Behavioral Model of Using Internet Banking Which is Influenced by the Perspective of Perceived Ease of use, Perceived Usefulness, and Trust

Rinaldi Alexander Mercu Buana University Jakarta, Indonesia

Abstract:- This study aims to determine the decision to use internet banking which is influenced by the perspective of perceived ease of use, perceived usefulness, and trust through the intention to use customers in adopting the internet banking. The object of this research is all customers of the BCA KCU Tanjung Priok rupiah savings located in Jakarta. This study was conducted on 377 respondents using a quantitative descriptive approach. Data was collected and processed using the SEM method on Smart PLS.

The results of this study prove that perceived usefulness and trust have a significant effect on the intention to use customers in using internet banking. Dudi Permana Mercu Buana University Jakarta, Indonesia

Meanwhile perceived ease of use does not significantly influence the intention to use.

Keywords:- Perceived Ease of Use; Perceived Usefulness; Trust; Intention to Use; Decision to Use.

I. INTRODUCTION

The development of technology, especially information technology makes people easier in everything. One of the things that drive the development and use of technology more rapidly is the internet. Table 1 shows the top 20 countries with the highest number of internet users as of December 31, 2017.

No	Country	2018 Population	Internet User 2017
1	China	1.415.045.928	772.000.000
2	India	1.354.051.854	462.124.989
3	United States	326.766.748	312.322.257
4	Brazil	210.867.954	149.057.635
5	Indonesia	266.794.980	143.260.000
6	Japan	127.185.332	118.626.672
7	Russia	143.964.709	109.552.842
8	Nigeria	195.875.237	98.391.456
9	Mexico	130.759.074	85.000.000
10	Bangladesh	166.368.149	80.483.000
11	Germany	82.293.457	79.127.551
12	Philippines	106.512.074	67.000.000
13	Vietnam	96.491.146	64.000.000
14	UK	66.573.504	63.061.419
15	France	65.233.271	60.421.689
16	Thailand	69.183.173	57.000.000
17	Iran	82.011.735	56.700.000
18	Turkey	81.916.871	56.000.000
19	Italy	59.290.969	54.798.299
20	Egypt	99.375.741	48.211.493

 Table 1:- Internet Users in the World

The data in Table 1 above shows that Indonesia ranks 5th with the most internet users in the world. The high number of internet users makes the internet become one of the

needs of the Indonesian people. Figure 1 show data accessed by internet users in Indonesia.



Fig 1:- Number of Internet Users in Indonesia

Figure 1 above shows that the largest internet users in Indonesia use these facilities to chat by 89,35%. Meanwhile, internet users are only 7.39% who use the internet for banking or banking services. Rahardjo in Ardyanto et al. (2015) states that information technology can help overcome problems, constraints, or the inability of the community on something. Similarly, in the case of financial transactions, this development was responded to by companies including banking companies including PT Bank Central Asia, Tbk by providing easy transaction services for customers via the internet.

In the future BCA, branches will change the way they serve customers who initially serve behind the counter such as customer service and tellers, later they will serve customers from the banking hall to help them transact using machines or the internet (InfoBCA, 2018).

According to Sohail and Shanmugham in Gandhi and Sheorey (2017) banks with the help of technological development are responding to the challenges that exist by trying new strategies, which seeks to build customer satisfaction by offering better products and services. One of the facilities offered by banks to their customers is internet banking. According to Fatimah and Suyanto (2016), internet banking is one of the results of the development of banking services based on internet technology.

II. LITERATURE REVIEW

A. Internet Banking

Internet banking provides extensive services for customers to conduct electronic transactions through the bank's website. Shih and Fang in Santouridis and Kyritsi (2014) said that internet or online banking is the latest type of information system that combines the internet with the World Wide Web, and has changed the performance of customers in various financial activities in a virtual space. It can be said, a bank that has a website but cannot be used for transactions is not included in internet banking.

B. Technology Acceptance Model (TAM)

TAM is an extension of the Theory of Reasoned Action (TRA) developed by Fishbein and Ajzen (1975) to describe the psychological determinant of behavior (Mansour, 2015). The TAM method that addresses

ISSN No:-2456-2165

behavioral intentions to use new technology, determined by an individual's attitude towards technology, has been widely applied in various situations, including banking, information services, payment services, and so on. (Cho, 2015). Acceptance of technology or intention to use it is influenced by behavioral intentions, which are influenced by two things: perceived usefulness and perceived ease of use.

