Research Article

Perceived Ease of Use and Perceived Usefulness, Intention to Use Digital Banks and the Role of Trust as Mediating Variables

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Abstract.
By incorporating the trust variable as a mediator in the relationship between perceived ease of use and perceived usefulness of using digital banking services on intention to use digital banking services and location—research in the special region of Yogyakarta—this study aims to analyze banking customers' tendencies to use digital banking services using the technology acceptance model (TAM) theoretical approach. This research's type and source of data is quantitative with primary data. Questionnaires were distributed as part of a survey procedure to collect data for this study. Using sample data from 208 respondents and the structural equation model (SEM) analysis tool, he concluded that while users' perceptions of the usefulness and ease of use of digital banking services have no bearing on each other, their perceptions of the ease of use of these services has a significant impact on their trust in them. It has a significant impact on user trust in digital banking services, which in turn has a significant impact on users' intention to use digital banking services; perceived ease of use of digital banking services has no significant impact on users' intention to use digital banking services; on the other hand, perceived usefulness of digital banking services has a significant impact on users' intention to use digital banking services; trust in digital banking services mediates the relationship between users' intention to use digital banking services and perceived ease of use of digital banking services.

Keywords: perceived ease of use, perceived usefulness, trust, intention to use, digital bank

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1. Introduction

The digitization of Internet and cell phone-based financial services is taking place very quickly and has penetrated almost all regions of the world [1]. For financial institutions that cannot provide digital services or online services, their customers will be abandoned [2]. The ease and convenience of transactions through digital financial services create a new business climate where you can carry out transactions anywhere and by anyone [3].

Currently, practically every area of life in Indonesia is colored by the advancement of digital technology. There is no denying the arrival of the digital era, which forces society to adjust to new developments in digital technology. In Indonesia, digital banks continue to develop over time. Through Financial Services Authority (OJK) Regulation Number 12/PJOK.03/2021, the government allows banks only to have one physical office, whether fully digital banks or transformations of conventional banks. This phenomenon shows a stronger tendency for customers to utilize digital banking services. They assume that the Technology Acceptance Model (TAM) is referred to. Then, a person's use of technology is influenced by two factors: their impression of the technology's ease of use and its perceived benefits or usefulness. Analyzing a person's level of trust in a bank and whether or not he plans to use its services is crucial for financial services.

Jasin [4] and Wardana [5] found that perceived ease of use can increase behavioral intention to use. Bregashtian [6] found that perceived ease of use cannot make people intend to use the application. Tahar [7] found that perceived usefulness did not increase the choice to use the app. Wahyuni [8] provided different findings, namely that perceived usefulness can increase the intention to use the application. The inconsistency of research results regarding choices makes this research interesting to review by adding trust as a mediating variable. Ramli [9] found that trust can increase consumers' intention to use mobile banking.

In light of the preceding justification, this study aims to determine if trust factors will mediate the choice of digital banks and to test and gather empirical data on the impact of perceived utility and simplicity of use on intentions to use digital banks. This study makes a theoretical addition by adding to the body of knowledge about how the intention to use digital banks is influenced by perceived usefulness and convenience of use, with trust acting as a mediating factor. Practically, this research recommends that bank company management can increase users' trust in digital bank applications by adding features that can reduce information security risks.

1.1. Perceived ease of use

The Technology Acceptance Model (TAM) has been used for decades in IT acceptance studies. The perceived ease of use reveals the mental work involved in learning and using I.T. Internet utilization saves customers time and energy when using the desired product [10]. In this context, the connection is fast [11], Quick search [12], easy purchasing process [13,14], and payments are simple and fast [15]. The perceived ease of use variable

uses the following four indicators [16]: ease of learning, clarity, ease of understanding, ease of becoming skilled, and ease of use.

