feel useless, then trust in the technology will decrease.
3) *Effectiveness*
   Effectiveness, namely individuals who use a technology and can complete their work effectively, then these individuals will believe that the technology is useful, and conversely individuals feel that using a technology cannot help complete work effectively, then these individuals do not believe in this technology.
4) *Easier*
   Easier, that is, individuals who feel their work is easier by using a technology, then these individuals will feel the technology is useful, conversely if individuals feel the technology used does not make their work easier, then these individuals feel the technology is useless.
5) *Performance*
   Performance or performance, namely individuals who feel their work performance increases by using a technology, then these individuals will consider the technology useful, and vice versa if individuals feel their work performance does not increase when using a technology, then these individuals will not consider the technology useful for their work.

Perceived Ease of Use

Davis (1989) in Kumala et al. (2020) defines perceived ease of use as the extent to which a consumer believes that using a particular system will be free of effort. Meanwhile, according to Gunawan (2014) in Ashghar and Nurlatifah (2020) states that perceived ease of use means an individual's belief that using information technology systems will not be a hassle or require great effort when used. Jogiyanto (2008) put forward a definition of perceived ease of use as the extent to which individuals believe using technology will be free of effort. If the individual considers the information media easy to use then he will use it. On the other hand, if individuals think that information media is not easy to use, then they will not use it.

A successful perceived ease of use should be as easy to use as possible without going through a process that can overwhelm the user. Information system users believe that an information system that is more flexible, easy to understand and easy to operate as a characteristic of ease of use. Ease of use gives an indication that a system is designed to make it easy for users and not difficult. This convenience means that a service will be easy to understand and can be easily operated, so consumers will easily learn how to use the service (Arta and Azizah, 2020).

Based on the opinion of the expert, the notion of perceived ease of use is that ease will reduce one's effort in learning the system.

The definition of perceived ease of use of internet banking is the user's belief that it is easy to understand, easy to learn and easy to use.

Perceived Ease of Use Indicator

According to Davis (1989) in Kumala et al. (2020:22) reveals that indicators of perceived ease of use:

a. *Easy to learn*

Easy to learn, namely individuals who can learn a technology easily is a sign that the individual considers the technology easy to use, conversely if the individual is difficult to learn a technology, the individual will consider the technology not easy to use.

b. *Easy to understand*
Easy to understand, namely individuals who feel a technology is easy to understand, individuals consider the technology easy to use, conversely, if individuals feel a technology is difficult to understand, individuals consider the technology not easy to use.

c. *Effortless*
Effortless, namely individuals who feel that a technology can be carried out briefly without effort, then the technology is considered easy to use and vice versa if a technology cannot be carried out concisely, then the technology is not easy to use.

d. *Easy to use*
Easy to use, that is, individuals who feel a technology is easy to use, then individuals will feel their trust in the technology increases, conversely if individuals feel a technology is not easy to use, then individual trust in a technology will decrease.

Attitude Towards Using

Attitude toward using technology (attitude toward using) is defined as the user's evaluation of his interest in using a particular technology (Davis, 1986, Abdalla, 2007). Meanwhile Sandi et al. (2021) stated that attitudes towards the use of technology are positive or negative feelings from someone if they have to carry out the behavior to be determined.

Attitude toward using shows a physical tendency that is seen in the evaluation of a technology based on the level of likes and dislikes (Kanchanatanee et al., 2014). A person's attitude in using a technology is inseparable from the positive feelings and beliefs that are reflected in the actual use of the technology (Gusni et al., 2020).

Attitude toward using technology (attitude toward using) in TAM is conceptualized as an attitude toward using a system in the form of acceptance or rejection as an impact when someone uses a technology in their work (Taylor & Todd, 1995; Pramiyati et al., 2019; Widodo & Azdy P., 2017).

Based on the opinions of some of these experts, it can be concluded that attitudes towards the use of technology are feelings of acceptance (positive) or rejection (negative) as an impact when someone uses a technology in their work. In the context of banking applications, the attitude toward using the application is the feeling of accepting (positive) or rejecting (negative) as an impact when someone uses internet banking in his work.

Attitude Toward Using Indicator

According to Taylor and Todd (1995), several indicators used to measure attitude toward using include:

1) *Attitude of acceptance*
After users try or use new technology in helping daily activities or carrying out their work, they must have an assessment of the technology. The assessment can be in the form of the user's acceptance of the technology. This attitude can be seen if the user has a positive assessment like using this technology in the future is a good idea. Thus the user will have the intention to use the technology in the future.

2) *Rejection attitude*
Technology that is felt to have no positive value to the work or activities of users will receive a bad assessment. This assessment will be seen from the attitude of the user's refusal to use the technology with several reasons that do not support the use of this technology.