This research does not only reach the intention to use, but also the intention to use internet banking can eventually lead to the decision to use the actual technology (Illia et. al, 2015). Decision making according to Setiadi in Ardyanto et. al (2015) is a process of integration that combines knowledge to evaluate two or more alternative behaviors and choose one of them.

C. Perceived Ease of Use

Perceived ease of use is one of the main components in TAM. Davis continued in Mun et.al (2017) argues that an individual might find a system difficult to use even though he might believe that the system is useful for him.

Research conducted by Santouridis and Kyritsi (2014) who found an influence between perceived ease of use significantly with the intention to use internet banking. Likewise with Alraja *et. al* (2016) who found a significant influence between perceived ease of use and intention to adopting internet banking in his research.

Both studies are in line with the research of Septiani et. al (2017) which proves that perceived ease of use has a significant effect on the intention to use an application in his research. Based on some empirical studies above, the researcher concludes:

 H_1 = Perceived ease of use positively and significantly affects the intention to use internet banking.

D. Perceived Usefulness

Perceived usefulness according to Laksana, Astuti, and Dewantara (2015) is someone's trust in the benefits arising from the use of technology. Davis in Muda et.al (2016) defining perceived usefulness as the perception of someone using new technology will improve its performance.

Lim *et.al* (2016) examines the existence of a significant influence between perceived usefulness and intention to use from its users. The research is in line with the results of Mun *et.al* (2017) who found significant usefulness between perceived usefulness and the intention to use payment services via cellular.

A similar study was conducted by Haider *et. al* (2018) who found that there was a significant influence between perceived usefulness and the intention to use m-banking. Based on some empirical studies above, the researcher concludes:

 H_2 = Perceived usefulness positively and significantly affects the intention to use internet banking.

E. Trust

In addition to the two determinants of TAM, trust is one key factor that is very important in e-banking transactions. So this study modifies the TAM theory by adding a factor of trust. Davis et. al in Kusumah (2015) emphasizing the concept of trust which is interpreted as the willingness of a party to easily accept actions against other parties based on the expectation that the other party will take important actions to the party who is trusted, regardless of the ability to monitor or control the other party.

Mansour (2015) in his research found that the role of trust significantly affected the intention to use internet banking. Muda *et. al* (2016) also found a significant influence between trust and intention to use the internet to make a transaction.

Likewise with Ramos *et. al* (2018) who found a significant influence between trust and intention to use m-banking. Based on some empirical studies above, the researcher concludes:

 H_3 = Trust positively and significantly affects the intention to use internet banking.

F. Intention to Use

Behavioral intention is defined as the level of how strong a person's intention is to carry out certain behaviors (Davis in Wibowo et. al, 2015). Al-Qeisi dan Hegazy (2015) in his research found that the intention to use is a big influence on the decision to use.

The research is in line with the research conducted by Tarhini *et. al* (2016) who also found that the intention to use significantly affected decision to use. Both studies were supported by the research of Ozlen and Djedovic (2016) who found a significant influence between intention to use and decision to use. Based on some empirical studies above, the researcher draws conclusions:

 H_4 = Intention to use positively and significantly affects the decision to use internet banking.

Figure 2 describes the relationship of each variable.



Fig 2:- Research Framework

III. RESEARCH METHOD

The approach used in this study is a quantitative approach. The research process is deductive, where research uses hypotheses that have been formulated from the concept to answer the existing problem formulation (Sugiyono, 2013). Based on the explanation and research field, the design of this study is a causal descriptive study.

A. Research Population and Samples

The population in this study is all rupiah savings customers who have internet banking facilities. The sample obtained using the Krejcie and Morgan method totaled 377 customers.

B. Data Collection Method

Data sources in this study used primary sources and secondary sources. Primary sources are sources of data directly collected by data collectors. The questionnaire is a technique of collecting data by giving a number of questions or written questionnaires to respondents (Sugiyono, 2013). While secondary sources are sources of data that are not directly collected by data collectors (Sugiyono, 2013).

