AN EMPIRICAL STUDY ON THE USAGE OF DIGITAL BANK IN INDONESIA

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ABSTRACT

Nowadays, information technology plays an important role as a support for daily activities. The role of this information technology is to provide convenience for its users. The development of information technology in banking is developing rapidly, until now there are digital banks. Therefore, the purpose of this study is to find out the factors that influence customers in the use of digital banks, especially in Indonesia. The research model used in this study is the UTAUT model with the addition of variables fear of financial loss, perceived identity theft, and security & privacy, with behavioral intention and security & privacy as moderation variables. In order to obtain data, data collection in the study was carried out by distributing questionnaires through Google Forms. From the questionnaire distributed, the results of 100 respondents of digital bank users were obtained. The results showed that the variables that have the most significant direct influence on Use Behavior in the use of bank digital applications are rerformance expectancy and security & privacy. Meanwhile, effort expectancy can be concluded that it does not have a significant influence on variable use behavior in digital banks, because both through variable moderation and direct effect, the Effort Expectancy factor does not have a significant influence.

INTRODUCTION

With the support of technology penetration, today's technological developments are increasingly intensive in almost all fields. This development is also felt in the banking sector or commonly known as internet banking or m-banking. By utilizing this technology, customers can easily make transfer transactions, account mutations, or other payments, so customers are given convenience in making transactions. An example of technological developments in development is the presence of digital banks.

In a survey conducted by Daily Social entitled "The Rise of Digital Banking in Indonesia", it is stated that in 2021 there will be a 50% increase in banking access through m-banking and banking applications. This is welcomed by digital bank players in Indonesia who are increasingly mushrooming in Indonesia. The presence of digital banks in Indonesia was pioneered by Jeniuswhich was owned by the National Pension Savings Bank (BTPN) in 2016(Mawarni, 2021). Based on the data obtained, it shows that the projection of adults who have a digital bank

account every year will continue to increase, and it is predicted that in 2026 it will increase by 39%(Bryan & Hati, 2022). therefore it is very important to do research in the field of digital banking.
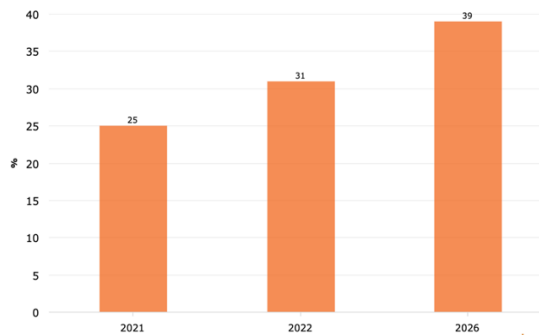

Figure 1: Proyeksi Pertumbuhan Digital Bank di Indonesia (Bryan & Hati, 2022)

One of the goals of digitizing banking is to achieve customer satisfaction(Mawarni, 2021). This digital bank development also provides positive value for digital bank users. The presence of a digital bank provides convenience and comfort. As an example of the convenience and convenience offered, the opening of a new customer account can be done through the bank's digital application and other banking services can be done digitally if there is an internet network. Next is cost efficiency, with digital banks being able to streamline banking administration costs such as administrative costs, investment costs, foreign exchange buying costs, and others (Normasari & Mayangsari, 2022).

Jenius is a pioneer of digital banks in the country. On August 16, 2016, jenius was launched for the first time. Being a pioneer of digital bank in Indonesia Jenius is also one of the most popular digital banks with the second highest number of downloaders in Indonesia. The same thing was also conveyed by , who explained that Jenius users increased by 19% in June 2022. While in the first position occupied by BNC Digital Bank. In terms of rating according to , the digitial bank with the best rating is owned by BCA Digital Blu, followed by Digibank in second place with the best rating.

