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Analysis of The Use of Mobile Banking Applications Using The Unified Theory of Acceptance and Use of Technology 3 (UTAUT3) and Perceived Security Models For PT BCA Digital Customers

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ABSTRACT: The current digital era 4.0 encourages various business sectors to carry out digital transformation, one of which is carried out by the banking sector which is starting to utilize smartphone technology in conducting digital-based banking financial transactions using mobile banking applications. This study aims to analyze the factors that influence the use of BLU Mobile Banking, The research model used in this study is the UTAUT-3 model with the expansion of the model by adding perceived security to customers using mobile banking, which examines the extent to which the construction of PE, EE, SI, FC, HM, HB, PV, PI and PS affects the Behavioural Intention and Use Behavior of Mobile Banking BLU. This study used a quantitative approach with purporsive sampling using the slovin formula with a total of 400 respondents. Data was analyzed using Partial Least Square (PLS) and Structural Equation Modeling (SEM) with SmartPLS data processing tools. The results showed that PE, HM, HB, PI, PS had a positive effect on BI. EE ,SI ,FC ,PV does not have a positive effect on BI. FC, HB and BI have a positive influence on UB. The influence on Behavioral Intention is 58%, while the influence on Use Behavior is 60%. This research can be used as a reference for BLU to focus on implementing mobile banking services as the main strategy in carrying out digital transformation.

Keywords: Digital Transformation, Mobile Banking, UTAUT-3, Acceptance

INTRODUCTION

The presence of digitalization makes all activities carried out by individuals and companies easier because of the help of the latest technology (Awaluddin et al., 2022). According to data obtained from Bank Indonesia (BI) in June 2023, during April 2023, the total transaction value in the digital banking sector in Indonesia reached Rp4,264.8 trillion, almost reaching Rp4.3 quadrillion (katadata, 2023). If you look at the trends of the last five years, in April 2023, the value of

digital banking transactions throughout Indonesia has grown by 158% when compared to April 2018. This shows that despite fluctuations in digital transactions every month, in the long run, the use of digital banking services in Indonesia is expected to continue to increase. This prompted PT BCA Digital to launch the BLU application.

There have been many digital bank *mobile banking* applications launched in Indonesia such as BLU, Jenius, LINE Bank and many others. Based on data collected and published by Populix in 2022, it was revealed that the Blu BCA Digital financial platform was placed in fifth position in the list of the most popular digital banks in Indonesia, *BLU* BCA Digital mobile banking following the ranking of other banks such as Bank Jago, Bank Neo Commerce, Jenius, and Sea Bank (katadata, 2022) Currently, the adoption rate of *Blu BCA Digital mobile banking* in Indonesia is still quite low, reaching only around 25%.

Based on data on the number of applications downloaded on the *Google Play Store* until January 2023, Blu mobile banking is in 6th position with a total download of 1 million (Bisnis Indonesia, 2019). If you look at the time of application release, the 5 competitors above have a similar release time, namely in 2021 except for Jenius. But the adoption of *competitor mobile banking* already has 5x the download of *Blu mobile banking*.

Although PT BCA Digital has allocated substantial investment in the development of *mobile banking application features* and is supported by the reputation of the parent company PT. Bank Central Asia Tbk is good among Indonesians, data on the use of digital bank services in Indonesia shows that the adoption of BLU BCA Digital mobile banking is still at a low level. Therefore, a study needs to be conducted to identify the causes of low utilization of *BLU BCA Digital* mobile banking.

The formulation of the problem in this research is as follows:

1. How respondents perceive the variables *Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, Hedonic Motivation, Price Value, Habit, Personal Innovativeness, Perceived Security, behavioral intention* and *Use Behavior*.

2. What is the effect of *Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, Hedonic Motivation, Price Value, Habit, Personal Innovativeness* and *Perceived Security* on behavioral *intention* in using BLU *mobile banking* services by BCA Digital bank customers in Indonesia?

3. What is the effect of *Facilitating Condition, Habit, Personal Innovativeness*, and *behavioral intention* on *Use Behavior* in using BLU *mobile banking* services by BCA Digital bank customers in Indonesia?

4. What is the effect of *Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, Hedonic Motivation, Price Value, Habit, Personal Innovativeness* and *Perceived Security* on *Use Behavior* through *behavioral intention* as an intervening variable in using BLU *mobile banking* services by BCA Digital bank customers in Indonesia?

Literature Review

In their research, Venkatesh and colleagues (2003) (Venkatesh et al., 2003) apply the concepts of performance expectations, effort expectations, attitudes to technology use, social implications, facilitating conditions, self-efficacy, and anxiety. After testing, three determining factors were eliminated, until the remaining four main factors determining the intention of use and usage behavior: performance expectancy, effort expectacny, social influence, and facilitating conditions.

Venkatesh introduced the UTAUT research model in 2003 and expanded it to UTAUT 2 in 2012 by adding three variables: hedonic motivation, price value, and habit (Venkatesh et al., 2012).