C. Data Analysis Method

Data analysis method in this study used SPSS and SEM-PLS. SPSS is used for descriptive analysis to describe data statistics such as minimum, maximum, and sum. Structural Equation Modeling (SEM) is an analytical technique applied to test hypotheses and detect the linkages between independent variables and dependent variables (Boonsiritomachai and Pitchayadejanant, 2017). The testing steps carried out with PLS are as follows (Ghozali, 2014):

- Outer Model: Convergent Validity, Composite Reliability & Cronbach Alpha, Average Variance Extracted (AVE), and Discriminant Validity.
- Inner Model: Goodness-fit Test Model and Statistic t-Test.

IV. DISCUSSION AND RESULTS

A. General Description of Respondents

Before conducting further research, researchers first identify the demographic data of respondents who can be categorized as sources of information. The researcher used probability sampling with simple random sampling. It can be seen that of 377 respondents, most of the respondents were female (58,9%) and the rest are male respondents (41,1%). Based on the level of education it is known to have an undergraduate program S1 (53,6%), high school (23,1%), D3 (17,5%), graduate program S2 (5,8%) and no respondents who have a doctoral program S3. Based on ages 26 to 35 years (45.9%), 17 to 25 years (22.0%), 36 to

45 years (18.6%), 46 to 55 years (10.1%), and more than (>) 55 years (3,4%).

Based on employment, private employees (66.0%), other jobs (16,4%), self-employed (11.4%), and government employees (6,2%). Based on the annual income of 25 million to 400 million (57.3%), less than (<) 15 million per year (17.5%), 15 million to 25 million per year (14.6%), and more than (>) 400 million per year (10.6%). Based on the length of time being a customer from 5 to 10 years (31.0%), 3 to 5 years (21.5%), more than (>) 10 years (21.2%), 1 to 3 years (19.6%), and less than (<) 1 year (6,7%).

B. Outer Model Test Results



Fig 3:- Outer Model

Figure 3 above explains the data input used for the outer test on SmartPLS.

1. Convergent Validity Test

The value of convergent validity is the value of loading factors on latent variables with their indicators. Convergent validity value is used to determine the validity of an indicator. Indicators are declared valid if the value of the loading factor is above 0.5 (original sample value).

Items	Original Sample	Loading Factor
X1-1	0,825	0,5
X1-2	0,810	0,5
X1-3	0,814	0,5
X1-4	0,779	0,5
X1-5	0,658	0,5
X2-1	0,834	0,5
X2-2	0,662	0,5
X2-3	0,712	0,5
X2-4	0,755	0,5
X2-5	0,660	0,5
X2-6	0,835	0,5
X3-1	0,678	0,5

X3-2	0,730	0,5
X3-3	0,720	0,5
X3-4	0,813	0,5
X3-5	0,771	0,5
X3-6	0,740	0,5
Y1-1	0,848	0,5
Y1-2	0,848	0,5
Y1-3	0,798	0,5
Y1-4	0,750	0,5
Y1-5	0,801	0,5
Y2-1	0,805	0,5
Y2-2	0,682	0,5
Y2-3	0,825	0,5
Y2-4	0,729	0,5
Y2-5	0,582	0,5
Y2-6	0,759	0,5

Table 2:- Convergent Validity Test

Based on the Table 2 above proves that all indicators of each variable have a larger original sample value than the loading factor so that it can be declared valid and can be used in research.

ISSN No:-2456-2165

2. Composite Reliability and Cronbach Alpha Tests

The reliability of the research instruments used in this study was tested using composite reliability and Cronbach Alpha coefficients.

Variabel	Cronbach's Alpha	Loading Factor
X1	0,837	0,7
X2	0,839	0,7
X3	0,838	0,7
Y1	0,868	0,7
Y2	0,828	0,7

Table 3:- Composite Reliability and Cronbach Alpha Tests

Based on the Table 3 above shows that the value of Cronbach's Alpha for each variable is above 0.7, so it can be concluded that the measuring instruments in this study are acceptable or reliable.

3. Average Variance Extracted Test (AVE)

AVE value is used to determine the value of the validity of a construct.

Average Variance Extracted	Loading Factor
0,608	0,5
0,557	0,5
0,552	0,5
0,656	0,5
0,540	0,5
	Average Variance Extracted 0,608 0,557 0,552 0,656 0,540

Table 4:- Average Variance Extracted Test

Based on the measurements in the Table 4 above, the AVE values for each variable above 0.5. So that it can be concluded that all of these variables have good validity constructs.

4. Discriminant Validity Test

Discriminant validity is a value of cross loading factors that are useful to determine whether the construct has adequate discriminant or not. There are ways to find out discriminant validity based on cross loading values.