The growth of digital banks in Indonesia is also accompanied by many obstacles experienced by its users. This was conveyed by (Setiawan, 2023) who stated that the services provided by Jenius were still experiencing problems, such as when logging in to the application. This obstacle is also experienced by other digital banks such as those experienced by Digibank and Blu from BCA. Another obstacle experienced by Jenius was the loss of customer money in the account. To deal with this incident by providing restrictions on the use of Jenius. Jenius provides a one-device policy so that customers can only transact through one verified device.

Based on the description above, the dramatic technological developments and the changing banking climate in digital banks are important for research, so that they can have an impact on customers to continue using them. And on the other hand, this research needs to be done because, research in the field of online banking has been done a lot, but the researchers did not find any previous research on research in the field of digital banking, especially in Indonesia. The results of this study are expected to be taken into consideration for digital banks in

determining appropriate marketing strategies to develop digital banks so that interest in using digital banks in Indonesia increases.

METHODE

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This study uses the research method developed by Venkatesh et al. in 2003 as a framework, namely the UTAUT model(Venkatesh et al., 2003) The following in Figure 1 depicts a research model that adopts several variables from the UTAUT model. This research model also added other variables apart from the UTAUT model, namely the Trust variable, Fear of Financial Loss, Perceived Online Identity Theft, and Security & Privacy.
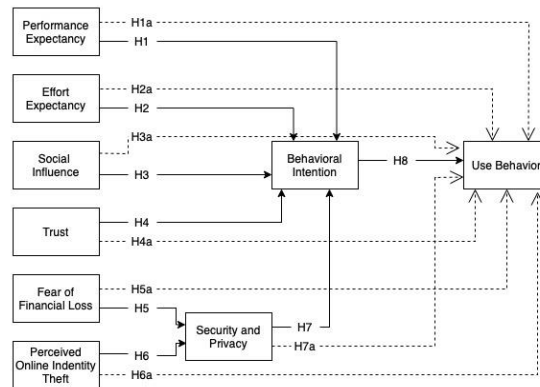

Figure 2 : Research Model

The hypothesis of this study will be presented in Table 1 below:

Table 1: Hypothesis

H1	*Performance Expectancy* in the use of *digital banks* has a positive influence on *Behavioral Intention*
H1a	*Performance Expectancy* has a positive influence on *Use Behavior* in the use of *digital banks*
H2	*Export Expectancy* in the use of *digital banks* has a positive influence on *Behavioral Intention*
H2a	*Export Expectancy* has a positive influence on *Use Behavior* in the use of *digital banks*
H3	*Social Influence* in the use of *digital banks* has a positive influence on *Behavioral Intention*
H3a	*Social Influence* has a positive influence on *Use Behavior* in the use of *digital banks*
H4	*Trust* in the use of *digital banks* has a positive influence on *Behavioral Intention*
H4a	*Trust* has a positive influence on *Use Behavior* in the use of *digital banks*
H5	*Fear of Financial Loss* in the use of *digital banks* has a positive influence on *Security and Privacy*
H5a	*Fear of Financial Loss* memilikipengaruh yang positifterhadap *Use Behavior*dalampenggunaan *digital bank*
H6	*Perceived Online Identity Theft* in the use of *digital banks* has a positive influence on *Security and Privacy*
H6a	*Perceived Online Identity* has a positive influence on *Use Behavior* in the use of *digital banks*
H7	*Security and Privacy* in the use of *digital banks* has a positive influence on *Behavioral Intention*
H7a	*Security and Privacy* has a positive influence on *Use Behavior* in the use of *digital banks*

H8	*Behavioral Intention* in the use of *digital banks* has a positive influence on *Use Behavior*

In this study, data collection techniques were used through field research. The field research conducted was to distribute questionnaires to respondents of digital bank users to obtain primary data. Based on appendix number 3, the number of customers was 23.5 million downloaders on the play store from seven digital banks

RESULT AND DISCUSSION

1. Validity and Reliability

Here are the values of Loading Factor, AVE, Composite Reliability, AVE and Cronbach's Alpha for latent varible with each indicator obtained by doing calculations using smartPLS(Stadler et al., 2021). From the results obtained, it can be seen that the variables of this study are valid and realible.

