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RESEARCH ARTICLE

THE EFFECT OF TECHNOLOGY ACCEPTANCE MODEL (TAM) TOWARD ACTUAL USAGE THROUGH BEHAVIORAL INTENTION IN REAL EFFORT TO INCREASE INTERNET BANKING USERS IN INDONESIA.

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Abstract

Banking is one industries that is currently growing rapidly. With the development of information technology, it will create such a great opportunity for the financial service providers in this industry. This opportunity can be used to further expand its business towards information technology. One of the banking products based on information technology today is internet banking. According to Shih and Fang (2006) internet banking is a new type of information system that uses emerging techniques, such as the Internet and the World Wide Web, and has changed the way consumers do various financial activities in a virtual space.

The purpose of the study is to determine the characteristics of internet banking users and to know the factors that influence the survey user of internet banking. It is expected that this research will broaden the knowledge of the long-term information technology. This will make information technology, such as internet banking, can be used, not only in industry banking, but various commercial and non-commercial brand business.

The research method used in this study is non probability sampling on several big cities in Indonesia. The data processing analysis is using multiple regression with SPSS 20.00 software. The results of this data processing will be conducted with an in-depth discussion on the characteristics of internet banking users and the factors that affect the use of internet banking in Indonesia.

The results of this study are divided into two parts. First, the results of qualitative research successfully strengthens the research model. The variables of perceived usefulness, perceived ease of use, perceived credibility, compatibility, personal innovativeness, and social influence do affect the interest in using internet banking, in the end, the real utilization in using the internet banking. In addition, using quantitative research successfully generated indicators for each valid and reliable variables, namely 3 indicators from actual usage, 4 indicators from behavioral intention, 6 indicators from perceived usefulness, 6 indicators from perceived ease of use, 4 indicators from perceived credibility, 4 indicators from compatibility, 3 indicators from personal innovativeness, and 4 indicators from social influence.

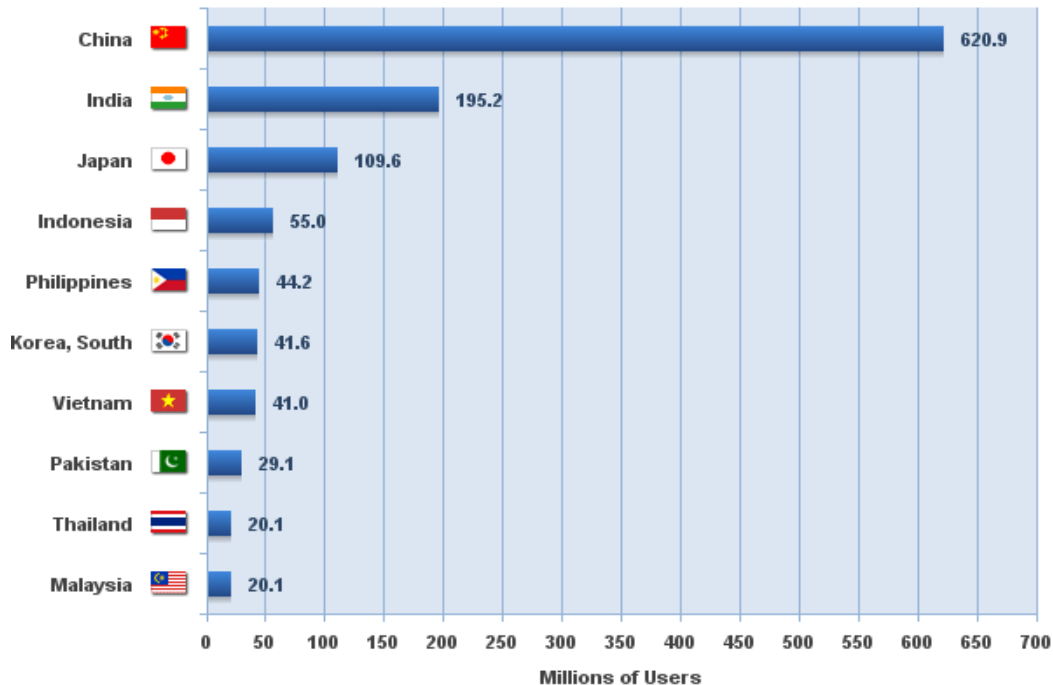
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Introduction:-

As one of the fastest growing industries, banking certainly utilizes various applications from existing information technology. One of the products of information technology is internet banking. Shih and Fang (2006) stated that internet banking is a new type of information system that uses developing techniques such as the Internet and the World Wide Web, and have changed the way consumers conduct various financial activities in virtual space. Since it was first introduced in the 1990's, internet banking is increasingly being adopted by bank customers worldwide. This new way of banking offers the users an access to banking services over time, reducing waiting times, direct access from anywhere in the world, lower costs, and eliminate the anxiety caused by the mistakes in cash registers (Santouridis and Kyritsi, 2014).