Items	(X1)	(X2)	(X3)	(Y1)	(Y2)
X1-1	0,825	0,339	0,266	0,290	0,192
X1-2	0,810	0,385	0,193	0,303	0,170
X1-3	0,814	0,289	0,116	0,378	0,299
X1-4	0,779	0,325	0,167	0,405	0,287
X1-5	0,658	0,356	0,376	0,313	0,189
X2-1	0,364	0,834	0,421	0,519	0,449
X2-2	0,348	0,662	0,314	0,546	0,527
X2-3	0,316	0,712	0,560	0,518	0,509
X2-4	0,227	0,755	0,353	0,539	0,428
X2-5	0,295	0,660	0,423	0,357	0,370
X2-6	0,381	0,835	0,450	0,475	0,443
X3-1	0,272	0,414	0,678	0,466	0,522
X3-2	0,235	0,454	0,730	0,411	0,377
X3-3	0,158	0,396	0,720	0,310	0,372
X3-4	0,169	0,424	0,813	0,360	0,325
X3-5	0,189	0,425	0,771	0,407	0,389
X3-6	0,186	0,374	0,740	0,427	0,371
Y1-1	0,463	0,526	0,472	0,848	0,714
Y1-2	0,318	0,539	0,409	0,848	0,734
Y1-3	0,357	0,602	0,474	0,798	0,659
Y1-4	0,301	0,535	0,392	0,750	0,507
Y1-5	0,340	0,518	0,455	0,801	0,652
Y2-1	0,301	0,524	0,411	0,702	0,805
Y2-2	0,205	0,438	0,356	0,494	0,682
Y2-3	0,323	0,604	0,511	0,762	0,825
Y2-4	0,081	0,298	0,288	0,533	0,729
Y2-5	0,189	0,442	0,465	0,417	0,582
Y2-6	0.178	0 371	0.342	0.582	0.759

Table 5:- Cross Loading Test

All indicators in the Table 5 have a greater correlation coefficient with each construct, compared to the indicator correlation coefficient in the construct blocks in the other columns, it is concluded that each indicator for the variables perceived ease of use (X1), perceived usefulness (X2), trust (X3), intention to use (Y1), and decision to use (Y2) in blocks are constituents of constructs in that column.

C. Inner Model Test Results



Fig 4:- Inner Model

The above Figure 4 explains the data input in the inner test on the SmartPLS.

1. R Square Test Results

Variabel	R Square		
Intention to Use (Y1)	0,518		
Decision to Use (Y2)	0,660		
Table 6: R Square Test			

Table 6:- R Square Test

Based on the data in the Table 6 above, the value of R Square variable intention to use (Y1) is 0.518atau 51,8%. So that it can be concluded that the variables perceived ease of use (X1), perceived usefulness (X2), and trust (X3) simultaneously have a significant effect on the intention to use (Y1) of 51,8%. While the remaining 48.2% is influenced by other factors outside the research model.

The R Square value on the decision to use (Y2) variable is 0.660 or 66%, So that the variables perceived ease of use (X1), perceived usefulness (X2), trust (X3), and intention to use (Y1) simultaneously have a significant effect on the decision to use (Y2) of 66%. While the remaining 34% is influenced by other factors outside the research model.

2. t-Test Results

Hypothesis testing is based on Path Coefficients which show the parameter coefficients and t-test significance values. The limit for rejecting and accepting the proposed hypothesis is using probability 0,05.

Hipotesis	T Statistics	T Tabel	P Values	Loading Factor
$(X1) \rightarrow (Y1)$	1,846	1,96	0,065	0,05
$(X2) \rightarrow (Y1)$	4,643	1,96	0,000	0,05
$(X3) \rightarrow (Y1)$	2,475	1,96	0,014	0,05
$(Y1) \rightarrow (Y2)$	28,862	1,96	0,000	0,05

Table 7:- t-Test and P Values Tests

Determination of hypothesis decisions is as follows:

- Based on the data in the Table 7 above, the t-value of the variable perceived ease of use (X1) is 1.846 smaller than t-table 1,96 or the P-value 0.065 is greater than 0.05, so Ha is accepted and H1 is rejected. This means that the variable perceived ease of use (X1) does not have a significant effect on the intention to use (Y1).
- Based on the data in the Table 7 above, the t-value of the perceived usefulness variable (X2) of 4.643 is greater than t-table 1.96 or the value of P-value 0.000 is smaller than 0.05, so Ha is rejected and H1 is accepted. This means that the perceived usefulness variable (X2) has a significant influence on the intention to use. (Y1).
- Based on the data in the Table 7 above, the t-value of the trust variable (X3) is 2.475 greater than t-table 1.96 or the value of P-value 0.014 is smaller than 0.05, thus rejecting Ha and accepting H1. This means that the trust variable (X3) has a significant effect on the intention to use (Y1).
- Based on the data in the Table 7 above, the t-value of the intention to use (Y1) variable of 28.862 is greater than t-table 1.96 or the P value of 0.000 is smaller than 0.05, so it rejects Ha and accepts H1. This means that

the intention to use (Y1) variable has a significant influence on the decision to use (Y2).

V. CONCLUSION

Based on the analysis and discussion, then conclusions can be drawn as follows:

- There is a positive and insignificant influence between perceived ease of use and the intention to use internet banking. This is certainly a challenge for BCA where BCA itself must be able to educate its customers that internet banking is an easy-to-use system for its customers. Perceived ease of use in using internet banking will be difficult when customers are given a tool called KeyBCA. KeyBCA is a tool used when customers want to transact using the internet banking system. The presence of KeyBCA in terms of transactions using internet banking can make perceived ease of use internet banking customers decrease, so they feel difficult when they use the system.
- There is a positive and significant influence between perceived usefulness on the intention to use internet banking. The features offered by internet banking are

intended to complement the customer's needs, which is to simplify their transaction processes. Perceived usefulness of internet banking is embedded in the minds of customers before they decide to use internet banking as their banking facility.

- There is a positive and significant influence between trust in the intention to use internet banking. Customer trust in internet banking is inseparable from institutions or financial institutions that have these facilities, in this study BCA. When confidence in an institution is strengthened positively, these beliefs directly affect their trust intentions, thereby strengthening trust and their attitudes in using the internet banking system (Ramos et al. 2018). In addition to internet banking publishing institutions, the image of the company's brand also supports the trust of the facility or not. Online transactions through the internet banking system will also be safe and smooth if supported by hardware and software and the reliability of the technology used to secure customers' transactions.
- There is a positive and significant influence between the interest in using internet banking towards the decision to use internet banking. The higher the intention to use internet banking, it can be stated that the higher their decision to use the system. Internet banking made by BCA has many features, both for transactions and non-transactions. This feature is offered by BCA to make it easier for customers to carry out their transaction activities because in this growing era customers' needs will also increase. Customers will look for a product that makes it easy for them to do transactions.

REFERENCES

- [1]. Al-Qeisi, Kholoud dan Ahmed Hegazy. (2015). "Consumer Online Behavior: A Perspective on Internet Banking Usage in Three Non-Western Countries". *Procedia Economics and Finance* Vol.23.
- [2]. Alraja, Mansour Naser; Samir Hammami, Billal Chikhi, dan Samia Fekir. (2016). "The Influence of Effort and Performance Expectancy on Employees to Adopt E-government: Evidence from Oman". *International Review of Management and Marketing* Vol.06 No.930-934.
- [3]. APJII. (2018). "Penetrasi dan Perilaku Pengguna Internet Indonesia Survey 2017". Asosiasi Penyelenggara Jasa Internet Indonesia.
- [4]. Ardyanto Denni, Heru Susilo, dan Riyadi. (2015).
 "Pengaruh Kemudahan dan Kepercayaan Menggunakan E-Commerce Terhadap Keputusan Pembelian Online". Jurnal Administrasi Bisnis, Vol. 22 No.1.
- [5]. BCA. (2018). *Info BCA Edisi Khusus Layanan No.34 Tahun 2018*. PT Bank Central Asia Tbk. Jakarta.
- [6]. Boonsiritomachai, Waranpong dan Krittipat Pitchayadejanant. (2017). "Determinants Affecting Mobile Banking Adoption by Generaion Y Based on the Unified Theory of Acceptance and Use of Technology Model Modified by the Technology Acceptance Model Concept". *Journal of Social Sciences*.