1.2. Perceived usefulness

A perceived advantage is the degree to which a person believes utilizing a system would enhance performance. Davis uses the term "helpful," which can be employed for worthwhile or profitable goals, to characterize this sense of usefulness [17]. Perceived usefulness refers to the advantages people think they can get from digital information and technology. The indicators used to measure perceptions of usefulness refer to the indicators developed by Davis [16]: becomes easier, practical/profitable, increases productivity, and increases effectiveness.

1.3. Trust

When someone has faith in digital technology, they are prepared to rely on a service provider and take action when doing so, leaves them open to abuse by the provider [18]. The conviction that a third party will act honorably in a trade transaction is known as trust [19]. In e-commerce, uncertainty will always exist due to unexpected actions and opportunistic behavior when service users and providers cannot meet face-to-face with other parties directly [20]. Avoiding opportunistic behavior is critical in eliminating uncertainty and creating successful business transactions [21]. Trust only exists if customers believe that the bank can provide services of the same or better quality than expected due to transactions via the Internet. The object of trust in online business is entirely different from that of offline business. Trust indicators are as follows [18]: reliability, honesty, concern for the company/bank, and credibility.

1.4. Intention to use

Intention is the tendency to carry out an action or behavior immediately before purchasing behavior [22, 23]. Intention to use is an attitude of liking an object that makes someone try to get it by paying for it with money or sacrifice [24]. The indicators used are [24]: interested in finding information about the product, considering using it, interested in trying it, wanting to know the product, and wanting to own the product.

2. Hypothesis Development

The model tested in this research comes from Utami research [25], namely perceived ease of use, perceived usefulness, and trust. Researchers replaced the repurchase intention construct to refer to Tahar research [7]. Based on this study, the following hypothesis:

H1:Perceived ease of use has a significant effect on trust

H2:Perceived usefulness has a significant effect on trust

H3:Trust has a significant effect on Intention to Use

H4:Perceived Ease of Use has a significant effect on Intention to Use

H5:Perceived usefulness has a significant effect on Intention to Use

H6:Perceived ease of use has a significant effect on intention to use with trust as a mediating variable

H7:Perceived usefulness has a significant effect on Intention to Use with Trust as a mediating variable

The research model that results from the formulation of this hypothesis is as follows (see Fig. 1).

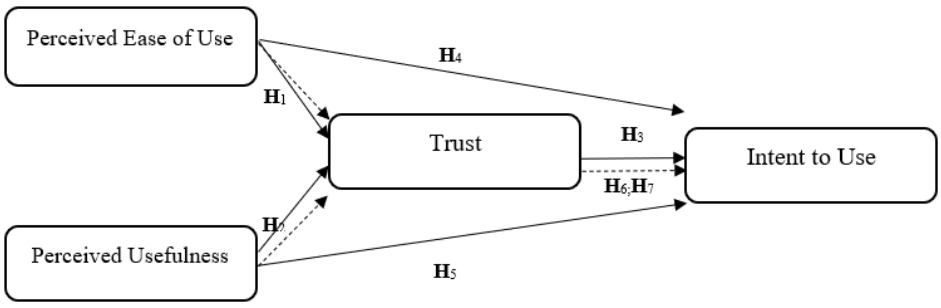

Figure 1: Research model.

3. Research Methods

3.1. Types, sources, and techniques of data collection

Primary data served as the source of the quantitative data employed in this study. Questionnaires are distributed as part of a survey procedure to collect data for this study.

3.2. Data analysis technique

In data analysis, descriptive analysis will be carried out first on the data obtained by considering the number of populations used as respondents in this research. Then, researchers will continue path analysis and predictive analysis. Every variable must undergo empirical analysis using Structural Equation Modeling (SEM) based on paradigms and hypotheses. Structural equation modeling is a multivariate data analysis method combining factor and path analysis. There are seven stages in SEM analysis, namely developing a theoretical model, creating a path diagram that depicts cause and effect relationships.

4. Results and Discussion

4.1. Respondent description

208 respondents with the following respondent profiles were identified based on the results of data collection conducted via an online questionnaire:

TABLE 1: Respondent profile.