3) *Nice experience*
After users try new technologies in performing tasks, there is bound to be experience gained. A pleasant experience will help the process of technology acceptance. This is because users will feel happy in using the technology.

Intention to Use

Fisbein and Ajzen (1975) define intention to use (interest in use) as a person's situation before carrying out an action using a particular technology, which can be used as a basis for predicting the behavior or action. The same definition is expressed by Venkatesh et al. (2003) in Kumala et al (2020) and Davis et al. (1989) that interest in use is a person's intention to use a particular technology system. Intention to use is an intention, desire or interest of a person to carry out a certain action or behavior, a person will carry out an action or behavior using a technology system if that person has the desire and interest to do so. In addition, interest can also be indicated that a certain behavior or action will be carried out in the future or in the future and repeat it at a later date (Aditya and Wardhana, 2016).

Based on the opinions of some of these experts, it can be concluded that intention to use is a person's situation before carrying out an action using a particular technology which will then be carried out again in the future or in the future and repeat it at a later date.

Intention to Use Indicator

Venkatesh et al. (2003) in Kumala et al (2020) revealed that several indicators used to measure interest in use include:

1) *Performance expectancy*, the level at which a person believes that using the system will help him achieve gains in job performance.
2) *Effort expectancy*, the level of ease associated with using the system.
3) *Social Influence*, the degree to which a person feels that he has to use a new system.
4) *Facilitating conditions*, the extent to which a person believes that the organizational and technical infrastructure exists to support the use of the system.

Hypothesis Development

Perceived usefulness of attitude toward using

Adamson and Shine (2003) in Irmadhani and Mahendra Adhi Nugroho (2011) define perceived usefulness as a person's belief construct that the use of a particular technology will be able to improve their performance. Even though the effort according to each person is different, in general, to avoid rejection from system users for the system being developed, the system must be easily applied by users without spending effort that is considered burdensome, that way users will want to use the system. The same research also shows that perceived ease of use has a positive and significant effect on the attitude toward using internet banking (Patrick Y. K. Chau & Vincent S. K. Lai, 2003). Setyawati (2020), Suprawan (2017), Fatmawati and Ali (2021), also stated that the variable perceived usefulness has a positive and significant effect on attitude towards using. Based on this explanation, the hypothesis to be tested is:

H1: Perceived usefulness has a positive and significant effect on attitude toward using.

Perceived ease of use towards attitude toward using

Perception of the ease of use of a technology is defined as a measure where a person believes that computers can be easily understood and used. If someone believes that the system is useful then he will react positively to the system and will use it. Conversely, if someone believes that the information system is less useful then he will not use it. Suprawan (2017), Setyowati (2020), Fatmawati and Ali (2021), stated that perceived ease of use has a positive and significant effect on attitude towards using. Based on the description above, the hypothesis proposed is:

H2: Perceived ease of use has a positive and significant effect on attitude toward using.

The effect of perceived usefulness on intention to use

Perceived usefulness has a positive influence on intention to use (Fred D. Davis, 1989). The perceived usefulness of a technology is one of the variables that determines the intention to use technology by users (Chen et al, 2017). It can be concluded that the perceived usefulness of a technology has a positive effect on the intention to use a technology, which means that the more useful the use of a technology is for users, the higher the intention to use a technology by users.

This statement is in line with some of the results of previous studies that support those conducted by Bangkara and Mimba (2016), Suprawan (2017), Kumala et al (2020), Setyawati (2020) which revealed that perceived usefulness has a positive effect on intention to use, meaning the better perceived usefulness of a particular technology, the higher the user's intention to use the technology. Then the hypothesis proposed is:

H3: Perceived usefulness has a positive and significant effect on intention to use.

The effect of perceived ease of use on intention to use

Perceived ease of use of information technology is one of the variables that influence users' intention to use information technology (Chen et al., 2017). It can be stated that the perceived ease of use of information technology has a positive effect on the intention to use information technology, which means that the easier it is to use information technology according to user perceptions, the higher the intention to use information technology by users.

The above opinion is supported by the results of previous research from Bangkara & Mimba (2016), Verma and Sinha (2017), Suprawan (2017), Setyawati (2020), and Pantow et al. (2021) who found that perceived ease of use of information technology has a positive effect on the intention to use information technology. Then the hypothesis proposed is as follows:

H4: Perceived ease of use has a positive and significant effect on intention to use

The effect of attitude toward using on intention to use

The formation of attitudes will influence consumer behavioral intentions in adopting or using internet banking. Attitudes in this case will influence specific behavior in utilizing information technology as indicated by behavioral intentions. According to Wibowo (2010), repeated use intention is a behavioral tendency to continue using a technology. Customers who feel comfortable, trust, capable and satisfied with internet banking services will continue to use this service to support their daily activities. Then the hypothesis to be tested is:
H5: Attitude toward using has a positive and significant effect on intention to use.