Farooq, Salam, Jaafar, Fayolle, Ayupp, Markovic, and Said (Farooq et al., 2017) further developed the UTAUT-2 model into the UTAUT-3 model by adding one variable, namely *Personal Innovativeness*. Farooq et al. (2017) view, recognition of personal innovation in information technology is defined as *Personal Innovativeness.*

This study adds one additional variable, namely perceived security. *Perceived Security* is a consumer's assessment of the security of making transactions using a website (Ha & Pan, 2018) . Undoubtedly, security remains one of the main concerns of consumers in the use of internet banking as well as electronic trading platforms (Wazid et al., 2019). Cybersecurity vulnerabilities as well as the challenges that come with them have made many people worry about online transactions. The adoption and use of M-Banking Applications has become a concern for consumers due to possible data breaches and leaks, theft and damage caused by computer hackers and cybercriminals (Apaua & Lallie, 2022). The banking sector always strives to do this, providing a large budget for the development of security mechanisms for its clients, for example multi-factor authentication, transaction encryption and others (Almaiah et al., 2023).

Conceptual Model

One of the best models in predicting the acceptance and use behavior of technology in an organizational context is the Unified Theory of Acceptance and Use of Technology-3. The UTAUT model has been shown to account for as much as 66% variation in interest in technology use (Farooq et al., 2017). This number shows the level of accuracy and effectiveness of the UTAUT model in predicting interest in using technology.

Researchers also modified the frame of mind by including the variable *Perceived Security. Perceived Security* is defined as the degree of confidence in a technology or system to transmit sensitive information without any breach or leak (Merhi et al., 2019).
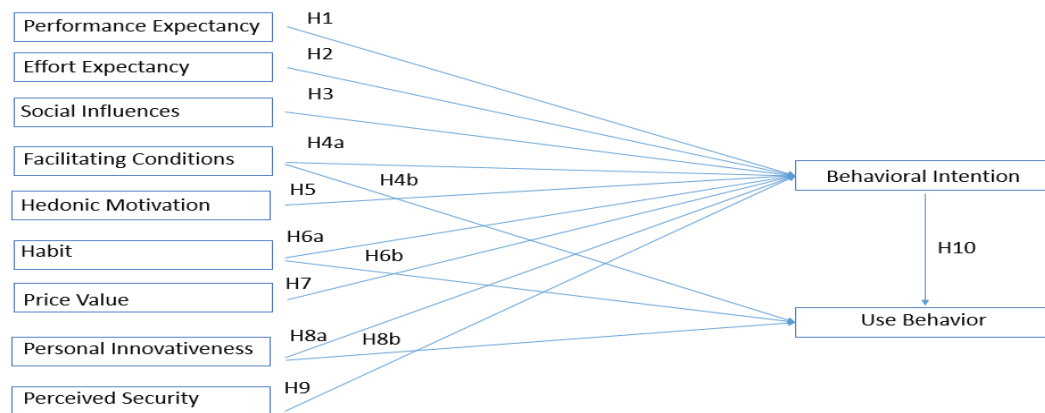
Figure 1 Resarch Framework: Modification of the Model

Research Hypothesis

H1: Performance expectancy has a significant positive effect on behavioral intention.

H2: Effort expectancy has a significant positive effect on behavioral intention.

H3: Social Influences have a significant positive effect on behavioral intention.

H4a: Facilitating Conditions have a significant positive effect on Behavioral intention.

H4b: Facilitating Conditions have a significant positive effect on Use Behavior.

H5: Hedonic Motivation has a significant positive effect on Behavioral intention.

H6: Price Value has a significant positive effect on Behavioral intention.

H7a: Habit has a significant positive effect on behavioral intention.

H7b: Habit has a significant positive effect on Use Behavior.

H8a: Personal Innovativeness has a significant positive effect on behavioral intention.

H8b: Personal Innovativeness has a significant positive effect on Use Behavior.

H9: Perceived Security has a significant positive effect on behavioral intention.

H10: Behavioral intention has a significant positive effect on Use Behavior.

This study introduces a comprehensive investigation into the low adoption rate of BLU BCA Digital mobile banking in Indonesia by integrating the UTAUT-3 model with an additional variable, Perceived Security. Unlike previous studies, this research uniquely explores the combined influence of Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, Habit, Personal Innovativeness, and Perceived Security on both behavioral intention and actual use behavior. By focusing specifically on BLU BCA Digital and comparing it to its competitors, this study provides novel insights and actionable recommendations for enhancing user adoption and engagement in the digital

banking sector. The novelty of this research lies in its detailed analysis of user perceptions and behaviors towards BLU BCA Digital mobile banking, offering a deeper understanding of the barriers and enablers influencing its adoption in the Indonesian market.

RESEARCH METHODOLOGY

This research uses quantitative research methods that can be defined as organized investigation of phenomena through the collection of numerical data as well as the application of statistical, mathematical, or computational techniques (Sugiyono, 2016). This study applied the deductive method. Deductive research implements deductive methods to test theories on a research topic, where the presentation of theories starts from general aspects and gradually leads to a more specific approach. This research is included in the category of explanatory research. Explanatory research is classified as a type of research that intends to interpret the position of variables and their respective implications for each other. The strategy used in this study is through Surveys. The data collected from the survey is then statistically analyzed to draw meaningful research conclusions. Based on the unit of analysis, the study belongs to individual types. Individual type research analyzes individual behavior to determine their respective responses to BLU *mobile banking* adoption intentions in Indonesia. The author's involvement in this study is *Minimal Involvement.* At this level, researchers are involved in a limited way in the research process. Based on Time Horizon, researchers use the *cross sectional* method. The *cross sectional* method is the collection of data carried out in one period, then the data is processed, analyzed and then concluded.

