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RESEARCH ARTICLE

E-BANKING INTERNAL AND EXTERNAL STIMULI TO IMPROVE E-SATISFACTION AND E-LOYALTY M-BANKING IN INDONESIA

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Abstract

Rapid advances in technology and information have changed Intensity of business competition in Indonesia currently increasing every day. The rapid development of technology and information has had a developmental impact in various fields, including in the field of payment systems in buying and selling transactions known as Mobile Banking or electric money or E-money. E-money is a non-cash payment facility that is widely applied in a number of countries in the world, including Indonesia. Jenius is Banking Reinvented full control in managing life and finances in a simpler, smarter, and safer way, from smartphone. This study aims to determine whether the factors of Privacy and Security, Apps Design, Customer Service to E-Banking Loyalty through E-Banking Satisfaction. In this study respondents collected were 200 user of Jenius in Surabaya according to the characteristics of respondents using snowball technique. Based on data analysis is that from four proposed hypotheses, all hypotheses are supported.

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Introduction:-

Banking industry is one of the most essential sectors in maintaining a nation's economy, the main economic stimulators that consists of consumption, investment, and export – import activities are all highly supported by banking industry. The services provided by bank has been modified and enhanced to fulfill more customers' needs that it is highly involved in daily life nowadays by allowing customers to send money, paying monthly bills like electricity and phone bill, automatically collect and pay periodical bills, instead of only being a mediator for collecting and lending fund. In these last few years, bank started to expand their services by utilizing technology information in developing electronic banking (e-banking) which have several types of services such as, automated teller machine, internet or computer banking, debit or credit card, direct payment, direct deposit, electronic check conversion, electronic fund transfer, payroll card, automatic bill payment, prepaid card, and smart card.

Among varied options of e-banking, mobile banking and internet banking are services that commonly used by customers through smartphone. Mobile banking (m-banking) offers some advantages for customers that allow them to check information such as balance, transaction history, also to send money, and to pay daily needs for instance; electricity, water, phone, and even tax bills. Moreover, m-banking is commonly used for top up the balance into digital wallets like Jenius, OVO, Gopay, and LinkAja. It is usually equipped by comprehensive guidance and features. In the midst of increasingly business competition in Indonesia it is important for Jenius to always increase

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M-Banking loyalty from Jenius user, so this research will focus on examining the effect of Privacy and Security, Apps Design, Customer Service to E-Banking Loyalty through E-Banking Satisfaction Jenius user in Surabaya.

Literature Review:-

Privacy and Security

The degree on how banks could provide privacy on customers' personal and transaction data definitely influence e-banking satisfaction (Thakur, 2014). As an addition, Stevano et al. (2018) shows in their research that accepted the hypothesis mentioning privacy and security influences the e-banking satisfaction significantly. Similar research done in Lebanese banks as object indicated that privacy and security play significant roles in influencing e-banking satisfaction (Hammoud et al., 2018). Thus, we tested the following hypotheses:

H₁: Privacy and Security has a positive significant effect on e-banking satisfaction

Apps Design

Apps design significantly influence the e-banking satisfaction of Islamic banks in Indonesia (Fianto et al., 2021). As it plays vital role in the satisfaction, Fianto et al., (2021) suggested the mobile banking provider to keep improving it. Further, the research done by Ling et al., (2016) on the object of banks in Malacca indicated that website design has significant positive relationship towards e-banking satisfaction. Tamara et al., (2019) explained that the design that ease the navigation has positive and significant impact on customer satisfaction. From these statements, we can make hypotheses that:

H₂: Apps Design has a positive significant effect on e-banking satisfaction

Customer Service

In research by Hammoud et al. (2018) customer service is represented by the term 'responsiveness', showing significant influence on the customer satisfaction for Lebanese banks. Also supported by another research that stated customer responsiveness and service has to be maintained effective since it is crucial especially when customers are having problem when using the services which might heavily influence the satisfaction (Parasuraman et al., 2002). Aligned with the research done by Ganguli and Roy (2011) that explained customer service plays certain roles in determining customer satisfaction. From these statements, we can conclude hypotheses as follows:

H₃: Customer service has a positive significant effect on e-banking satisfaction

E-Banking Satisfaction

Study on the object of Pakistan bank by Haq and Awan (2020) result as e-banking satisfaction significantly affecting e-banking loyalty. Added by Shahriari (2014) that found significant relationship between e-banking satisfaction and e-banking loyalty. Using the object of Mellat Bank's customers in Isfahan, Aghdaie (2015) research leads to the finding of significant relationship between e-banking satisfaction and e-banking loyalty. Thus, the following hypothesis is proposed:

H₄: E-Banking Satisfaction has a positive significant effect on E-Banking Loyalty.

E-Banking Loyalty

Explained by Casidy and Wymer (2016) that customer loyalty is when customers are tied and attached to particular brand or company. Also, Thakur (2016) mentioned customer loyalty could also be defined as the intention of customers to have repeat purchase on specific service or product providers. Some scholars introduced e-loyalty with the extension of conventional customer loyalty theory. Reichheld and Schefter (2000) explained that in simple term, e-loyalty is when users keep revisiting a particular website after once he visited it. Furthermore, Srinivasan and Anderson (2003), stated that the behavior or repurchasing or revisiting the website are supported by customers' appropriate feeling towards the service delivery.

Research Issue And Methodology:-

The type of approach used in this study is a quantitative approach. The population used is all user of M-Banking Jenius in Surabaya. The sampling technique used is non-probability sampling using a questionnaire as a tool major in data collection. In this study, researchers will use snowball sampling techniques, where researchers choose

respondents who will help researchers to distribute and fill out questionnaires. In this study respondents collected were 200 user of M-Banking Jenius in Surabaya according to the characteristics of respondents. Research model can be seen below

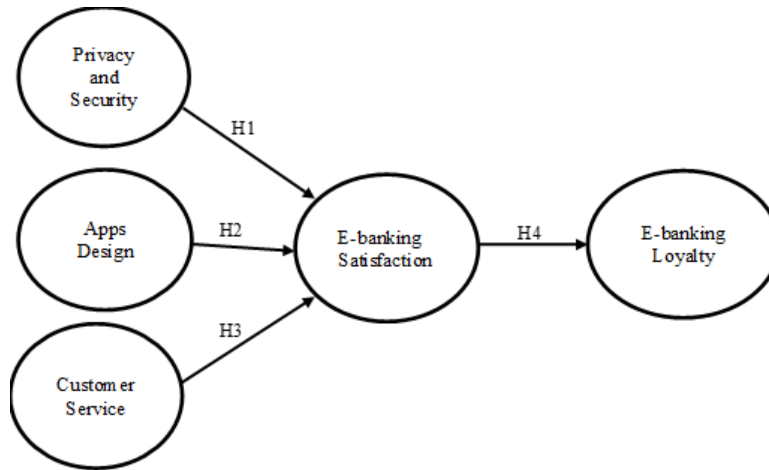


Figure 1:- Research Model.
Source: Haq and Awan (2020)

Finding And Discussion:-

Findings

This study used Multiple Regression in testing between the variables. Statistical analysis tool used to answer the problem formulation of this research is SPSS 22.0. Once the questionnaires were returned, the next step that must be conducted is descriptive statistic-analysis.

In Table 1, it shows that respondents who fill out questionnaires are mostly done by women, this can be seen from 120 respondents (60%) of respondents while 80 respondents (40%) are men. This indicates that user of Jenius mostly is female.

Table 1:- Respondents Characteristic by Gender.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	120	60.0	60.0	60.0
	Male	80	40.0	40.0	100.0
	Total	200	100.0	100.0	

Source: own calculation

From the results in Table 2, it can be seen that the characteristics of respondents based on age are dominated by age group 18-35 which is 80 respondents (80%), followed by 36-50 age group which is 40 respondents (20%). This shows that the majority of respondents are in the age subgroup of generation X and Y.