The effect of perceived usefulness on intention to use through attitude towards using

Perceived usefulness has a positive influence on intention to use through attitude toward using. This shows that the higher the perceived usefulness of a technology, the higher the attitude toward using it, which in turn has an impact on the higher the intention to use the technology.

This statement is supported by the results of previous research conducted by Bangkara and Mimba (2016), Suprawan (2017), and Fatmawati and Ali (2021) revealed that the variable attitude toward using mediates the effect of perceived usefulness on intention to use, which means the higher the perceived usefulness of a technology, can increase a person's attitude toward using that technology, and further increase a person's intention to use that technology. Then the hypothesis proposed is as follows:
H6: Attitude toward using can mediate the effect of perceived usefulness on intention to use.

The effect of perceived ease of use on intention to use through attitude towards using

Perceived ease of use has a positive effect on intention to use through attitude toward using. This shows that the higher the perceived ease of use of a technology, the greater the attitude toward using it, which in turn increases the user's intention to use that technology.

The above statement is in accordance with the results of previous research conducted by Bangkara and Mimba (2016), Osman et al (2016), Verma and Sinha (2017), Suprawan (2017), and Fatmawati and Ali (2021) revealed that the variable attitude toward using mediates the influence from perceived ease of use to intention to use, which means that the higher the perceived ease of use of a technology, can increase a person's attitude toward using a technology, and further increase a person's intention to use a technology. So the hypothesis is proposed as follows:

H7: Attitude towards using can mediate the effect of perceived ease of use on intention to use.

III. RESEARCH MODELS

Based on the research framework, a research model can be made as follows.

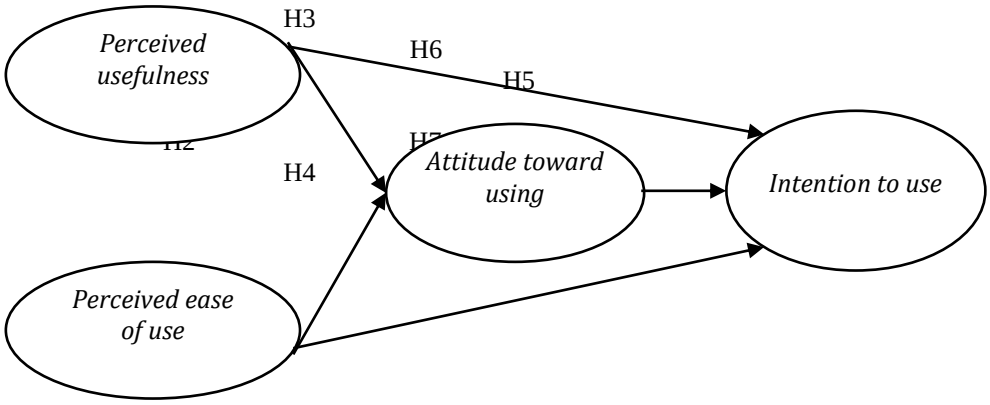

Figure 1. Research Model
Source: Davis et al (1989), Kumala et al., (2020)

IV. RESEARCH METHOD

This research is a survey research, with data collection techniques using a questionnaire. Sampling was carried out using a purposive sampling technique, with the sample criteria being student customers of Bank Mandiri in the Special Region of Yogyakarta who use mobile banking (m-banking) on their smart-phones. The number of samples in this study were 160 respondents. The data used in this research is primary data. The instrument quality test was carried out through convergent validity tests and reliability tests using Cronbach alpha. The measurement of perceived usefulness variables consists of 5 indicators; perceived ease of use 4 indicator

points; attitude toward using 3 indicator items; intention to use 4 indicator points. The analytical tool used in this study uses the Partial Least Square (PLS).

V. RESULTS AND DISCUSSION

The results of the research are the combined final results of the problem background, hypotheses, data collection and literature testing using data analysis methods carried out on the research object to find the point of solving the problems encountered.

The following is an overview of the respondents who were the subject of this study.

Table 1. Characteristics of Respondents

No	Characteristics	Number of Respondents	Percentage (%)
1	Gender		
	-Man	78	48,75
	-Women	82	51,25
2	Age		
	>17-25 year	120	75,00
	>25 year	40	25,00
3	Bank Customers		
	- Less than 6 months	55	34,38
	- More than 6 months	105	65,62
	Total Respondens	160	100

Validity and Reliability Test Results

The results of the instrument quality test, namely the validity test and reliability test, are presented in Table 2 below.