Operational Variables

Here are the operational variables in this study:

Variable	Indicator	Item
Performance Expectancy (PE)	I find *Blu mobile banking* useful in my daily life	PE1
	I feel Blu mobile banking can increase my chances of getting my work done	PE2
	I feel *Blu mobile banking* can help me get work done faster	PE3
	I feel *Blu mobile banking* is able to increase my productivity	PE4
Effort Expectancy (EE)	I feel understanding Blu mobile banking is easy	EE1
	I can access Blu *mobile banking* easily	EE2
	I found it easy to learn the use of Blu mobile banking	EE3
	I feel that I can master the features in Blu mobile banking easily	EE4
Social Influence (SI)	I feel that important people around me suggest that I should use Blu's mobile banking service	SI1
	I feel that people who influence my behavior suggest that I should use Blu's mobile banking service	SI2
	I feel that people I value their opinions suggest that I should use Blu's mobile banking service	SI3
Facilitating Condition (FC)	I feel I have the necessary insight to use Blu's mobile banking services	FC1
	I feel Blu's mobile banking is compatible with other technologies I use	FC2

	I feel there is a unit that is ready to help if I have difficulty using Blu mobile banking services	FC3
Hedonic Motivation (HM)	I feel happy in implementing *Blu* mobile banking services	HM1
	I was comforted in implementing *Blu's* mobile banking services	HM2
	The features of Blu's *mobile banking* service make me happy	HM3
Price Value (PV)	I feel that using Blu's mobile banking service is quite cheap	PV1
	I feel the benefits gained from using BLU mobile banking are worth the costs incurred	PV2
	I feel that at the current price, Blu mobile banking is able to provide good value	PV3
Habit (HB)	I feel that using Blu's mobile banking services has become a habit for me	HB1
	I feel using BLU mobile banking has become a must for me	HB2
	I feel using BLU mobile banking is something that should be done without thinking	HB3
Personal Innovativeness (PI)	When I hear information about a new technology/feature, I try to implement it	PI1
	I feel that compared to those around me, I am usually the first person to try the latest technology/features	PI3
	I love experimenting with new technologies/features	PI3
Perceived Security (PS)	I feel Blu's mobile banking service is safe to use	PS1
	I feel Blu mobile banking has strong security features	PS2
	I believe transactions through Blu mobile banking are protected and safe	PS3
Behavioral intention (BI)	I intend to continue using Blu's mobile banking services in the future	BI1
	I will always try to use Blu mobile banking in my daily life	BI2
	I predict I will use BLU mobile banking in the future	BI3
Use Behavior (UB)	I often use *Blu*'s mobile banking services	UB1
	I often use Blu mobile banking services to make payment transactions	UB2
	I often use Blu mobile banking service to make money transfer transactions	UB3
	I prefer to use Blu mobile banking instead of other digital bank mobile banking	UB4

The population of this study is the number of BLU *mobile banking users* in Indonesia. According to PT BCA Digital's 2022 annual report, there are 1.1 million customers (Annual Report, 2022)who utilize Blu's *mobile banking* services and will make up the population in this study. This study uses a *Non Probability Sampling approach*, the sampling technique does not provide equal opportunities or opportunities to every member of the population when selected as a sample (Ghozali & Latan, 2015). The sampling method of this study is *purposive sampling*, with the criteria of being a BLU *mobile banking* user.

Researchers applied the Slovin formula to determine the total sample

size of the entire population of BCA Digital customers.

$$n = \frac{N}{N(d)^2 + 1}$$

$$n = \frac{1.100.000}{1.100.000(0,05)^2 + 1}$$

$$n = 400$$

In this study, researchers applied primary data types. Primary data is a data source that directly provides data to the data collector. In its implementation for the primary data collection process, researchers obtained questionnaires to BCA Digital customers who were used as samples in the study.

Validity Test

The validity test parameters in this study are:

Table 1. Validity Test Parameter

Validity Test	Parameter	Rule of Thumbs
Convergent Validity	Loading Factor	> 0.70
	Average Variance Extracted (AVE)	> 0.50
Discriminant Validity	Cross Loading	> 0.70 for each variable
	AVE Square Root	The square root of AVE > from the correlation between latent constructs

Reliability Test

The reliability test parameters in this study are:

Table 2. Reliability Test Parameter

Reliability Test	Parameter	Rule of Thumbs
Reliability	Cronbach's Alpha	> 0.70
	Composite Reliability	> 0.50

Structural Model Test (*Inner Model*)

The test parameters of the structural model in this study are:

Tabel 3. Inner Model Test Parameter

Parameter	Rule of Thumbs
R-Square	R> 0,75 (strong), 0,50>R>0,75(moderate), R<0,25 (weak)
Q-Square	Q>0
F-Square	F>0,35 (big), 0,15>F>0,35 (moderate), F<0,15 (weak)