- [7]. Cho, Yoon. C. (2015). "Exploring Factors That AffectUsefulness, Ease of Use, Trust, and Purchase Intention in the Online Environment". *Journal of Management And Information Systems* Vol.19 No.1.
- [8]. Fatimah, Esi Oktafian dan Suyanto. (2016). "Analysis Factors of Using Internet Banking in Indonesia". *Management and Organizational Studies*, Vol.3 No.2.
- [9]. Gandhi, Aradhana dan Pratima Sheorey. (2017)."Mobile Banking Adoption in a Developing Country Like India". *A Management Journal*, Vol.8 Issue 2.
- [10]. Ghozali, Imam. (2014). Structural Equation Modeling Metode Alternatif Dengan Partial Least Squares (PLS). Universitas Diponegoro. Semarang.
- [11]. Haider, Muhammad Jamal; Gao Changcun, Tayyaba Akram, dan Syed Talib Hussain. (2018). "Exploring Gender Effects in Intention to Islamic Mobile Banking Adoption : An Empirical Study". Journal of Economic and Business, Vol.13.
- [12]. Illia, Abdou; Thomas Ngniatedema, dan Zhentu Huang. (2015). "A Conceptual Model For Mobile Banking Adoption". *Journal of Management Information and Decision Sciences*, Vol.18 No.01.
- [13]. Kenpro. (2012). Sample Size Determination Using Krejcie and Morgan. http://www.kenpro.org/samplesize-determination-using-krejcie-and-morgan-table/ accessed on 16th December 2018.
- [14]. Kusumah, Ryan. (2015). "Analisa Dampak Kepercayaan, Harga, Kualitas, dan Persepsi Akan Resiko Terhadap Perilaku Pembelian Konsumen di Toko Online Instagram". Jurnal Berkala Ilmiah Efisiensi, Vol.15 No.05.
- [15]. Laksana, Giga Bawa; Endang Siti Astuti, dan Rizki Yudhi Dewantara. (2015). "Pengaruh Persepsi Kemanfaatan, Persepsi Kemudahan Penggunaan, Persepsi Resiko dan Persepsi Kesesuaian Terhadap Minat Menggunakan Mobile Banking". Jurnal Administrasi Bisnis, Vol.26 No.2.
- [16]. Lim, Yi Jin; Abdullah Osman, Shahrul Nizam Salahuddin, Abdul Rahim Romle, dan Safizal Abdullah. (2016). "Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention". *Procedia Economics and Finance*, Vol.35 No.401-410.
- [17]. Mansour, Kaouther Ben. (2015). "An Analysis of Business' Acceptance of Internet Banking : An Integration of E-trust to the TAM". Journal of Business and Industrial Marketing, Vol.31.
- [18]. Muda, Mazzini; Rohani Mohd, dan Salwana Hassan. (2016). "Online Purchase Behavior of Generation Y in Malaysia". *Journal of Economic and Finance*, Vol.37.
- [19]. Mun, Yeow Pooi; Haliyana Khalid, dan Devika Nadarajah. (2017). "Millenials' Perception on Mobile Payment Services in Malaysia". *Journal of Computer Science*, Vol.124.
- [20]. Ozlen, Muhammed Kursad dan Irfan Djedovic. (2016). "Online Banking Acceptance: The Influence of Perceived System Security on Perceived System Quality". Journal of Accounting and Management Information Systems Vol.16 No.01.

- [21]. Ramos, Fernanda Leao; Jorge Brantes Ferreira, Angilberto Sabino de Freitas, dan Juliana Werneck Rodrigues. (2018). "The Effect of Trust in the Intention to Use M-Banking". Journal of Administration, Accounting and Tourism, Vol. 15.No.02.
- [22]. Santouridis, Ilias dan Maria Kyritsi. (2014). "Investigating the Determinants of Internet Banking Adoption in Greece". *Journal of Economics and Finance*, Vol.9.
- [23]. Sugiyono. (2013). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Alfabeta. Bandung.
- [24]. Tarhini, Ali; Mazen El-Masri, Maged Ali, dan Alan Serrano. (2016). "Extending the UTAUT Model to Understanding the Customer' Acceptance and Use of Internet Banking in Lebanon". *Information*, *Technology and People*, Vol.29 No.04.
- [25]. Wibowo, Setyo Ferry; Dede Rosmauli, dan Usep Suhud. (2015). "Pengaruh Persepsi Manfaat, Persepsi Kemudahan, Fitur Layanan, dan Kepercayaan Terhadap Minat Menggunakan E-Money Card". Jurnal Riset Manajemen Sains Indonesia, Vol.6.No.1.