Table 2. Validity Test Results

Variable	Items	*Loading factor*	AVE	Information
Perceived usefulness (X1)	X1.1	0,722	0,633	Valid
	X1.2	0,762		Valid
	X1.3	0,822		Valid
	X1.4	0,755		Valid
	X1.5	0,754		Valid
Perceived ease of use (X2)	X2.1	0,701	0,616	Valid
	X2.2	0,746		Valid
	X2.3	0,722		Valid
	X2.4	0,703		Valid
Attitude toward using (Z)	Z1.1	0,715	0,626	Valid
	Z1.2	0,775		Valid
	Z1.3	0,861		Valid
Intention to use (Y)	Y1	0,813	0,632	Valid
	Y2	0,815		Valid
	Y3	0,831		Valid
	Y4	0,825		Valid

In Table 2, it is obtained that all question items on the variables perceived usefulness, perceived ease of use, attitude toward using, and intention to use have a loading factor value and the Average Variance Extracted (AVE) value is greater than 0.5, so it can be concluded that all questions in all research variables declared valid or have met convergent validity.

Reliability Test Results

The reliability test in this study can be determined by looking at the composite reliability value and *Cronbach's Alpha value*. The instrument is declared reliable if it has a composite reliability value and a *Cronbach's Alpha* value greater than 0.60. The results of the reliability test can be seen in Table 3.

Table 3. Reliability Test Results

Variable	*Composite Reliability value*	*Cronbach's Alpha value*	Information
Perceived usefulness	0,944	0,915	Reliabel
Perceived ease of use	0,923	0,905	Reliabel
Attitude toward using	0,901	0,879	Reliabel
Intention to use	0,931	0,815	Reliabel

The results of the reliability test show that all research variables have a composite reliability score and *Cronbach's alpha* value is greater than 0.60, so it can be concluded that all the questions contained in each research variable in the questionnaire are declared reliable or reliable, so the questionnaire can be used to collect data study.

Hypothesis Test Results

1. Test Results for the *Coefficient of Determination* (R^2)

The goodness of fit test was carried out by involving the *coefficient of determination* (R^2) of each dependent variable of the model used in the study, as well as calculating the *predictive-relevance value* (Q^2). The results of the coefficient of determination (R^2) of each dependent variable can be seen in Table 4.

Table 4. Test Results for the *Coefficient of Determination* (R^2)

Dependent Variable	R^2 value	R^2 (%)
Attitude toward using (Z)	0,322	32,2%
Intention to use (Y)	0,491	49,1%

Source: Primary data processed, 2022

From the results in Table 4 it shows that 32.2% change in the attitude toward using variable can be explained/influenced by the variables perceived usefulness and perceived ease of use; while 49.1% of the variation in the change in the intention to use variable can be explained or influenced by the variables perceived usefulness, perceived ease of use, and attitude toward using.

The next stage is to calculate the predictive relevance (Q2) value so that the overall goodness of fit can be fulfilled. The predictive relevance value (Q2) can be calculated as follows:

$Q^2 = 1 – (1 – R^2Z)(1 – R^2Y)$

$Q^2 = 1 – (1 – 0,322)(1 – 0,491)$

$Q^2 = 1 – (0,678)(0,509)$

$Q^2 = 1 – 0,345 = 0,655$ or 65,5%

The value of $Q^2 = 0.655$ above the number 0, meaning that 65.5% of the variation in the intention to use variable can be explained or explained by the variables perceived usefulness, perceived ease of use and attitude toward using, while 34.5% is explained by other variables outside the research model. Thus it can be concluded that the path analysis model using partial least squares has good relevant predictive value.

2. Statistical t test results (*Proof of Research Hypothesis*)

All research hypothesis testing is summarized in the path analysis table using partial least squares (PLS) which is presented in Table 5.

Table 5. *Path Coefficient Results*

Hypothesis	Track Influence	Original Sample	*p value* (Sig)	Information
H1	*Perceived Usefulness->Attitude toward using*	0,347	0,002	Positive significant
H2	*Perceived ease of use-> Attitude toward using*	0,285	0,003	Positive significant
H3	*Perceived Usefulness ->Intention to use*	0,265	0,007	Positive significant
H4	*Perceived ease of use -> Intention to use*	0,480	0,000	Positive significant
H5	*Attitude toward using -> Intention to use*	0,503	0,000	Positive significant
H6	*Perceived Usefulness -> Attitude toward using *-> Intention to use*	0,323	0,002	Mediate
H7	*Perceived ease of use -> Attitude toward using *-> Intention to use*	0,275	0,004	Mediate

Source: Primary data processed, 2022

Information:
PU = *Perceived usefulness*
PEOU = *Perceived ease of use*
ATU = *Attitude toward using*
IU = *Intention to use*

Based on the results of data analysis in table 5, the results of each hypothesis test in this study can be explained as follows:

1. **The effect of *perceived usefulness* on *attitude toward using***

The results of path analysis using partial least squares in table 5 show that the path coefficient value of the direct effect of perceived usefulness on attitude toward using is positive 0.347 with a p-value = 0.002 <0.05, so it is concluded that perceived usefulness has a direct positive and significant effect on attitude toward using, means that the first hypothesis which states that perceived usefulness has a positive effect on attitude toward using is accepted.