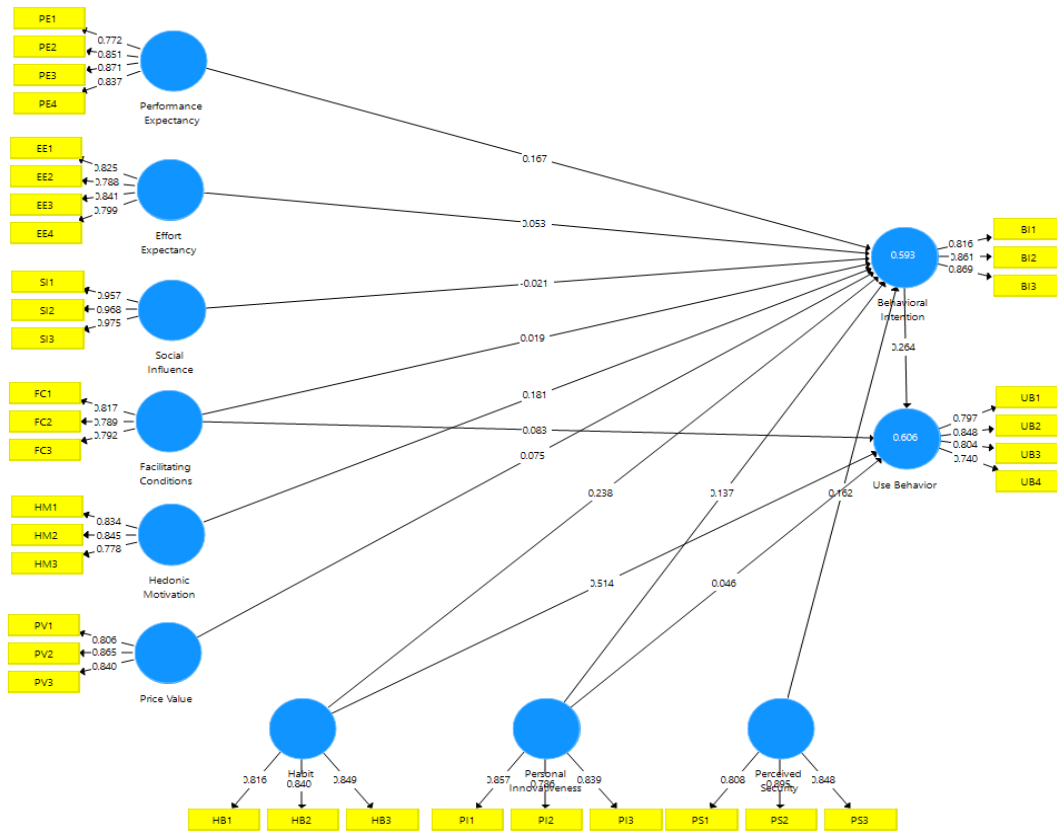**RESULT AND DISCUSSION**   **Measurement Model (Outer Model)**

Figure 2 SmartPLS Testing Research Model

Convergent Validity

Convergent validity relates to the principle that measurements of a construct should be highly correlated. Convergent validity occurs when scores obtained from two different instruments that measure the same construct have a high correlation. Validity indicators can be measured using outer loading scores. Outer loadings is a table that contains loading factors to show the magnitude of the correlation between indicators and latent variables. If the outer loading value is more than 0.70 (>0.70) then the indicator can be used. In addition, validity can be measured by the AVE Value which describes the magnitude of variance or diversity of manifest variables that can be possessed by latent constructs. The Average Variance Extracted (AVE) value that meets the minimum criteria is greater than 0.50 (>0.50).
Valid

Table 4. Loading Factor and AVE value

Leave it variable	Construct Variables	Loading Factor	Conclusion	AVE	Conclusion
Performance	PE1	0.772	Valid	0.695	Valid
Expectancy	PE2	0.851	Valid		

	PE3	0.871	Valid		
	PE4	0.837	Valid		
Effort Expectancy	EE1	0.825	Valid	0.662	Valid
	EE2	0.788	Valid		
	EE3	0.841	Valid		
	EE4	0.799	Valid		
Social Influence	SI1	0.957	Valid	0.935	Valid
	SI2	0.968	Valid		
	SI3	0.975	Valid		
Facilitating Condition	FC1	0.817	Valid	0.639	Valid
	FC2	0.789	Valid		
	FC3	0.792	Valid		
Hedonic Motivation	HM1	0.834	Valid	0.672	Valid
	HM2	0.845	Valid		
	HM3	0.778	Valid		
Price Value	PV1	0.806	Valid	0.701	Valid
	PV2	0.865	Valid		
	PV3	0.840	Valid		
Habit	HB1	0.816	Valid	0.698	Valid
	HB2	0.840	Valid		
	HB3	0.849	Valid		
Personal Innovativeness	PI1	0.857	Valid	0.686	Valid
	PI2	0.786	Valid		
	PI3	0.839	Valid		
Perceived Security	PS1	0.808	Valid	0.725	Valid
	PS	0.895	Valid		
	PS3	0.848	Valid		
Behavioral intention	BI1	0.816	Valid	0.721	Valid
	BI2	0.861	Valid		
	BI3	0.869	Valid		
Use Behavior	UB1	0.797	Valid	0.637	Valid
	UB2	0.848	Valid		
	UB3	0.804	Valid		
	UB4	0.740	Valid		

Based on the table above, it is known that there are all indicators that have a loading factor value of > 0.700 so that these indicators are valid and can be used in this study. All variables have an AVE value of > 0.500 so that the variables are valid and can be used in this study.

Discriminant Validity

Discriminant validity testing is carried out to prove whether the indicator in a construct will have the largest loading factor in the construct formed than the loading factor with other constructs This can be known through the Forner-lacker criteria value or can also use values in the cross loading table.