Category	Amount	Percent
Gender		
Man	88	42
Woman	120	58
	208	100
Age		
18-23	127	61
24-29	7	3
30-35	3	1
36-41	7	3
42-47	19	9
48-53	31	15
54-59	8	4
60-65	2	1
66-71	4	2
	208	100

TABLE 1: Respondent profile.

Category	Amount	Percent
Work		
Teacher	9	4
Housewife	4	2
Student	116	56
Government officials	24	12
Private sector employee	30	14
Pension	3	1
Businessman	17	8
Other	5	2
	208	100
Monthly expenses		
< 2,000,000	99	48
2,000,000 to 4,999,000	72	35
5,000,000 to 7,999,000	23	11
8,000,000 to 10,999,000	10	5
>= 11,000,000	4	2
	208	100
Marital status		
Married	76	37
Not married	132	63
	208	100
Digital Bank Services		
ATM	47	23
ATM, Internet Banking (website)	11	5
ATM, Internet Banking (website), Mobile Banking (smartphone)	14	7
ATM, Mobile Banking (smartphone)	106	51
Internet Banking (website)	2	1
Mobile Banking (smartphone)	28	13
	208	100

Based on Table 1, the majority of respondents in this study were women (58%), the ages of most respondents were in the range 18-23 years (61%), with work status as students (56%), with the highest level of expenditure being less than two million rupiah per month (48%) and single/not married (63%).

The most widely used facilities are Automated Teller Machines (ATMs) and mobile banking, with a proportion reaching 51 percent of all respondents. In comparison, 23 percent of respondents only use ATMs for banking financial services. Furthermore, 13 percent of respondents use mobile banking to fulfill banking financial services, and only 1 percent use Internet banking for digital banking services.

4.2. Validity test

Based on the replies of 208 respondents and 12 lists of statements that represented each variable, the author of this study employed Confirmatory Factor Analysis (CFA) to assess reliable indicators to measure latent constructs using the AMOS version 22 application. Table 2 displays the findings from using AMOS version 22 to evaluate the confirmatory analysis instrument's quality.

According to Ghozali [26], If the estimated standardized loading value, derived from standard regression weights, is less than 0.50, the data may be considered legitimate. According to Table 2 validity test results, all measures of perceived utility, trustworthiness, and intention to use—all with estimated standardized loading values of ≥ 0.50—are deemed valid.

4.3. Reliability test

Construct reliability is used in the second instrument test, which measures reliability. The reliability test ensures that measurements made on the instrument are consistent and demonstrates the degree to which the measurement is bias-free (error-free). When the validity of the model's indicators is strong, a construct reliability value of 0.70 or more is considered desirable; nonetheless, a reliability value between 0.60 and 0.70 is also acceptable [26]. Table 3 displays the findings from the AMOS reliability testing as follows.

Table 3 displays the test findings, which support the study's construct reliability values, all of which had values of > 0.70. Thus, every research variable may be relied upon.

Table 2: Validity test results.

Variable	Indicator	Statement Items	Factor Loading	Limit	Information
Perceived Ease of Use	X1.1	Digital banking is easy to learn	0.816	≥ 0.5	Valid
	X1.2	Digital banking is easy to understand	0.689		Valid
	X1.3	I found it easy to quickly become skilled at using digital banking.	0.845		Valid
Perceived Ease of Use	X1.1	Digital banking is easy to learn	0.816	≥ 0.5	Valid
	X1.2	Digital banking is easy to understand	0.689		Valid
	X1.3	I found it easy to quickly become skilled at using digital banking.	0.845		Valid
Trust	Y1.1	Digital banks have good reliability	0.767	≥ 0.5	Valid
	Y1.2	Digital banks are open/honest in providing information	0.880		Valid
	Y1.3	I feel that digital banks have good care for their customers	0.875		Valid
	Y1.4	I think digital banks have good credibility.	0.891		Valid
Intent to Use	Y2.1	I am interested in finding information about services at digital banks	0.924	≥ 0.5	Valid
	Y2.2	I am considering making transactions through a digital bank	0.812		Valid

Table 3: Reliability test results.