2. **The effect of *perceived ease of use* on *attitude toward using***

The results of the path analysis using partial least squares in Table 4 show that the path coefficient value directly influences perceived ease of use on attitude toward using a positive 0.285 with a p-value = 0.003 <0.05, so it is concluded that perceived ease of use has a direct positive effect and significant to attitude toward using, means that the second hypothesis which states that perceived ease of use has a positive effect on attitude toward using is accepted.

3. **The effect of *perceived usefulness* on *intention to use***

The results of path analysis using partial least squares in Table 4 show that the path coefficient value of the direct effect of perceived usefulness on intention to use is positive 0.265 with p-value = 0.007 <0.05, so it is concluded that perceived usefulness directly has a positive and significant effect on intention to use, means that the third hypothesis which states that perceived usefulness has a positive effect on intention to use can be accepted.

4. **The effect of *perceived ease of use* on *intention to use***

The results of path analysis using partial least squares in Table 4 show that the path coefficient value of the direct effect of perceived ease of use on intention to use is positive 0.480 with p-value = 0.000 <0.05, so it is concluded that perceived ease of use has a direct positive effect and significant to intention to use, meaning that the fourth hypothesis which states that perceived ease of use has a positive effect on intention to use can be accepted

5. **The effect of *attitude toward using* on intention to use**

The results of the path analysis using the partial least squares in Table 4 show that the path coefficient value has a direct effect on attitude toward using on intention to use as positive as 0.503 with a p-value = 0.000 <0.05, so it is concluded that attitude toward using has a direct positive and significant effect on intention to use, it means that the fifth hypothesis which states that attitude toward using has a positive effect on intention to use is accepted.

6**. The effect of *perceived usefulness* on *intention to use* through *attitude toward using***

The results of path analysis using partial least squares in Table 4 show that the path coefficient value of the indirect effect of perceived usefulness on intention to use through an attitude toward using is positive 0.323 with p-value = 0.002 <0.05, so it is concluded that perceived usefulness is indirectly has a positive and significant effect on intention to use through attitude toward using, thus meaning the sixth hypothesis states that attitude toward using is able to mediate the effect of perceived usefulness on intention to use, thus the sixth hypothesis in this study is accepted.

7**. The effect of *perceived ease of use* on *intention to use* through *attitude toward using***

The results of path analysis using partial least squares in Table 4 show that the path coefficient value of the indirect effect of perceived ease of use on intention to use through an attitude toward using is positive 0.275 with p-value = 0.004 <0.05, so it is concluded that the perceived ease of use indirectly has a positive and significant effect on intention to use through attitude toward using, thus meaning the seventh hypothesis states that attitude toward using is able to mediate the effect of perceived ease of use on intention to use, this result is supported. Thus it means that the seventh hypothesis in this study is accepted.

VI. Discussion

1. The results of hypothesis testing 1 state that perceived usefulness has a positive and significant effect on attitude toward using accepted, meaning that the higher the perceived usefulness of a banking technology, the better the

acceptance of the technology. Perceived usefulness influences attitude towards using banking customers who use mobile banking. The results of this test are supported by research conducted by Kurniawan et al., (2013), Fatmawati and Ali (2021), Suprawan (2017).