The development of internet banking in Indonesia began in 1998. In September 1998, where Bank Internasional Indonesia (BII) and followed by Bank Niaga in 2000, Bank Bukopin and Bank Central Asia in 2001, Bank Mandiri in 2003, Bank Permata in 2005, Bank Negara Indonesia in 2007, Bank Danamon Indonesia in 2008, Bank Rakyat Indonesia in 2009 and Bank Mega in 2010 were developing the internet banking (<http://tonnymarezo.wordpress.com/2014/04/17/sejarah-internet-banking/>). The development of internet banking until 2014 was slow, considering not all banks have adopted the information technology such as internet banking.



Source: Internet World Stats - www.internetworldstats.com/stats3.htm
 2,802,478,934 Internet users in the World estimated for Dec 31, 2013
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Figure 1.1:- Asia Top Internet Countries December 31, 2013.

The increase of internet banking usage development by Indonesian banks still can be improved, considering the internet usage in Indonesia is quite large. The large number of internet users in Indonesia as of December 31, 2013 can be seen from Figure 1.1 above. From the figure, it can be seen that Indonesia is the fourth country with the largest internet user in Asia with 55 million users. This shows that information technology products such as internet banking is appropriate if it is applied in Indonesia given the high number of internet users in Indonesia. Thus, the research in connection with internet banking usage is very important in the effort to improve the quality of internet banking so that it can be a useful competitiveness for banking customers.

This phenomenon is one of the factors behind this research. This study will examine the factors that influence the behavioral intention of internet banking users in Indonesia and the effect of behavioral intention on the actual usage of internet banking users in Indonesia. Moon and Kim (2001) define actual usage as the usage frequency and volume based on users' self report. According to Davis et al. (1989), behavioral intention is defined as the extent to which individuals intend to perform certain behaviors. In this study, behavioral intention is used as an intervening variable that links independent variables with dependent variables. The independent variables used in this study are perceived usefulness, perceived ease of use, perceived credibility, personal innovativeness, social influence, and compatibility.

Theory of Reasoned Action (TRA) and Theory of Planned Behavior (Ajzen and Fishbein, 1980; Ajzen, 1985; 1991) states that "a person's action is determined by the intention to perform." Based on the theory, an action of an individual is determined by the intention to do a certain act. The action is referred to the actual usage and intention in behavioral intention. Theory of Planned Behavior (TPB) says that "behavioral intentions trigger future behaviors" (Ajzen and Fishbein, 1980). Based on the theory, behavioral intentions can trigger consumers' behavior in the future. Consumers' behavior in the future stated is the focus of this research which is the actual usage of internet banking users in Indonesia. According to these theories, behavioral intentions can trigger and determine future consumers' actions and behaviors. Therefore, behavioral intention is very important and interesting to investigate.

In the end, this study aims to determine the characteristics of internet banking users and understand the factors that affect Internet users. It is hoped that this research can enrich the general knowledge in relation to the long-term use of information technology. Thus, information technology, such as internet banking, can be used not only in the banking industry but can be applied in various commercial and non-commercial business brand.

Literature Review:-

Internet Banking:-

Based on Shih and Fang (2006) internet banking is a new type of information system that uses emerging techniques, such as the Internet and the World Wide Web, and has changed the way consumers conduct various financial activities in virtual space. Lymperopoulos, 1996, p.263 explains that internet banking as an alternative banking in the distribution network. In addition, in various surveys, it is explained that internet banking is a banking service that offers a choice of technology-based independent services (Dabholkar et al, 2003) and as one of the banking services shown in broader terms of e-banking (Kolodinsky et al, 2004).

Actual Usage:-

Based on the understanding of Premkumar and Bhattacharjee (2008), the use of information technology (IT usage) has been the main focus of information systems research for more than two surveys. The use of information technology in this study is expressed by actual usage variables in accordance with the theory of TAM. There are several different definitions of actual usage. According to Moon and Kim (2001), actual usage is the frequency and volume based on users' self report. Serenko (2008) defines actual usage as the extent to which an individual hires an interface agent in his email application.