Table 2 Validity and Reliability

Variable	Factor Loading		Composite Reliability	AVE	Cronbach´s Alpha
Performance Expectancy	PE1	0.864	0.931	0.771	0.901
	PE2	0.885			
	PE3	0.907			
	PE4	0.855			
Effort Expectancy	EE1	0.856	0.919	0.792	0.870
	EE2	0.918			
	EE3	0.894			
Social Influence	SI1	0.862	0.815	0.597	0.683
	SI2	0.764			
	SI3	0.681			
Trust	T1	0.927	0.927	0.809	0.883
	T2	0.855			
	T3	0.916			
Fear of Financial Lost	FOFL1	0.918	0.964	0.899	0.944
	FOFL2	0.974			
	FOFL3	0.952			
Perceived of Identity Theft	POIT1	0.934	0.871	0.871	0.926
	POIT2	0.936			
	POIT3	0.931			
Security &Pivacy	SP1	0.767	0.865	0.618	0.795
	SP2	0.890			
	SP3	0.655			
	SP4	0.814			
Behavioral Intention	BI1	0.826	0.887	0.721	0.806
	BI2	0.878			
	BI3	0.843			
Use Behavior	UB1	0.943	0.959	0.887	0.937
	UB2	0.942			
	UB3	0.941			

2. **Path Coefficient**

Table 3 Path Coefficient

Hipotesis	Original Sample	Sample Mean	Standard Deviation	T -Statistic	P-Value
H1	0.334	0.340	0.095	1.881	0.000
H2	0.073	0.103	0.121	0.601	0.271
H3	0.170	0.174	0.090	1.881	0.030
H4	0.214	0.180	0.149	1.434	0.076
H5	-0.079	-0.087	0.184	0.426	0.342
H6	-0.260	-0.259	0.186	1.403	0.081
H7	0.200	0.208	0.105	1.909	0.028
H8	0.646	0.650	0.064	10.062	0.000

3. **Koefisien Determinasi (R^2)**

Table 4 Coefficient Determination

	R Square	R Square Adjusted	Pengaruh Oleh Variabel Penelitian
Behavioral Intention	0.557	0.533	53.3%
Security & Privacy	0.110	0.092	9.2%
Use Behavior	0.417	0.411	41.1%

Based on the results of Table 4, it can be seen that exogenous variables greatly affect endogenous variables, especially Behavioral Intention variables, namely 53.3%, for Use Behavior 41.1% and Security &Privacy 9.2%. While the rest of the variables are influenced by other factors that are not found in the study.

4. **Uji Hipotesis**
   a. **Performance Expectancy to Behavioral Intention (H1)**

Table 5 Performance Expectancy to Behavioral Intention (H1)

	Original Sample	T Statistics	P-Value	Remark
Performance Expectancy -> Behavioral Intention	0.334	1.881	0.000	Valid

In the results of the first hypothesis test, namely the influence of *Performance Expectancy* on *BehavaioralIntention*, it shows that the *p-value* obtained is smaller than the value $\alpha = 0.10$ that is 0.000 and the statistical value obtained is greater than 1,282, which is 1,881. So it can be concluded that the *performance* of *digital banks* has a significant positive influence on *Behavioral Intention*.

b. Effort Expectancy to Behavioral Intention (H2)

Table 6: Effort Expectancy to Behavioral Intention (H2)

	Original Sample	T Statistics	P-Value	Remark
Effort Expectancy -> Behavioral Intention	0.073	0.601	0.271	Invalid

In the results of the second hypothesis test, namely the influence of Effort Expectancy on Behavaioral Intention, it shows that the p-value obtained is greater than the value $\alpha = 0.10$ In the results of the second hypothesis test, namely the influence of Effort Expectancy on Behavaioral Intention, it shows that the p-value obtained is greater than the value

c. Social Influence to Behavioral Intention (H3)