2. The results of hypothesis testing 2 state that perceived ease of use has a positive and significant effect on attitude toward using which is acceptable, meaning that the more ease of use the technology is, the more it will be accepted by banking customer users. These results are supported by Kurniawan et al., (2013), Fatmawati and Ali (2021), Suprawan (2017).
3. The results of hypothesis testing 3 state that perceived usefulness has a positive and significant effect on intention to use which can be accepted, meaning that the better the perceived usefulness of a particular technology, the higher the intention to use the technology by users. When someone increasingly believes that technology can improve their performance, can work faster, easier, more effectively, then that person's interest in using technology will also increase. This result is in line with the results of previous research from Chawla and Joshi (2019), Hemas and Tileng (2020), Kumala et al (2020), Setyawati (2020), Pantow et al (2021), which state that perceived usefulness has a positive and significant effect on intention to use, the better the perceived usefulness of a particular technology, the higher the user's intention to use the technology.
4. The results of hypothesis testing 4 state that perceived ease of use has a positive and significant effect on intention to use which is acceptable. This means that if the mobile banking application for customers is easier to learn, easy to understand without draining energy and easy to use, it will further increase the intention to use mobile banking. The results of this test are supported by previous research conducted by Setyawati (2020), Suprawan (2017), Bangkara and Mimba (2016), Darmaningtyas and Suardana (2017), Verma and Sinha (2017), which state that the ease of use of an information technology for users, the higher the interest in using the technology.
5. The results of hypothesis testing 5 state that the attitude toward using has a positive and significant effect on the intention to use is accepted. This means that the attitude toward using has a positive influence on the intention to use mobile banking technology. The results of this test are supported by previous research conducted by (Kurniawan et al., 2013) which stated that Attitude toward using has a positive and significant effect on intention to use. The same results are also supported by Fatmawati and Ali (2021), Bangkara and Mimba (2016) and Suprawan (2017).
6. The results of hypothesis testing 6 state that the attitude toward using is able to mediate the effect of perceived usefulness on intention to use which is acceptable. This means that the attitude toward using strengthens the effect of perceived usefulness on the intention to use mobile banking. The results of this test are supported by Maharani (2021), Fatmawati and Ali (2021), Bangkara and Mimba (2016) and Suprawan (2017), who found the same research results, that attitude toward using can mediate the effect of perceived usefulness on intention to use.
7. The results of hypothesis 7 test state that the attitude toward using is able to mediate the effect of perceived ease of use on intention to use which is acceptable. This means that the attitude toward using strengthens the effect of perceived ease of use on the intention to use mobile banking. The results of this test are supported by research conducted by Maharani (2021), Fatmawati and Ali (2021), Bangkara and Mimba (2016) and Suprawan (2017), who found the same research results, that attitude toward using can mediate the effect of perceived ease of use against intention to use.

CONCLUSION

From the results of the data analysis carried out as well as the discussion in this study, the results are in accordance with the *Technology Acceptance Model* (TAM) theory put forward by Davis that the easier a technology is to use, the more useful the technology will be. Thus the results of this study can be concluded as follows:

1. *Perceived usefulness* has a positive and significant effect on the *attitude toward using*.
2. *Perceived ease of use* has a positive and significant effect on the *attitude toward using*
3. *Perceived usefulness* has a positive and significant effect on *intention to use*.
4. *Perceived ease of use* has a positive and significant effect on *intention to use*.
5. *Attitude toward using* has a positive and significant effect on *intention to use*.
6. *Attitude toward using* mediates the effect of *perceived usefulness* on *intention to use*
7. *Attitude toward using* mediates the effect of *Perceived ease of use* on *intention to use.*

REFERENCES

[1]. Amanullah, B. (2016). The Effect of Perceived Benefits, Ease of Use, and Trust on Positive Attitudes in Using Mobile Banking Services. Journal of Economics and Accounting Research, 3(2), 66.

[2]. Anthony, L., & Sama, H. (2021). Qualification Studies Regarding Acceptance Factors For Shopee E-Commerce Applications And Fintech Shopeepay For Senior Communities. Journal Conference on Management, Business, Innovation, Education and Social Science, 1(1), 678–686.

[3]. Arta, T.L.F., and Azizah, S. N. (2020). The Influence of Perceived Usefulness, Perceived Ease of Use and E-Service Quality on Decisions to Use Go-Food Features in the Gojek Application. Scientific Journal of Management, Business and Accounting Students, Vol. 2, No. 2: 291-303

[4]. Ashghar, S. A., and Nurlatifah, H. (2020). Analysis of the Effect of Perceived Ease of Use, Perceived Usefulness, and Perceived Risk on Repurchase Desire through e-Trust and Satisfaction (Case Study of Gopay Users in MSME Transactions). Journal of Al Azhar Indonesia Social Sciences Series, Vol.1, No. 1: 40-52.

[5]. Astutik, Y. (2021). Hot Competition! Early 2021 Tokopedia Beats Shopee. available at https://www.cnbcindonesia.com/tech/20210225181934-37-226221/persaingan-panas-awal-2021-tokopedia-kalakan-shopee, accessed on 22 May 2021.

[6]. Bangkara, R.P., and Mimba, N.P.S.H. (2016). The Influence of Perceived Usefulness and Perceived Ease of Use on Interest in Using Internet Banking with Attitude Toward Using as Intervening Variables. Udayana University Accounting E-Journal, Vol.16, No.3: 2408-2434.