Behavioral Intention:-

According to Namkung and Jang (2007), behavioral intention refers to people's beliefs about what they want to do in a particular situation. While Warshaw and Davis (1985) in Jang et al. (2011) defines behavioral intention as the extent to which a person has formulated a conscious plan for performing or not performing some defined future behavior. In addition, Jani and Han (2011) states that behavioral intention is considered to include intentions to revisit, word-of-mouth that can predict consumers' consumption behavior, as well as recipients of word-of-mouth in the future.

Based on TAM theory, behavioral intention affects actual usage. Some researchers found a relationship between behavioral intentions with actual usage. According to Moon and Kim (2001), behavioral intention to use World Wide Web or WWW in the future has a strong positive relationship with the actual use of WWW. Yousafzai and Yani-de-Soriano (2012) found that the use of internet banking or IB surveys is predicted significantly by intentions. Sambasivan et al. (2010) also found that intention to use affected actual usage of Electronic Payment System or EPS.

Perceived Usefulness:-

Davis (1989) defines perceived usefulness as the extent to which a person believes that using a particular system will improve his performance. The definition comes from the definition of “useful” which means it can be used profitably (Davis, 1989). According to Jayasingh and Eze (2009), perceived usefulness explains the user's perception of the extent to which the system will improve user's performance. While Ndubisi and Jantan (2003) states that perceived usefulness is a concept related to an assessment of the benefits obtained by an individual or company from the use of technology.

Sambasivan et al. (2010) found that perceived usefulness had a significant effect on the intention to use EPS. Guriting and Ndubisi (2006) suggested that perceived usefulness determines significant behavioral intention. Koenig-Lewis et al. (2010) found that perceived usefulness had a direct positive effect on behavioral intention.

Perceived Ease of Use:-

Lin (2007) states that perceived ease of use shows the degree to which a Web site is considered easy to understand, learn or operate. Meanwhile, according to Ndubisi and Jantan (2003), perceived ease of use relates to individual assessment of the effort involved in the process of using technology. Based on TAM's theory, Chong et al. (2010) states that perceived ease of use is the extent to which prospective adopters expect newly adopted technologies to be free from any effort with respect to transfer and utilization.

Shen and Chen (2008) in Jayasingh and Eze (2009) states that perceived ease of use has a positive effect on consumers' intentions to use. Jayasingh and Eze (2009) found that behavioral intention toward mobile coupons is directly affected by perceived ease of use. While Sambasivan et al. (2010) found that the adoption of ease of use had a significant effect on the intention to use EPS.

Other researchers, such as Venkatesh and Morris (2000) in Luarn and Lin (2005) suggest that perceived ease of use has a significant effect on usage intention. Wang et al. (2003) also found that perceived ease of use has a significant and positive effect towards behavioral intention. Guriting and Ndubisi (2006) also found that perceived ease of use determines significant behavioral intention.

Perceived Credibility:-

The third variable of Technology Accepted Model or TAM, discussed for technology acceptance, is perceived credibility (Jayasingh and Eze, 2009). According to Ganesan (1994), perceived credibility is the extent to which either party believes that the other party has the skills required to perform the job more effectively and reliably. Wang et al., (2003) defines perceived credibility as the extent to which one believes that the use of mobile banking will have no threat to the security or privacy of its users. Lu et al., (2003) states that there are two key elements of perceived credibility, namely security and privacy.

According to Amin (2008), perceived credibility is an important factor in predicting Malaysian customers' intentions to use mobile phone credit cards. Lu and Wang (2008) also found that there is a direct and significant relationship between perceived credibility of intent to behave.

Compatibility:-

Blackwell et al. (2006, p.548) states another definition of compatibility, ie compatibility refers to the extent to which the new product is consistent with current individual habits, values, needs and past experiences of potential adopters. According to Roger (1983) in Moore and Benbasat (1991), compatibility is the degree to which innovation is perceived to be consistent with existing values, needs, and past experience of potential adopters. As Schiffman and Kanuk (2007, p.486), compatibility is the extent to which potential customers feel about the new product is consistent with their needs, values and current habits.

Mallat et al. (2006) in Schierz et al. (2010) explains that compatibility has a direct impact on the intention to use a technology. Tornatzky and Klein (1982) in Schierz et al. (2010) also states that compatibility is a characteristic of crucial innovation that directs consumer acceptance. While Koenig-Lewis et al. (2010) found that compatibility had a direct positive effect on behavioral intention. Koenig-Lewis et al (2010) also finds the importance of consumer evaluation of the extent to which new technologies will fit their lifestyles and familiarity with established technologies.