Table 7 Social Influence to Behavioral Intention (H3)

	Original Sample	T Statistics	P-Value	Remark
Social Influence -> Behavioral Intention	0.170	1.881	**0.030**	**Valid**

In the results of the third hypothesis test, namely the influence of *Social Influence* on *BehavaioralIntention*, it shows that the *p-value* obtained is smaller than the value $\alpha = 0.10$ that is 0.030 and the statistical value obtained is greater than 1.282, which is 1.881. It is concluded that *Social Influence* has a significant influence on *Behavioral Intention.* So it can be concluded that the environment such as the influence of friends and family, as well as promotions carried out affect the bank's *digital* users. On the other hand, the use of digital banks is also influenced by current trends, namely the digitalization trend.

d. Trust to Behavioral Intention (H4)

Table 8 Trust to Behavioral Intention (H4)

	Original Sample	T Statistics	P-Value	Remark
Trust -> Behavioral Intention	0.214	1.434	0.076	Valid

In the results of the fourth hypothesis test, namely the influence of *Trust* on *BehavaioralIntention*, it shows that the *p-value* obtained is smaller than the value $\alpha = 0.10$ that is 0.076 and the statistical value obtained is greater than 1.282, which is 1.434. The user's sense of security and confidence in the stored data is inferred to affect *Behavioral Intention.* Therefore, it can be concluded that *trust* in *digital banks* has a significant positive influence on *Behavioral Intentions.*

e. Fear of Financial Loss to Security & Privacy (H5)

Table 9 Fear of Financial Loss to Security&Privacy (H5)

	Original Sample	T Statistics	P-Value	Remark
Fear of Financial Lossv -> Security & Privacy	-0.079	0.426	0.342	Invalid

In the results of the fifth hypothesis test, namely the influence of *Fear of Financial Loss* on *Security & Privacy*shows that the *p-value* obtained is greater than the valueα = 0.10 that is 0.000 and the statistical value obtained is greater than 1,282, which is 1,881. From this value, it can be concluded, that *Fear of Financial Loss* does not have a significant influence on *Security &Privacy* (Rahayu, 2022). The fear and worry of losing money owned at *digital banks* does not affect *Security & Privacy*.

f. Perceived of Identity Theft to Security & Privacy (H6)

Table 10 Perceived of Identity Theft to Security & Privacy (H6)

	Original Sample	T Statistics	P-Value	Remark
Perceived of Identity Theft -> Security & Privacy	-0.260	1.403	0.081	Valid

In the results of the sixth hypothesis test, namely the influence of Perceived of Identity Theft on Security &Privacy, it shows that the p-value obtained is smaller than the valueα = 0.10 that is 0.081 and the statistical value obtained is greater than 1.282, which is 1.403. From these results, it can be seen that the sense of concern if pegguuna bank digital accounts can be hacked by other parties has an influence on Behvaioral Intention(Putritama, 2019). Then it can be concluded that Perceived of Identity Theft has a significant influence on Behavioral Intention.

g. Security& Privacy to Behavioral Intention (H7)

Table 11 Security & Privacy to Behavioral Intention (H7)

	Original Sample	T Statistics	P-Value	Remark
Security & Privacy -> Behavioral Intention	0.200	1.909	0.028	Valid

In the results of the seventh hypothesis test, namely the influence of Security & Privacy on Behavioral Intention, it shows that the p-value obtained is smaller than the valueα = 0.10 that is 0.028 and the statistical value obtained is greater than 1.282, which is 1.909. So it can be concluded that Security & Privacy in the use of digital banks has a significant influence on Behavioral Intention.

h. Behavioral Intention to Use Behavior (H8)

Table 12 Behavioral Intention to Use Behavior (H8)