[7]. Chawla, D., and Joshi, H. (2019). Consumer attitude and intention to adopt mobile wallet in India – An empirical study. International Journal of Bank Marketing, Vol.37, No.7: 1590-1618.

[8]. Chen, C. F., Xu, X., and Arpan, L. (2017). Between the technology acceptance model and sustainable energy technology acceptance model: Investigating smart meter acceptance in the United States. Energy Research and Social Science, Vol. 25: 93-104.

[9]. Darmaningtyas, I G. B., and Suardana, K. A. (2017). The Effect of Technology Acceptance Model (TAM) on the Use of Software by Auditors with Implications for Auditor Performance. Udayana University Accounting E-Journal, Vol. 21, No. 3: 2448-2478

[10]. Davis, F.D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, Vol. 13, No. 3 : 319-340

[11]. Davis, F.D., R.P. Bagozzi, and P.R. Warshaw. (1989). User acceptance of computer technology: A comparison of two theoretical models. Management Science, Vol. 35, No. 8: 982-1003.

[12]. Fatmawati, I., and Ali, H. (2021). Determination of Attitude Toward Using and Purchase Intentions: Analysis of Perceived Ease of Use and Perceived Usefulness (Case Study Of Instagram Shop's Features On Social Media Instagram). Dynasty International Journal of Management Science, Vol.3, No. 1: 119-133.

[13]. Ghozali, I. (2016). Alternative Structural Equation Modeling Method with Partial Least Square. Semarang: Diponegoro University Publishing Agency.

[14]. Ghozali, I. (2018). Application of Multivariate Analysis with the IBM SPSS 25 Program, Edition 9. Semarang: Diponegoro University Publishing Agency.

[15]. Hardani, Auliya, N.H., Andriani, H., Fardani, R.A., Ustiawaty, J., Utami, E.F., Sukmana, D.J., and Istiqomah, R.R. (2020). Qualitative & Quantitative Research Methods. Yogyakarta: CV. Science Library.

[16]. Haidari, M. B., and Tileng, K. G. (2018). Analysis of Factors Influencing the Use of Go-Pay. JUISI, Vol. 04, No. 01:10-15.

[17]. Hemas, D. P., and Tileng, K. G. (2020). Analysis of the Influence of Usability, Convenience and Trust Factors on the Intention to Use the Linkedin Application. JUISI, Vol. 06, No. 02: 31-40.

[18]. Irmadhani, & Nugroho, M. A. (2012). Effect of perceived usefulness, perceived ease of use and. Accounting Study Program, Faculty of Economics, Yogyakarta State University, 1–20

[19]. Hosseini, M.H., Fatemifar, A. and Masoumeh, R. 2015. Effective Factors Of The Adoption Of Mobile Banking Service By Customers. Journal of Business Management, 4(6), pp. 1-13.

[20]. Jogiyanto. (2008). Behavioral Information System. Yogyakarta: CV. Andi Offset.

[21]. Kumala, D. C., Pranata, J. W., and Thio, S. (2020). The Influence of Perceived Usefulness, Perceived Ease of Use, Trust, and Security on Interest in Using Gopay in Generation X in Surabaya. Journal of Hospitality Management, Vol. 6, No. 1: 19-29.

[22]. Kusuma, H., and Sari, M. S. (2012). Rebuilding Community Trust After Violations in Business to Consumer (B2C) E-Commerce: An Empirical Study in Yogyakarta. Journal of Technology Management, Vol. 11, No. 2: 129-149.

[23]. Kurniawan, D., E, P. H. S. S., Japarianto, E., Marketing, J. M., Petra, U. K., & Siwalankerto, J. (2013). Analysis of Customer Acceptance of Mobile Banking Services Using the Technology Acceptance Model Approach and Theory of Reasoned Action. Journal of Marketing Management, 1(1), 1–13.

[24]. Kusumadewi, A.N., Lubis, N.A., Prastiyo, R.A., and Tamara, D. (2021). Technology Acceptance Model (TAM) in the Use of Online Learning Applications During the Covid-19 Pandemic for Parents of Elementary School Students. Edunesia: Educational Scientific Journal, Vol. 2, No. 1: 272-292.

[25]. Maharani, M. R., Osman, O., and Marsofiyati. (2021). The effect of Perceived Usefulness and Perceived Ease of Use on The Use of E-learning with TAM Model in Faculty of Economics Student of Jakarta State University. Journal of Economic, Office and Accounting Education, Vol. 2, No. 3:1-12.

[26]. Noviatun, I., and Riptiono, S. (2021). Testing the Intention to Use OVO E-Wallet Using a Modified Technology Acceptance Model (TAM) in Kebumen. Scientific Journal of Management, Business and Accounting Students, Vol. 3, No.1: 193-201.