Table 5. Fornell-Lacker value
Value Fornell – Lacker

	BI	EE	FC	HB	HM	PS	PE	PI	PV	SI	UB
BI	**0.849**										
EE	0.533	**0.813**									
FC	0.467	0.502	**0.799**								
HB	0.641	0.469	0.382	**0.835**							
HM	0.652	0.578	0.531	0.650	**0.820**						
PS	0.506	0.518	0.465	0.387	0.420	**0.851**					
PE	0.579	0.405	0.449	0.580	0.611	0.338	**0.834**				
PI	0.510	0.478	0.398	0.434	0.471	0.347	0.398	**0.828**			
PV	0.580	0.602	0.505	0.537	0.650	0.576	0.436	0.448	**0.837**		
SI	0.320	0.377	0.382	0.256	0.344	0.356	0.384	0.249	0.453	**0.967**	
UB	0.656	0.473	0.421	0.735	0.632	0.435	0.614	0.436	0.576	0.374	**0.798**

Based on the table above, it is known that the value of the correlation relationship between variables in each latent construct in this study has a higher value when compared to the correlation between other variables contained in this study. So it can be concluded that there is no problem of multicollinarity between latent variables.

Table 6. Cross Loadings
Value Cross Loadings

	BI	EE	FC	HB	HM	PS	PE	PI	PV	SI	UB
BI1	**0.816**	0.510	0.415	0.518	0.551	0.491	0.436	0.401	0.589	0.315	0.531
BI2	**0.861**	0.416	0.401	0.582	0.570	0.402	0.573	0.466	0.446	0.299	0.638
BI3	**0.869**	0.434	0.373	0.528	0.538	0.397	0.456	0.426	0.444	0.192	0.488
EE1	0.451	**0.825**	0.412	0.408	0.451	0.396	0.377	0.392	0.475	0.208	0.380
EE2	0.442	**0.788**	0.388	0.394	0.482	0.415	0.294	0.400	0.517	0.324	0.375
EE3	0.428	**0.841**	0.423	0.343	0.482	0.471	0.328	0.393	0.547	0.403	0.400
EE4	0.410	**0.799**	0.410	0.380	0.464	0.404	0.317	0.367	0.414	0.296	0.383
FC1	0.364	0.452	**0.817**	0.303	0.406	0.358	0.341	0.347	0.399	0.282	0.335
FC2	0.401	0.434	**0.789**	0.288	0.436	0.377	0.335	0.223	0.430	0.330	0.293
FC3	0.357	0.321	**0.792**	0.323	0.431	0.380	0.399	0.382	0.382	0.304	0.378
HB1	0.590	0.472	0.342	**0.816**	0.601	0.336	0.523	0.372	0.500	0.226	0.640
HB2	0.511	0.303	0.261	**0.840**	0.478	0.247	0.431	0.332	0.333	0.103	0.577
HB3	0.499	0.390	0.348	**0.849**	0.541	0.383	0.492	0.379	0.503	0.308	0.620
HM1	0.633	0.578	0.478	0.526	**0.834**	0.433	0.483	0.383	0.579	0.305	0.529
HM2	0.492	0.420	0.410	0.540	**0.845**	0.278	0.531	0.389	0.480	0.255	0.508
HM3	0.448	0.389	0.405	0.539	**0.778**	0.294	0.496	0.392	0.531	0.282	0.518
PE1	0.566	0.414	0.324	0.588	0.542	0.243	**0.772**	0.277	0.350	0.114	0.601
PE2	0.438	0.285	0.391	0.460	0.476	0.292	**0.851**	0.369	0.352	0.408	0.475
PE3	0.469	0.328	0.436	0.436	0.518	0.352	**0.871**	0.374	0.413	0.455	0.492
PE4	0.424	0.294	0.349	0.410	0.477	0.239	**0.837**	0.314	0.330	0.348	0.443
PI1	0.541	0.518	0.433	0.415	0.486	0.390	0.394	**0.857**	0.512	0.379	0.402

PI2	0.315	0.225	0.222	0.346	0.287	0.226	0.284	**0.786**	0.256	0.087	0.347
PI3	0.366	0.395	0.294	0.299	0.362	0.210	0.290	**0.839**	0.289	0.084	0.324
PS1	0.429	0.450	0.367	0.342	0.339	**0.808**	0.294	0.291	0.458	0.204	0.340
PS2	0.419	0.391	0.413	0.320	0.378	**0.895**	0.291	0.288	0.484	0.345	0.366
PS3	0.443	0.478	0.407	0.326	0.355	**0.848**	0.278	0.306	0.525	0.358	0.403
PV1	0.469	0.489	0.409	0.439	0.558	0.435	0.338	0.298	**0.806**	0.334	0.472
PV2	0.475	0.503	0.446	0.483	0.564	0.484	0.395	0.442	**0.865**	0.366	0.524
PV3	0.511	0.517	0.414	0.429	0.514	0.522	0.362	0.383	**0.840**	0.433	0.451
SI1	0.328	0.393	0.371	0.252	0.351	0.356	0.371	0.231	0.441	**0.957**	0.364
SI2	0.287	0.354	0.365	0.258	0.328	0.338	0.376	0.257	0.435	**0.968**	0.352
SI3	0.309	0.344	0.371	0.232	0.317	0.337	0.367	0.235	0.436	**0.975**	0.367
UB1	0.613	0.462	0.399	0.534	0.548	0.441	0.548	0.414	0.512	0.434	**0.797**
UB2	0.558	0.335	0.384	0.581	0.492	0.340	0.560	0.350	0.442	0.277	**0.848**
UB3	0.481	0.378	0.279	0.614	0.520	0.342	0.452	0.279	0.433	0.259	**0.804**
UB4	0.438	0.333	0.277	0.618	0.456	0.263	0.395	0.349	0.449	0.221	**0.740**

Based on the table above, it can be seen that all variable constructs of each latent variable have a higher correlation value when compared to the correlation of other variable constructs. From this it can be concluded that the indicators used in this study are valid because the discriminant validity is met.