	Original Sample	T Statistics	P-Value	Remark
Behavioral Intention -> Use Behavior	0.646	10.062	0.000	Valid

The last hypothesis test, namely the influence of *Behavioral Intention* on *Use Behavior*, shows that the *p-value* obtained is smaller than the value $\alpha = 0.10$ is 0.000 and the statistical value obtained is greater than 1.282, which is 10.062. From the figures obtained, it can be concluded that *Behavioral Intention* has a significant influence on *Use Behavior*.

i. Hipotesis Direct Effect

Table 13: Direct Effect

	Original Sample	T Statistics	P-Value	Remark
Perform Expectancy -> Use Behavior	0.216	2.819	0.002	Valid
Effort Expectancy -> Use Behavior	0.047	0.620	0.268	Invalid
Social Influence -> Use Behavior	0.110	1.821	0.034	Valid
Trust -> Use Behavior	0.138	1.450	0.074	Valid
FOFL -> Use Behavior	-0.010	0.346	0.364	Invalid
POIT -> Use Behavior	-0.034	0.955	0.170	Invalid
Security & Privacy -> Use Behavior	0.129	1.970	0.024	Valid

From the table, it can be seen that the p-value obtained from each of these factors is greater than the value $\alpha = 0.10$ and the statistical value obtained is greater than 1,282. It can be concluded that *Effort Expectancy*, *Fear of Financial Loss* and *Perceived of Identity Theft* do not have a significant influence on *Use Behavior*.

CONCLUSION

Based on this research, several conclusions can be made that the factors that affect customer intentions in using digital banks are Performance Expectancy, Effort Expectancy, Social Influence, Trust, Fear of Financial Loss, Perceived of Identity Theft, Security & Privacy and Behavioral Intention. The influence of factors (Performance Expectancy, Effort Expectancy, Social Influence, Trust, Fear of Financial Loss, Perceived of Identity Theft, Security & Privacy and Behavioral Intention.

DAFTAR PUSTAKA

Bryan, A. Y., & Hati, S. R. H. (2022). The impact of customer experience on the intention to reuse and the indirect influence of customer satisfaction on bank XYZ customers. In *Sustainable Future: Trends, Strategies and Development* (pp. 173–176). Routledge.

Mawarni, R. (2021). Penerapan Digital Banking Bank Syariah Sebagai Upaya Customer Retantion Pada Masa Covid-19. *Al Iqtishod: Jurnal Pemikiran Dan Penelitian Ekonomi Islam*, *9*(2), 39–54.

Mbama, C. I., Ezepue, P., Alboul, L., & Beer, M. (2018). Digital banking, customer experience and financial performance: UK bank managers' perceptions. *Journal of Research in Interactive Marketing*, *12*(4), 432–451.

Normasari, E., & Mayangsari, S. (2022). The Influence Of Fraud Star And Digital Banking On Ffr In Banking Sector And The Moderating Role Of Foreign Ownership. *Jurnal Riset Akuntansi Dan Bisnis Airlangga Vol*, *7*(2), 1319–1342.

Putritama, A. (2019). The mobile payment fintech continuance usage intention in Indonesia. *Jurnal Economia*, *15*(2), 243–258.

Rahayu, R. (2022). Factors That Influence the Behavioural Intention to Use E-Payments in Indonesia. *Ekonomis: Journal of Economics and Business*, *6*(1), 116–125.

Setiawan, R. (2023). Anteseden Dan Implikasi Kepuasan Pelanggan Dalam Perspektif Extended Tam: Studi Pada BTPN Jenius (Antecedents And Implications Of Customer Satisfaction In The Perspective Of Extended TAM: A Study At BTPN Jenius). STIE Indonesia Banking School.

Stadler, M., Sailer, M., & Fischer, F. (2021). Knowledge as a formative construct: A good alpha is not always better. *New Ideas in Psychology*, *60*, 100832.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 425–478.