Schierz et al. (2010) found that compatibility has the greatest influence on intention to use mobile payment services. Yang et al. (2012) found a stronger effect of compatibility on behavioral intention and it was found to be stronger for potential adopters. Jayasingh and Eze (2009) also found that the behavioral intention of mobile coupons is directly affected by compatibility.

Personal Innovativeness:-

According to Kuo and Yen (2009), personal innovativeness is a willingness to adopt innovative technology. Agarwal and Prasad (1998) in Lu et al (2005) states that personal innovativeness symbolizes the risk-taking tendency that exists in certain individuals and not in others. In addition, Agarwal and Prasad (1998) in Lu et al (2005) also defines personal innovativeness as the willingness of individuals to try new information technologies.

Agarwal and Prasad (1998) in Kuo and Yen (2009) explains that personal innovativeness bridges perceptions in the decision to adopt information technology. Thus, higher personal innovativeness leads to behavior to adopt more positive information technology. Yang et al (2005) found that Personal Innovativeness in Information Technology (PIIT) significantly affected the behavioral intention directly. Yang (2005) argued that personal innovativeness is also an important factor influencing behavior to adopt new technologies.

Lu et al. (2008) tested PIIT in the adoption model of wireless mobile data services and found a direct effect of PIIT on intention to adopt wireless services. Agarwal and Prasad (1998) found that individuals with higher levels of personal innovativeness established more positive perceptions of target technology in terms of survey benefits, ease of use, conformity and more positive intentions towards the use of new technologies .

Social Influence:-

According to Yang et al (2012), in an innovation diffusion survey, social influence has long been considered an important element in explaining adoption behavior. Venkatesh et al. (2003) defines social influence as the extent to which individuals feel that other people are important to the individual believes that they must use the new system. Nysveen et al. (2005) in Shin (2009) also defines social influence as an individual's perception that individual's most important people thinks that this individual should or should not perform a certain action.

Another definition proposed by Hoyer and MacInnis (2007, p.392) is, social influence is the information and pressure of individuals, groups, and mass media that affect how a person behaves. Meanwhile, according to Lu et al. (2005), social influence is the perceived pressure of social networks to decide or not to decide certain behavioral decisions

The results of Jayasingh and Eze (2009) show that behavioral intention to mobile coupons is directly influenced by social influence. Venkatesh et al. (2003) states social influence as a factor that determines the behavioral intention directly. According to Thompson et al (1991), individual behavior is influenced by how people view of individuals because the individuals are result of using technologists. Kleijnen et al. (2004) in Jayasingh and Eze (2009) states that social influence shows a significant impact on behavioral intention.

Venkatesh et al. (2003) also stated that social influences is further recognized as one of the four main determinants of behavioral intention to use. Yang et al (2012) found that social influences in the form of subjective norms and images directly affect behavioral intention. Hong and Tam (2006) also found that social influences influence intention to adopt directly.

Research Issue and Methodology:-

Research Issue:-

The data gathering in this research is conducted by literature studies, interviews and questionnaires. Literature means study of previous studies as supporting the achievement of objectives in this study. Literature sources that will used in this study originated as books, journals, articles, government reports, the research findings and other data related.

Methodology:-

This research is divided into 2 main researches. The first research is a qualitative research and second research is a quantitative research. The explanation of each of these studies are:

Initial research was conducted by pilot project, using a simple qualitative method by asking 50 participants from several cities in Java island to know the variables that influence internet banking users in Indonesia. In addition, interviews will also be conducted with participants from each selected region regarding the assessment of participants on internet banking that has been used by banks in the banking industry today.

Through a preliminary research, there will be some adjustments between the indicators used in previous research with the results obtained from the pilot project conducted. After that, there will be testing of initial data quality by validity and reliability testing using SPSS 20.00 software. The number of respondents used to test the data quality is one hundred respondents on the island of Java so that the total of some selected areas collected is 500 questionnaires. From this initial test, will ensure for the research model and indicators used in continuing this research.

Findings and Discussion:-

Findings:-

Qualitative Research:-

Based on Table 4.1, it can be concluded the variables that can be found based on a 50 participant interview.

Table 4.1:-Interview Result Variable Summary.