[27]. Nurfiyah, Mayangky, N.A., Hadianti, S., and Riana, D. (2019). Analysis of the Technology Acceptance Model in Electronic Trading Platform Applications Among Students. Journal of Informatics Engineering, Vol. 12, No. 1: 59-68.

[28]. Oentario, Y., Harianto, A., and Irawati, J. (2017). The Influence of Usefulness, Ease of Use, Risk on Intention to Buy Online Patisserie Through Consumer Attitude in Social Media in Surabaya. Journal of Marketing Management, Vol. 11, no. 1: 26-31.

[29]. Osman, Z., Alwi, N. H., and Khan, B. N. (2016). A study of mediating effect of attitude on perceived ease of use and students' intention to use online learning platforms among online learning institutions in Malaysia. Pan-Commonwealth Forum 8 (PCF8): 1-6.

[30]. Pantow, A.K., Sungkowo B., Limpeleh, E.A.N., & Tandi, A.A. (2020). Analysis of Using MYOB Accounting Software for Accounting Students Using the Technology Acceptance Model Approach. Journal of the Academy of Accounting, Vol. 3, No.2: 200-207.

[31]. Pantow, A.K., Sungkowo, B., Limpeleh, E. A. N., and Tandi, A. A. (2021). Acceptance of Accounting Students for the MYOB Accounting Application with the Technology Acceptance Model Approach. Owner: Accounting Research & Journal, Vol. 5, No. 1: 22-30.

[32]. Fred D. Davis. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology No Title. MIS Quarterly, 13(No. 3: 319-340), 319–340. https://doi.org/https://doi.org/10.2307/249008

[33]. Patrick Y. K. Chau & Vincent S. K. Lai. (2003). An Empirical Investigation of the Determinants of User Acceptance of Internet Banking No Title. Journal of Organizational Computing and Electronic Commerce, 13(2), 123–145. https://doi.org/https://doi.org/10.1207/ S15327744JOCE1302_3

[34]. Rakhmadian, M., Sefaverdiana, P. V., and Rahman, N. (2019). Analysis of Perceived Usefulness and Perceived Ease of Use of the Use of Academic Information Systems. IJCIT (Indonesian Journal on Computer and Information Technology), Vol. 4, No. 2: 155-161.
[35]. Sandi, A.S., Soedijono, B., Nasiri, A. (2021). The Influence of Usability and Ease of Use Attitudes with the TAM Method in Apprentice Information Systems. IT Journal Research and Development (ITJRD), Vol.5, No.2: 109-117.
[36]. Now, U. and R. Bougie. (2016). Research methods for business: a skill-building approach, 7th Edition. West Sussex: John Wiley and Sons Ltd.
[37]. Setyawati, R. (2020). The Influence of Perceived Usefullness, Perceived Ease Of Use Against Behavioral Intention To Use With Attitude Towards Using As Intervening Variables No Title. Dewantara Ecobis Journal, 3(No. 1 January 2020), 39–51.
[38]. Singasatia, D., and Melami, M. (2020). The Influence of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) on Attitude Toward Using (ATU) and Their Impact on Behavioral Intention To Use (BITU) (Case Study: Users of Level IV Competition Online Registration System (LT) Regional Quarters of the Java Scout Movement) West). available at https://stt-wastukancana.ac.id/jurnal/download/ 7.2.4. Dayan.pdf, accessed on 16 February 2022.
[39]. Subagio, H., and Jessica, J. (2020). The Influence of Perceived Usefulness, Perceived Ease Of Use, Subjective Norm, And Customer Experience On Intention To Use Mytelkomsel (Case Study on Petra Christian University Students in Surabaya). Marketing Strategy Journal, Vol.7, No.1: 1-12.
[40]. Sugiyono. (2016). Management Research Methods. Bandung: CV Alfabeta.
[41]. Suprawan, L. (2017). The Effect of Technology Acceptance Model on Behavioral Intention to Use Facebook Live: The Mediating Role of Attitude. International (Humanities, Social Sciences and Arts), Vol. 10, No. 4: 31-43.
[42]. Taylor, S., and Todd, P.A. (1995). Understanding Information Technology Usage: A Test of Competing Models. Information Systems Research, Vol. 6, No.2:144-176.
[43]. Verma, P., and Sinha, N. (2017). The role of attitude as a mediator of the perceived ease of use and behavioral intention relationship. International Journal of Management Concepts and Philosophy, Vol. 10, No. 3: 227- 245.
[44]. Widuri, R., Handoko, B. L., Riantono, I. E. (2019). Perception of Accounting Student on Learning of Generalized Audit Software. International Conference on Information Management and Technology (ICIMTech):115–119.