Table 2:- Respondents Characteristic by Age.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 35	160	80.0	80.0	80.0
	35 - 50	40	20.0	20.0	100.0
	Total	200	100.0	100.0	

Source: own calculation

Table 3:- Descriptive Statistics.

	N	Mean	Std. Deviation
P1	200	4.485	.6417
P2	200	4.460	.5290
P3	200	4.585	.5139
P	200	4.509999	.4159172

AD1	200	4.105	.8351
AD2	200	4.460	.5745
AD3	200	4.360	.6577
AD4	200	4.465	.6005
AD	200	4.3475	.46740
CS1	200	4.390	.6324
CS2	200	4.485	.6096
CS3	200	4.445	.5990
CS4	200	4.420	.6128
CS	200	4.4350	.43644
S1	200	4.375	.6531
S2	200	4.470	.5838
S3	200	4.445	.5554
S4	200	4.555	.5370
S5	200	4.380	.5632
S	200	4.445	.3967
L1	200	4.565	.5895
L2	200	4.495	.6098
L3	200	4.270	.7347
L4	200	4.490	.5398
L	200	4.4550	.41164
Valid N (listwise)	200		

Source: own calculation

Based on the results from dataprocessing in table3, it shows thatall averagescore ofthe mean for overallindicatorisabove 3.61 means that allindicatorsofvariables can beperceived agreeby allrespondents. Also, the standard deviation is under 2.0 means thatthe answers given byrespondents arehomogeneous. The highest meanaverageisE-Banking Loyaltyis 4.4550.This mayindicatethat respondents are agree with indicators of E-Banking Loyalty thanothervariables. Apps Design has the highest score for standard deviation, that is 0.46740.This mayindicatethat the respondents give answers forE-Banking Satisfaction leashtomogeneouscomparedwithother variables.

Validity Test

The criteria is if the value of the factor loading is higher than 0.138, then the statement is considered valid. Based on the test of the data validity, all indicators used to estimate each variable are valid, because the factor loading for every indicators are more than 0.138.

Table 4:- Validity Test.

Indicator	FL	Indicator	FL	Indicator	FL	Indicator	FL	Indicator	FL
Privacy and Security		Apps Design		Customer Service		E-Banking Satisfaction		E-Banking Loyalty	
P1	.407	AD1	.362	CS1	.459	S1	.482	L1	.417
P2	.465	AD2	.478	CS2	.441	S2	.574	L2	.338
P3	.411	AD3	.442	CS3	.494	S3	.510	L3	.463
		AD4	.438	CS4	.431	S4	.506	L4	.210
						S5	.313		

Source: own calculation

Reliability Test

Reliability test is do by comparing cronbach's alpha value, if the value is higher than 0.6, then the statement is considered reliable.

Table 5:- Reliability Test.

Variable	Cronbach's Alpha Based on Standardized Items
Privacy and Security	.682
Apps Design	.658
Customer Service	.675
E-Banking Satisfaction	.717
E-Banking Loyalty	.562

Source: own calculation

From the table 5, it is proven that the variable of Privacy and Security, Apps Design, Customer Service, E-Banking Satisfaction, and E-Banking Loyalty having the Cronbach alpha value higher than 0.60. So, it can be concluded that the statements develop the variables can be said to be consistent/reliable and can be used for further analysis.