No.	Variabel	Total Participants
1.	Actual Usage	50
2.	Behavioral Intention	50
3.	Perceived Usefulness	16
4.	Perceived Ease of Use	11
5.	Perceived Credibility	11
6.	Social Influence	11
7.	Personal Innovativeness	9
8.	Compatibility	8

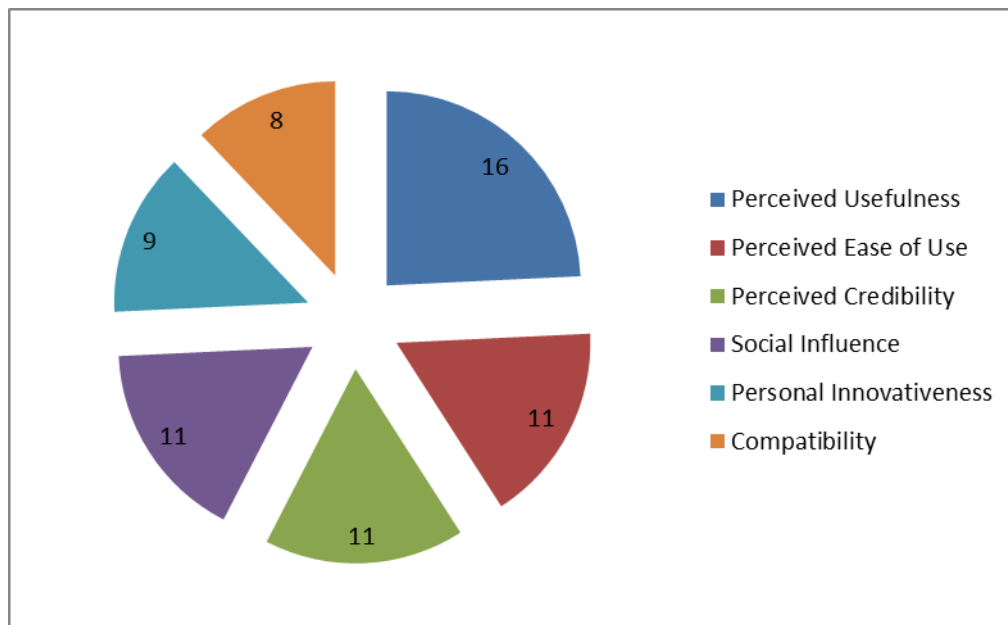


Figure 4.1:-The Variables that influence Behavioral Intention and Actual Usage on Internet Banking.

From Table 4.1 it can be seen that the research model that has been supported by the interview result. It can be seen that all customers who used internet banking reflect actual usage, and this is also supported by behavioral intention. Furthermore, it can be seen that the majority factor, which is the reason for using internet banking, is perceived usefulness (based on 16 participants) and then for perceived ease of use, perceived credibility and social influence

based on 11 participants for each. And for the next sequence is personal innovativeness and compatibility is based on 9 and 8 participants respectively.

The results obtained from this qualitative method would strengthen the research model proposed in this study. To explain the research objectives of the variables that affect the formation of actual usage of internet banking where the formulation of the problem written is that there is influence in perceived usefulness, perceived ease of use, perceived credibility, social influence, personal innovativeness, and compatibility towards actual usage through behavioral intention.

Initial Questionnaire Preparation:-

From the initial investigation result with qualitative methods of interviews, then the next stage would be the process of questionnaires preparation. The variables to be studied have been reinforced by the initial investigation results. Then, the literature study was carried out to adjust with the theoretical aspects of each indicator per variable.

The indicators, in accordance with qualitative research that will be conducted, are:

Table 4.2:-Indicator Design for each Research Variable.

No.	Variabel	Indicator	Previous Research
1.	Actual Usage	<ol style="list-style-type: none"> 1. Prefer to use the products offered by service provider compared to other service providers' offers in shopping transactions. 2. Often use the product from the service provider. 3. Perform most of the transactions using products from service provider 	Lin (2007) and Sambasivan <i>et al.</i> (2010)
2.	Behavioral Intention	<ol style="list-style-type: none"> 1. Want to know more of the detailed information about service provider's products. 2. Want to increase the use of service provider's products in everyday life. 3. Want to use the service provider's product 4. Want to know the promotions offered by the service provider. 	Jayasingh and Eze (2009)
3.	Perceived Usefulness	<ol style="list-style-type: none"> 1. The use of information system products from the service provider make shopping experience more enjoyable 2. Using the information system products from the service provider increases the effectiveness of performing any activities everytime 3. Using information system products from the service provider improves the effectiveness in performing any activities anywhere 4. Using information system products from the service provider is very useful in my daily life 5. Using Online shopping sites gives the facility to compared products offered. 6. Using Online shopping sites provides access to useful information for shopping 	Jayasingh and Eze (2009); Yu et al. (2015) and Lin (2007)
4.	Perceived Ease of Use	<ol style="list-style-type: none"> 1. Information regarding the information system product from the service provider is easy to obtain 2. The information system product from the service provider is easy to use to shop. 3. The use of information systems product from the service providers does not take a long time in shopping activities. 4. Transactions using information system products from the service providers are easy to 	Jayasingh and Eze (2009) and Lin (2007)