Reliability Test (Cronbach's Alpha and Composite Reliability)

Cronbach's Alpha measures the lower limit of the reliability value of an item, while composite reliability measures the true value of the reliability of a construct. Therefore, a reliability test must be performed to find out if each item on the questionnaire meets the reliability criteria. A variable construct is considered reliable if it has a composite reliability value above 0.70 and Cronbach's alpha above 0.60.

Tabel 7. Cronbach's Alpha and Composite Reliability Value

Variabel	Cronbach's Alpha	Composite Reliability
Performance Expectancy	0.854	0.901
Effort Expectancy	0.829	0.887
Social Influences	0.965	0.977
Facilitating Conditions	0.718	0.842
Hedonic Motivation	0.760	0.860
Price Value	0.787	0.875
Habit	0.784	0.874
Personal Innovativeness	0.775	0.867
Perceived Security	0.809	0.888
Behavioral intention	0.806	0.886
Use Behavior	0.809	0.875

From the table above, it can be seen that each variable produces a Cronbach's alpha value and a composite reliability value greater than 0.7 so that

all indicators are declared reliable in measuring the variable.

Inner Model

R Square Analysis (R2)

R Square (R2) analysis is performed on each endogenous latent variable indicating what degree of influence the endogenous latent variable receives from each exogenous variable contributing to it. The coefficient of determination is used to measure the accuracy of predictions (estimations). In general, an R2 value of 0.75 is considered to have a large estimation accuracy, an R2 of 0.50 has a moderate accuracy estimation, and an R2 value of 0.25 has a low estimation accuracy. The result of the value of the coefficient of determination can be found in the following table.
0.

Tabel 8. R-square Value

Variabel Laten	R-square	R-square adjusted
Behavioral intention	0.593	0.584
Use Behavior	0.606	0.602

R2 Use Behavior *model estimation accuracy* 0.602. Based on this value, it has an estimation of **Medium** accuracy. In other words, *Effort Expectancy, Facilitating Conditions, Habit, Hedonic Motivation, Perceived Security, Performance Expectancy, Personal Innovativeness, Price Value, Social Influences* and *Behavioral intention* influenced 60.2% while the remaining 39.8% were influenced by other factors outside the research model.

Q Square Analysis (Q2)

The Stone-Geisser value Q2 is used to test how well the model produces values and to find out the estimated parameters. If $Q^2 > 0$ indicates the model has *predictive relevance* and if the Q2 model < 0 indicates the model has no *predictive relevance*.

Tabel 9. Q-square Value

Variabel Laten	Q^2
Behavioral intention	0.413
Use Behavior	0.377

Based on the test results in the table above, it can be seen that the constructive model *of Behavioral intention* has a Q^2 of 0.413 and *Use Behavior* so that it has a predictive value.

F Square Analysis (F2)

F Square analysis is used to assess the effect of the independent variable on the dependent variable. In general, the value of 0.02 is considered to have a small affect size, 0.15 has a medium affect size and 0.35 has a large affect size.

Tabel 10. F-square Value

Variable Laten	F-Square	Information
Performance Expectancy -> *Behavioral intention*	0.036	Small
Effort Expectancy -> *Behavioral intention*	0.0003	Small
Social Influences -> *Behavioral intention*	0.001	Small
*Facilitating Condition*s -> *Behavioral intention*	0.001	Small

Hedonic Motivation -> Behavioral intention	0.029	Small
Price Value -> Behavioral intention	0.006	Small
Habit -> Behavioral intention	0.068	Small
Personal Innovativeness -> Behavioral intention	0.031	Small
Perceived Security -> Behavioral intention	0.038	Small
Facilitating Conditions -> Use Behavior	0.0013	Small
Habit -> Use Behavior	0.382	**Big**
Personal Innovativeness -> Use Behavior	0.004	Small
Behavioral intention -> Use Behavior	0.087	Small

Based on the table above, the test results in the table above can be seen that the influence of *Habit* on *Use Behavior* has the largest contribution with the value of the constructive model affect size F2 of 0.382 and is classified as having a large estimating value. The effect of *Performance Expectancy, Effort Expectancy, Social Influences, Facilitating Conditions, Hedonic Motivation, Habit, Price Value, Personal Innovativeness, Perceived Security* on *Behavioral intention* has a small estimation value with a constructive model value affect size F2 < 0.15. The effect of *Facilitating Conditions, Habit, Perceived Security, Behavioral intention* on *Use Behavior* has a small estimation value with a

constructive model value affect size F2 < 0.15.