Results of Multiple Regression:-

1. Privacy and Security, Apps Design, Customer Service to E-Banking Satisfaction

The results of multiple regression are as follows:

Table 6:- Coefisien Regression Model 1.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.902	.279		3.228	.001
	P	.285	.057	.299	4.976	.000
	AD	.263	.049	.310	5.409	.000
	CS	.250	.057	.275	4.397	.000

a. Dependent Variable: S
Source: own calculation

From table 6, the regression equation can be written as follows:

$$S = b_1P + b_2AD + b_3CS$$

$$S = 0.285 P + 0.263AD + 0.250 CS$$

Based on table 6, all the independent variables have positively influence towards E-Banking Satisfaction. Privacy and Security has the greatest regression coefficient compare to other variables, that is 0.285. Therefore, Privacy and Security is the most influence to E-Banking Satisfaction. In the other side, Customer Service has the smallest effect on E-Banking Satisfaction, that is 0.250.

Results of Simple Regression:-

1. E-Banking Satisfaction to E-Banking Loyalty

The results of simple regression are as follows:

Table 7:- Coefisien Regression Model1.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
2	(Constant)	1.992	.278		7.158	.000
	S	.554	.062	.534	8.889	.000

a. Dependent Variable: L
Source: own calculation

Based on table 7, independent variables have positively influence towards customer satisfaction. E-Banking Satisfaction has highest regression coefficient compare to the others that is 0.554.

From table 7, the regression equation can be written as follows:

$$L = b_4PE$$

$L = 0.554PE$

F-test

Based on the calculation of SPSS, the significance of F test value in the model 1 and model 2 are 0.000, so it can be concluded three model's independent variables together influencing dependent variable significantly.

Table 9:- Result of F-test 1.

Model	Sum of Squares	Mean Square	F	Sig.
1	Regression	0.000	0.000	0.000
	Residual	0.000	0.000	0.000
	Total	0.000	0.000	0.000
a. Dependent Variable: CS				
b. Predictors: (Constant), P, AD, CS				
Source: own calculation				

Table 10:- Result of F-test 2.

Model	Sum of Squares	Mean Square	F	Sig.
2	Regression	0.000	0.000	0.000
	Residual	0.000	0.000	0.000
	Total	0.000	0.000	0.000
a. Dependent Variable: L				
b. Predictors: (Constant), CS				
Source: own calculation				

t-test

1. Privacy and Security, Apps Design, Customer Service to E-Banking Satisfaction

The t test used to determine whether the independent variables of Privacy and Security, Apps Design, Customer Service partially (independently) have significant influence on E-Banking Satisfaction. If the value of t test is below 0.05, then it can be stated that the variable is significantly influenced by partially.

2. E-Banking Satisfaction to E-Banking Loyalty

The t test used to determine whether the independent variables of E-Banking Satisfaction independently have significant influence on E-Banking Loyalty. If the value of t test is below 0.05, then it can be stated that all variable is significantly influenced by partially. From table 7, E-Banking Satisfaction have significant influence on E-Banking Loyalty.

Discussion:-

The results of this study shows that the variables which Privacy and Security, Apps Design, Customer Service have positive and significant effects on E-Banking Satisfaction. Also, E-Banking Satisfaction have positive and significant effect on Customer Loyalty. So, the conclusion is that from four proposed hypotheses, all of the hypotheses are supported.

The first hypothesis stating that Privacy and Security has a positive significant effect on E-Banking Satisfaction is supported. The first hypothesis stating that Privacy and Security has a positive effect on E-Banking Satisfaction is supported because the t test value is 0.000, below 0.05. This shows the consistency results of this study with Thakur (2014) that states that Privacy and Security have a significant positive effect on E-Banking Satisfaction.

The second hypothesis stating that Apps Design has a positive significant effect on E-Banking Satisfaction is supported. The second hypothesis stating that Apps Design has a positive effect on E-Banking Satisfaction is supported because the t test value is 0.000, below 0.05. This shows the consistency results of this study with Fianto et al., (2021) that states that Apps Design have a significant positive effect on E-Banking Satisfaction.

The third hypothesis stating that Customer Service has a positive significant effect on E-Banking Satisfaction is supported. The third hypothesis stating that Customer Service has a positive effect on E-Banking Satisfaction is supported because the t test value is 0.000, below 0.05. This shows the consistency results of this study with

Hammoud et al. (2018) that states that Customer Service have a significant positive effect on E-Banking Satisfaction.