		understand. 5. Learning how to operate an Online shopping site is easy 6. Becoming capable in operating Online shopping sites is easy	
5.	Perceived Credibility	1. (PC1) I believe that my information is kept secret 2. (PC2) I believe that my transaction is guaranteed 3. (PC3) I believe that my privacy will not be leaked 4. (PC4) I believe that the banking environment is safe	Luarn and Lin (2005), Foon and Fah (2011)
6.	Compatibility	1. The product from the service provider is in accordance with my lifestyle. 2. The product from the service provider is in accordance with all aspects of my daily activities. 3. The product from the service provider is in accordance with my personality in conducting activities. 4. The product from the service provider is in accordance with the existing hardware (smartphones, etc.)	Jayasingh and Eze (2009) and Yang et al. (2016)
7.	Personal Innovativeness	1. Among my friends, I am usually the first to explore new IT 2. I like to experiment with new CMPS 3. If I hear about new information technology, I will find a way to experiment with it.	Agarwal and Prasad (1998) and R. Boyle & C. Ruppel (2006)
8.	Social Influence	1. (SI1) People who are important to me think that I should use mobile banking 2. (SI2) People who are close to me think that I should use mobile banking 3. (SI3) People who influence my behavior think that I should use mobile banking 4. (SI4) Most people around me use mobile banking	Venkatesh et al. (2003), Venkatesh and Zhang (2010), Foon and Fah (2011), Sripalawat et al. (2011)

In addition, it is also necessary to gain the characteristics of respondents in ensuring the suitability of the questionnaire results obtained with research objectives. So as for the characteristics of the respondents in study are explained as follows:

1. Men and women who understand well and use the internet in daily activities
2. Is a customer of a bank, at least 1 bank in Indonesia branch within the last 6 months
3. Have interacted with customer service from a bank, a bank would have to be located in Indonesia in the last year
4. Used internet banking for personal use from at least 2 internet bankings, the banks would have to be located in Indonesia

Qualitative Research:-

Validity and Reliability Test:-

Validity Test:-

Based on table 4.3, the r-square value of all indicator are greater than its r critical. Therefore it can be concluded that all indicators in this study are valid.

Table 4.3:- Validity Test Result for Perceived Usefulness as the Variable.

Variable	Item Code	$r_{critical}$	r_{Table}	Criteria
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<i>Perceived Usefulness</i>	PU1	0.751	0.088	Valid
	PU2	0.751	0.088	Valid
	PU3	0.767	0.088	Valid
	PU4	0.705	0.088	Valid
	PU5	0.715	0.088	Valid
	PU6	0.648	0.088	

Source: Data Processed, 2017

Table 4.4:- Validity Test Result for Perceived Ease of Use as the Variable.

Variable	Item Code	$r_{critical}$	r_{Table}	Criteria
<i>Perceived Ease of Use</i>	PEOU1	0.678	0.088	Valid
	PEOU2	0.649	0.088	Valid
	PEOU3	0.593	0.088	Valid
	PEOU4	0.710	0.088	Valid
	PEOU5	0.740	0.088	
	PEOU6	0.629	0.088	

Source: Data Processed, 2017

Table 4.5:- Validity Test Result for Perceived Credibility as the Variable.

Variable	Item Code	$r_{critical}$	r_{Table}	Criteria
<i>Perceived Credibility</i>	PC1	0.624	0.088	Valid
	PC2	0.620	0.088	Valid
	PC3	0.674	0.088	Valid
	PC4	0.683	0.088	Valid

Source: Data Processed, 2017

Table 4.6:- Validity Test Result for Compatibility as the Variable.

Variable	Item Code	$r_{critical}$	r_{Table}	Criteria
<i>Compatibility</i>	COM1	0.787	0.088	Valid
	COM2	0.797	0.088	Valid
	COM3	0.745	0.088	Valid
	COM4	0.597	0.088	Valid

Source: Data Processed, 2017

Table 4.7:- Validity Test Result for Personal Innovativeness as the Variable.

Variable	Item Code	$r_{critical}$	r_{Table}	Criteria
<i>Personal Innovativeness</i>	PI1	0.584	0.088	Valid
	PI2	0.726	0.088	Valid
	PI3	0.603	0.088	Valid

Source: Data Processed, 2017

Table 4.8:- Validity Test Result for Social Influence as the Variable.