Goodness of Fit Index (GoF Index)

Goodness of Fit (GoF) is a measurement of fit *indexes* to evaluate measurement models and structural models and also provides a simple measurement for the entirety of the model's predictions. Index measurement at this stage results in the validity of a variable from exogenous variables and endogenous variables. The Goodness of Fit Index (GoF) has three assessment categories, namely 1) 0.1 for low GoF values, 2) 0.25 for medium GoF values, and 3) 0.36 for high GoF values. The following are the results of the Goodness of Fit (GoF) test in table 4.25, as follows:

Tabel 11. Gof Index Value

Variable	R-Square	Average Variance Extracted (AVE)
Performance Expectancy		0.721
Effort Expectancy		0.662
Social Influences		0.639
Facilitating Conditions		0.698
Hedonic Motivation		0.672
Price Value		0.725
Habit		0.695
Personal Innovativeness		0.686
Perceived Security		0.701
Behavioral intention	0.584	0.935
Use Behavior	0.602	0.637
Rata-Rata	0.593	0.706

GoF = √AVE x √R2
GoF = √0.706 x √0.593
GoF = 0.647

Based on the table above, the results of calculating the value of the Gof test value in the table above, it is known that the GoF value of the research model of 0.647 or 64.7% is classified as high. This value proves that this research model has the performance of measurement models and structural models, which are large (very good).

Hypothesis Testing

Coefficient analysis of structural models is used to test hyposis by knowing which relationships have a significant effect. If the p-value < a (0.05) then the relationship is significant, otherwise if the p-value > a (0.05) then the relationship is not significant. Here are the calculations from hypothesis testing:

Tabel 12. Hypothesis Testing

Hypothesys	Path Coefficient	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	Information
H1	*Performance Expectancy -> Behavioral intention*	0.167	3.106	0.002	Aceepted
H2	*Effort Expectancy -> Behavioral intention*	0.053	0.986	0.325	Rejected
H3	*Social Influences -> Behavioral intention*	-0.021	0.502	0.616	Rejected
H4a	*Facilitating Conditions -> Behavioral intention*	0.019	0.442	0.659	Rejected
H4b	*Facilitating Conditions -> Use Behavior*	0.083	2.013	0.045	Aceepted
H5	*Hedonic Motivation -> Behavioral intention*	0.181	3.092	0.002	Aceepted
H6a	*Habit -> Behavioral intention*	0.238	4.431	0.000	Aceepted
H6b	*Habit -> Use Behavior*	0.514	11.407	0.000	Aceepted
H7	*Price Value -> Behavioral intention*	0.075	1.098	0.273	Rejected
H8a	*Personal Innovativeness -> Behavioral intention*	0.137	2.544	0.011	Aceepted
H8b	*Personal Innovativeness -> Use Behavior*	0.046	1.150	0.251	Rejected
H9	*Perceived Security -> Behavioral intention*	0.162	2.878	0.004	Aceepted
H10	*Behavioral intention -> Use Behavior*	0.264	5.404	0.000	Aceepted

Based on the diataws table, the conclusion of the results of hypothesis testing is obtained, by comparing the results of p value with a value above can be drawn the following conclusions:

1. *Performance Expectancy -> Behavioral intention* has a P value of 0.002 smaller than 0.05. Based on this value, it can be known that there is a significant positive influence.

2. *Effort Expectancy -> Behavioral intention* has a P Values of 0.325 greater than 0.05. Based on this value, it can be known that there is an insignificant positive influence.
3. Social Influences -> *Behavioral intention* has a P value of 0.616 greater than 0.05. Based on this value, it can be known that there is an insignificant positive influence.
4. *Facilitating Conditions -> Behavioral intention* has a P Values of 0.659 greater than 0.05. Based on this value, it can be known that there is an insignificant positive influence.
5. *Facilitating Conditions -> Use Behavior* has a P Values of 0.045 smaller than 0.05. Based on this value, it can be known that there is a significant positive influence.
6. *Hedonic Motivation -> Behavioral intention* has a P value of 0.002 less than 0.05. Based on this value, it can be known that there is a significant positive influence.
7. *Habit-> Behavioral intention* has a P value of 0.000 less than 0.05. Based on this value, it can be known that there is a significant positive influence.

8. *Habit-> Use Behavior* has a P Values of 0.000 smaller than 0.05. Based on this value, it can be known that there is a significant positive influence.
9. *Price Value -> Behavioral intention* has a P value of 0.273 greater than 0.05. Based on this value, it can be known that there is an insignificant positive influence.
10. *Personal Innovativeness -> Behavioral intention* has a P value of 0.011 less than 0.05. Based on this value, it can be known that there is a significant positive influence.
11. *Personal Innovativeness -> Use Behavior* has a P Values of 0.251 greater than 0.05. Based on this value, it can be known that there is an insignificant positive influence.
12. *Perceived Security -> Behavioral intention* has a P Values of 0.004 less than 0.05. Based on this value, it can be known that there is a significant positive influence.
13. *Behavioral intention -> Use Behavior* has a P value of 0.000 less than 0.05. Based on this value, it can be known that there is a significant positive influence.