Variable	CR	Limit	Information
Perceived Ease of Use	0.828	≥ 0.70	Reliable
Perceived Usefulness	0.915		Reliable
Trust	0.915		Reliable
Intention to Use	0.861		Reliable

4.4. Goodness of fit test

The primary goal of SEM analysis is to evaluate the goodness of fit, which assesses how well the proposed model fits the "fit" parameters or how well it matches the sample data. Figure 2 is a statistical suitability test using several commonly obtained criteria.

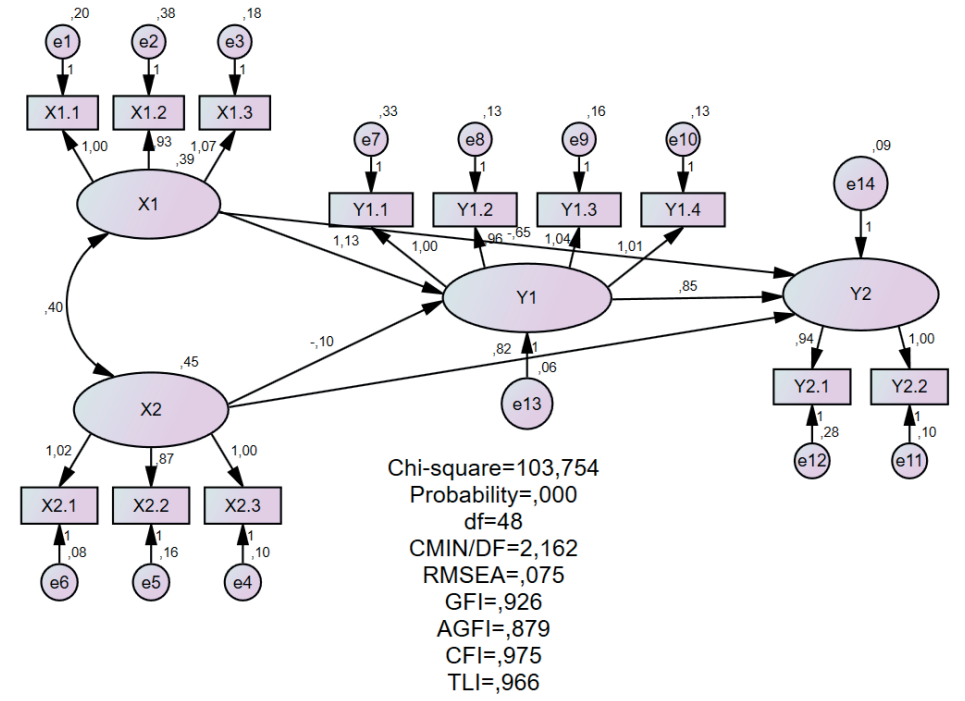

Figure 2: Good fit.

The suggested model is tested using several appropriateness indices after the structural equation model has been assumed. Several indexes among them are:

TABLE 4: Compliance.

Goodness of Conformity Index	Cut Value	Research Model	Model
Chi-Square	Expected to be small	103,754	Not fit
Most likely	≥0.05	0,000	Not fit
RMSEA	≤0.08	0.075	Fit
GFI	≥0.90	0.926	Fit
AGFI	≥0.90	0.879	Marginal
CMIN/DF	≤2.0	2,162	Marginal
TLI	≥0.90	0.966	Fit
Finance	≥0.90	0.975	Fit

The majority of the study models have a level of appropriateness that satisfies the requirements (good fit), according to the findings in Table 4. Of the seven standards, four criteria include good fit: RMSEA, GFI, TLI, and CFI. Meanwhile, the Marginal Fit category includes significant probability, AGFI, and CMIN/DF. The study's findings demonstrate that the model fits overall, indicating that the suggested model is approved.