Variable	Item Code	$r_{critical}$	r_{Table}	Criteria
<i>Social Influence</i>	SI1	0.756	0.088	Valid
	SI2	0.764	0.088	Valid
	SI3	0.738	0.088	Valid
	SI4	0.691	0.088	Valid

Source: Data Processed, 2017

Table 4.9:- Validity Test Result for Behavior Intention as the Variable.

Variable	Item Code	$r_{critical}$	r_{Table}	Criteria
<i>Behavioral Intention</i>	BI1	0.652	0.088	Valid
	BI2	0.648	0.088	Valid
	BI3	0.525	0.088	Valid

	BI4	0.524	0.088	Valid
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Source: Data Processed, 2017

Table 4.10:-Validity Test Result for Actual Usage as the Variable.

Variable	Item Code	$r_{critical}$	r_{Table}	Criteria
<i>Actual Usage</i>	AU1	0.660	0.088	Valid
	AU2	0.780	0.088	Valid
	AU3	0.699	0.088	Valid

Source: Data Processed, 2017

Reliability Test:-

The Reliability Test Result in this study can be seen as follows.

Table 4.11:-Reliability Test Results of Perceived Usefulness as the Variable.

Cronbach's Alpha Based on Standardized Items	N of Items
0.897	6

Source: Data processed, 2017

Table 4.12:-Reliability Test Results of Perceived Ease of Use as the Variable.

Cronbach's Alpha Based on Standardized Items	N of Items
0.869	6

Source: Data processed, 2017

Table 4.13:-Reliability Test Results of Perceived Credibility as the Variable.

Cronbach's Alpha Based on Standardized Items	N of Items
0.825	4

Source: Data processed, 2017

Table 4.14:-Reliability Test Results of Compatibility as the Variable.

Cronbach's Alpha Based on Standardized Items	N of Items
0.875	4

Source: Data processed, 2017

Table 4.15:-Reliability Test Results of Personal Innovativeness as the Variable.

Cronbach's Alpha Based on Standardized Items	N of Items
0.793	3

Source: Data processed, 2017

Table 5.33:-Reliability Test Results of Social Influence as the Variable.

Cronbach's Alpha Based on Standardized Items	N of Items
0.878	4

Source: Data processed, 2017

Table 5.34:-Reliability Test Results of Behavioral Intention as the Variable.

Cronbach's Alpha Based on Standardized Items	N of Items
0.783	4

Source: Data processed, 2017

Table 5.34:-Reliability Test Results of Actual Usage as the Variable.

Cronbach's Alpha Based on Standardized Items	N of Items
0.845	3

Source: Data processed, 2017

Based on the reliability test results, it is known that all variables have Cronbach's Alpha value greater than 0.60 that is equal to 0.897 on perceived usefulness; 0.869 for perceived ease of use; 0.825 for perceived credibility; 0.875 for

compatibility; 0.793 for personal innovativeness; 0.878 for social influence; 0.783 for behavioral intention; and 0.845 for actual usage. So it can be concluded that the overall variables in this study are reliable.

Discussion:-

In an effort to find the variables that affect the actual usage of internet banking users in Indonesia, it is necessary to conduct an in-depth search through qualitative study with interview method. Searches conducted from May 2017 to June 2017 in East Java.

From Table 1.1 it can be seen that the research model is supported from the interview results. It can be seen that all customers who use internet banking reflect actual usage and this is also supported by behavioral intention. Furthermore, it can be seen that the majority factor, which is the reason for using internet banking, is perceived usefulness (based on 16 participants) and then for perceived ease of use, perceived credibility and social influence based on 11 participants for each. And for the next sequence is personal innovativeness and compatibility is based on 9 and 8 participants respectively.

The results obtained from this qualitative method do strengthen the proposed research model in this study. The purpose is to explain the research objectives of the variables that affect the formation of actual usage of internet banking. The formulation of the problem written is that there is influence perceived usefulness, perceived ease of use, perceived credibility, social influence, personal innovativeness, and compatibility towards actual usage through behavioral intention.

Conclusion, Limitation and Research Extention:-

Conclusion:-

The respondents' responses to each statements on perceived usefulness as the variables were measured by the following statements, the use of information system products from the service provider make shopping experience more enjoyable, increases the effectiveness of performing any activities everytime, improves the effectiveness in performing any activities anywhere, very useful in everyday life, provide facilities to compare products offered, and provides access to useful information for shopping, where each of these indicators have an average mean of 3.83 which means the statements were perceived as agreed by the respondents of internet banking users.