Table 13. Indirect Hypothesis Testing

Path Coefficient	Original Sample (O)	T Statistics ($|O/STDEV|$)	P Values	Information
Performance Expectancy -> Behavioral intention -> Use Behavior	0.044	2.505	0.013	Accepted
Effort Expectancy -> Behavioral intention -> Use Behavior	0.014	0.986	0.325	Rejected
Social Influence -> Behavioral intention -> Use Behavior	-0.005	0.491	0.623	Rejected
Facilitating Conditions -> Behavioral intention -> Use Behavior	0.005	0.443	0.658	Rejected
Hedonic Motivation -> Behavioral intention -> Use Behavior	0.048	2.587	0.010	Accepted
Habit -> Behavioral intention -> Use Behavior	0.063	3.407	0.001	Accepted

Price Value -> Behavioral intention -> Use Behavior	0.020	1.001	0.317	Rejected
Personal Innovativeness -> Behavioral intention -> Use Behavior	0.036	2.441	0.015	Accepted
Perceived Security -> Behavioral intention -> Use Behavior	0.043	2.812	0.005	Accepted

1. *Performance Expectancy -> Behavioral intention -> Use Behavior* has a P Values value of 0.013 smaller than 0.05. Based on these values, it can be seen that *Performance Expectancy* affects *Use Behavior* through *Behavioral intention* as an intervening variable.
2. *Effort Expectancy -> Behavioral intention -> Use Behavior* has a P Values value of 0.325 greater than 0.05. Based on this value, it can be seen that *Effort Expectancy* does not affect *Use Behavior* through *Behavioral intention* as an intervening variable
3. Social Influence -> *Behavioral intention -> Use Behavior* has a P Values value of 0.623 greater than 0.05. Based on these values, it can be seen that Social Influence does not affect *Use Behavior* through *Behavioral intention* as an intervening variable
4. *Facilitating Condition -> Behavioral intention -> Use Behavior* has a P Values value of 0.658 greater than 0.05. Based on these values, it can be seen that *Facilitating Condition* does not affect *Use Behavior* through *Behavioral intention* as an intervening variable
5. *Hedonic Motivation -> Behavioral intention -> Use Behavior* has a P Values value of 0.01 smaller than 0.05. Based on these values, it can be seen that *Hedonic Motivation* affects *Use Behavior* through *Behavioral intention* as an intervening variable
6. *Habit -> Behavioral intention -> Use Behavior* has a P Values value of 0.001 smaller than 0.05. Based on these values, it can be seen that *Habit* affects *Use Behavior* through *Behavioral intention* as an intervening variable
7. *Price Value -> Behavioral intention -> Use Behavior* has a P Value of 0.317 greater than 0.05. Based on these values, it can be seen that *Price Value* does not affect *Use Behavior* through *Behavioral intention* as an intervening variable
8. *Personal Innovativeness -> Behavioral intention -> Use Behavior* has a P value of 0.015 smaller than 0.05. Based on these values, it can be seen that *Personal Innovativeness* affects *Use Behavior* through *Behavioral intention* as an intervening variable.
9. *Perceived Security -> Behavioral intention -> Use Behavior* has a P Values of 0.005 smaller than 0.05. Based on these values, it can be seen that *Perceived Security* affects *Use Behavior* through *Behavioral intention* as an intervening variable

CONCLUSION

Based on the results of research and SEM analysis that has been conducted regarding the UTAUT-3 model and Perceived Security on the use of BLU mobile banking for PT BCA Digital

customers, several conclusions can be drawn to answer the questions in this study as follows:

Performance Expectancy (PE) has a significant positive effect on the Behavioral Intention (BI) of PT BCA Digital customers in adopting BLU mobile banking services.

Effort Expectancy (EE) does not affect the Behavioral Intention (BI) of PT BCA Digital customers in adopting BLU mobile banking services.

Social Influence (SI) does not affect the Behavioral Intention (BI) of PT BCA Digital customers in adopting BLU mobile banking services.

Facilitating Condition (FC) does not affect the Behavioral Intention (BI) of PT BCA Digital customers in adopting BLU mobile banking services.

Hedonic Motivation (HM) has a significant positive effect on the Behavioral Intention (BI) of PT BCA Digital customers in adopting BLU mobile banking services.

Habit (HB) has a significant positive effect on the Behavioral Intention (BI) of PT BCA Digital customers in adopting BLU mobile banking services.

Price Value (PV) does not affect the Behavioral Intention (BI) of PT BCA Digital customers in adopting BLU mobile banking services.

Personal Innovativeness (PI) has a significant positive effect on the Behavioral Intention (BI) of PT BCA Digital customers in adopting BLU mobile banking services.

Perceived Security (PS) has a significant positive effect on the Behavioral Intention (BI) of PT BCA Digital customers in adopting BLU mobile banking services.

Facilitating Condition (FC) has a significant positive effect on the Use Behavior (UB) of PT BCA Digital customers in adopting BLU mobile banking services.

Habit (HB) has a significant positive effect on the Use Behavior (UB) of PT BCA Digital customers in adopting BLU mobile banking services.

Personal Innovativeness (PI) does not affect the Use Behavior (UB) of PT BCA Digital customers in adopting BLU mobile banking services.

Behavioral Intention (BI) has a significant positive effect on the Use Behavior (UB) of PT BCA Digital customers in adopting BLU mobile banking services.

Performance Expectancy, Hedonic Motivation, Habit, Personal Innovativeness and Perceived Security affect the behavior of using BLU mobile banking services by PT BCA Digital customers with intervening Behavioral Intention.

The R Square value of Behavioral Intention is 58.4% and Use Behavior is 60%, indicating that there are 40% influences from other variables that were not included in this study which are factors that influence the adoption of BLU mobile banking use by PT BCA Digital customers.

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