The fourth hypothesis stating that E-Banking Satisfaction has a positive significant effect on E-Banking Loyalty is supported. The third hypothesis stating that E-Banking Satisfaction has a positive effect on E-Banking Loyalty is supported because the t test value is 0.000, below 0.05. This shows the consistency results of this study with Haq and Awan (2020) that states that E-Banking Satisfaction have a significant positive effect on E-Banking Loyalty.

Conclusion:-

This model was developed in order to research E-Banking Loyalty for Jenius E-Banking in Surabaya. This research model formed an influence relationship between Privacy and Security, Apps Design, Customer Service have positive and significant effects on E-Banking Satisfaction. Also, E-Banking Satisfaction have positive and significant effect on E-Banking Loyalty. So, the conclusion is that from four proposed hypotheses, all of the hypotheses are supported.

As derived from the research outcomes, variables such as Privacy and Security, Apps Design, Customer Service and E-Banking Satisfaction have been the factors that are important to note as those variables have critical influence toward E-Banking Loyalty on Jenius user in Surabaya. Therefore, the managerial implication must be concentrated upon those variables.

The managerial implications of these findings can be based on the theories that have been developed as follows. First, E-Banking Satisfaction is one of the important variables that affects the level of E-Banking Loyalty. Good customer satisfaction will be seen from user who satisfied with the apps' features, satisfied with the services provided, satisfied with the experience of doing transaction, and satisfied with the easiness on doing transaction and satisfied with the easiness of transaction because of the presence of customer service. Loyalty of users can also be seen from user gladly recommend anyone to use the apps, prefer to use the apps among similar services, willing to share positive experience in using the apps to relatives and intend to keep using the apps in the future. One of the forming indicators of E-Banking Satisfaction is satisfied with the easiness of transaction because of the presence of customer service, where this indicator gets the lowest results among other indicators. For this reason, Jenius need to develop this indicator by increase the switching cost, by consistently coming up with attractive promotion or program so that in order to get cashback then customers don't need to use cross platform where are Jenius is used to top up balance to their digital wallet just to get promotion provided by those platforms. E-Banking Loyalty will automatically increase with increasingly satisfied user.

Second, the Privacy and Security Variable is the variable that most influences the E-Banking Satisfaction variables. Personal financial information is also well-protected therefore privacy and security is very important and affects the satisfaction of users. One indicator of Privacy and Security is personal data is protected safely where this indicator gets the lowest results among other indicators, so it is important for Jenius to develop this indicator by creating a proper informative video or socialization regarding on how customers are suggested to do transaction safely for instance, avoid using public internet when accessing Jenius, lists of conditions when customers are encouraged to change the access code.

Third, the Customer Service Variable is the second variable that influences the E-Banking Satisfaction variables. Always ready to help regarding anything in anytime when using the apps is very important and affects the satisfaction of users. One indicator of Customer Service is being appreciated and recognized by customer service where this indicator gets the lowest results among other indicators, so it is important for Jenius to pay attention to this. For this reason Jenius needs to evaluate employees and give specific directions on how to treat customers well and recognized user by their data.

Fourth, the Apps Design variable is the third variable that influences the E-Banking Satisfaction variable. Interface is clear that make transaction to be easier is very important and affects the satisfaction of users. One indicator of Apps Design is that interface design is updated regularly where this indicator gets the lowest results among other indicators, so it is very important for Jenius to improve the indicator by providing more on-app features especially customer service hence customers aren't necessarily directed to browser like the current one.

Research Limitation

This study has limitation which is only examining in Indonesia. Future study can conduct on other countries where there are geographical differences that can be additional research attractiveness. Specifically, we take respondents residing in Surabaya only. Future research can develop for other areas. Also, this research only uses Jenius as research object. Using other object can produce different results.

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