4.5. Hypothesis test

The regression weight test in this study seeks to ascertain the direct relationship between exogenous and endogenous variables. The hypothesis is supported if the probability value is ≤ 0.05 and C.R.≥ 1.96 [26]. The following table displays the test results for AMOS version 22.0 used in this study:

Table 5: Hypothesis test results.

hypothesis	Code	Estimation	S.E	Cr	P	Information
Perceived Ease of Use → Trust	H1	1,130	0.420	2,690	0.007	Accepted
Perceived Usefulness → Trust	H2	-0.096	0.378	-0.255	0.799	Rejected
Trust → Intention to Use	H3	0.853	0.310	2,750	0.006	Accepted
Perceived Ease of Use → Intention to Use	H4	-0.650	0.691	-0.941	0.347	Rejected
Perceived Use → fulnessIntention to Use	H5	,824	,413	1,995	,046	Accepted

Table 5 demonstrates that all three hypotheses—including the first, which holds that perceived ease of use affects trust—have a positive and significant impact. The intention to use is influenced by the third hypothesis, trust, and the choice to use is influenced by the fifth hypothesis, perceived utility. The impact of perceived utility on trust and perceived usability on intention to use was the hypothesis that was rejected. Next, by comparing the value of the standardized direct effect with the standardized indirect impact, the mediating (intervening) variable is used to assess the mediation relationship between exogenous variables and endogenous variables. Standardized direct impact value, for instance, is lower than standardized indirect impact value. The findings in this instance indicate that the mediating variable indirectly impacts the correlation between the two variables. The following are the test results:

According to Tables 6 and 7, trust mediates the influence of perceived ease of use. The indirect value of perceived ease of use (F1) on intention to use (F4) is 0.963 > -0.650, which is the direct value of perceived ease of use (F1) on intention to use. Trust does not

TABLE 6: Immediate effect.

Information	F2	F1	F3	F4
F3	-0.096	1,130	0,000	0,000
F4	0.824	-0.650	0.853	0,000

TABLE 7: Indirect Impact.

Information	F2	F1	F3	F4
F3	0,000	0,000	0,000	0,000
F4	-0.082	0.963	0,000	0,000

act as a mediator between perceived usefulness and intention to use, as evidenced by the indirect value of perceived usefulness (F2) on intention to use (F4), which is -0.082 < 0.824, which is the direct value of perceived usefulness (F1) on intention to use (F4).

This research finds that trust can mediate the influence of perceived ease of use on the intention to use digital banks. Information technology must be utilized optimally, especially in the current era of digitalization. This study is in line with Utami [25], who states that trust can mediate the influence of perceived ease of use on intention to use, and trust positively affects perceived usefulness and perceived comfort [27]. This study's results align with Prathama's findings [28]. The level of user trust in a system can increase along with its ease. Davis said that the more easily accessible the technology is, the higher a person's confidence in using it [29]. The following finding is that perceived usefulness can increase the intention to use. The research results are in line with Firman [30]. Davis also revealed that perceived usefulness is the most critical factor in utilizing a system [31]. The perceived usefulness of a system is related to productivity and effectiveness, which can improve user performance.

5. Conclusion

The study's conclusions are as follows: user trust is significantly impacted by perceived ease of use of digital banking services; service trust is not impacted by perceived usefulness of using digital banking services; intention to use services is significantly impacted by trust in banking services; and intention to use services is not impacted by perceived ease of use.

This study has several shortcomings; one is that it was restricted to quantitative research, and data collection was only done in the Yogyakarta Special Region. Regarding these constraints, scientists have proposed some directions for future investigation,

including broadening the area covered by data collection to maximize the quality of the results and incorporating qualitative techniques to produce more profound, more comprehensive results that capture the phenomena under study.

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