In addition, the indicator of perceived usefulness is also valid in measuring the perceived usefulness variable with the value of r critical is greater than the r_{table} where r_{table} is 0.088. With a reliability value of 0.897, which is greater than 0.60, then it can be concluded that the perceived usefulness variable is reliable in affecting behavioral intention.

The respondents' responses to each statements on perceived ease of use as the variables were measured by the following statements, Information regarding the information system product from the service provider is easy to obtain, easy to be used, does not take a long time to shop, easy to understand, easy to operate the site, becoming capable is easy. These indicators has an average mean of 3.74 which means the statements were perceived as agreed by respondents of internet banking users. In addition, the indicators of perceived ease of use is also declared valid in measuring perceived ease of use variable with value of r critical is bigger than r_{table} where r_{table} is 0.088. With a reliability value of 0.869 which is greater than 0.60 then it can be concluded that the perceived ease of use variable is reliable in influencing behavioral intention.

The respondents' responses to each statements on perceived credibility as the variables were measured by the following statements, user information are kept confidential, transactions are guaranteed, privacy will not be leaked, and believe in the security of the banking environment. These indicators has an average mean of 3.75 which means perceived to be agreed by respondents from internet banking users. In addition, the indicators of perceived credibility is also declared valid in measuring perceived credibility variable with value of r critical is bigger than r_{table} where r_{table} equal to 0.088. With a reliability value of 0.825, which is greater than 0.60, then it can be concluded that the perceived credibility variable is reliable in affecting behavioral intention.

The respondents' responses to each statements on compatibility as the variables were measured by the following statements, the product is in accordance with lifestyle, in all aspects of daily activities, in user personality in the current activity, and the hardware (smartphone, etc.). These indicators has average mean of 3.48 which means the

statements were perceived as agreed by the respondents of internet banking users. In addition, the indicators of credibility also declared valid in measuring perceived credibility variable with value of r critical is bigger than r_{table} where r_{table} equal to 0.088. With a reliability value of 0.875, which is greater than 0.60, then it can be concluded that the perceived credibility variable is reliable in affecting behavioral intention.

The respondents' responses to each statements on personal innovativeness as the variables were measured by the following statements, being the first to explore new IT, experimenting, and looking for ways to experiment, where each of these indicators has an average mean of 3.58 which means these statements were perceived as agreed by the respondents from internet banking users. In addition. The indicators of personal innovativeness is also declared valid in measuring personal innovativeness variable with value r critical is greater than r_{table} where r_{table} is 0.088. With the reliability value of 0.793, which is greater than 0.60, then it can be concluded that the personal innovativeness variable is reliable in influencing behavioral intention.

The respondents' responses to each statements on Social Influence as the variables were measured by the following statements important people and close friends do affect behavior and most people around will influence users to use mobile banking, where each of these indicators has an average mean of 3.82. This means the statement were perceived as agreed by the respondents of internet banking users. In addition, the indicators of social influence is also declared valid in measuring social influence variable with value r critical is bigger than r_{table} where r_{table} is 0.088. With a reliability value of 0.878 greater than 0.60, then it can be concluded that the social influence variable is reliable in affecting behavioral intention.

The respondents' responses to each statements on Behavioral Intention as the variables were measured by the following statements, wanting to know about detailed information about the feature, want to increase usage, want to use internet banking services and want to know the services in internet banking, where each of these indicators have average mean of 3.60 which means the statements were perceived as agreed by the respondents of internet banking users. In addition, the indicators behavioral intention are also declared valid in measuring behavioral intention variable with value of r critical is bigger than r_{table} where r_{table} equal to 0.088. With the reliability value of 0.783, which is greater than 0.60, then it can be concluded that behavioral intention variable is reliable in affecting actual usage.

The respondents' responses to each statements on Actual Usage as the variable were measured by the following statements, prefer internet banking services, more often using and conduct most of transactions using internet banking, which each of these statements has an average mean of 3.49, which means the statements were perceived as agreed by the respondents of internet banking.

In addition, the indicators of actual usage were also declared valid in measuring actual usage as a variable, proven by the value of r critical is bigger than r_{table} where r_{table} equal to 0.088. With a reliability value of 0.845 greater than 0.60, it can be concluded that the actual usage variable is reliable to be used in this study.

References:-

1. Agarwal, R. and Prasad, J. (1998). A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information Systems Research Vol. 9 No.2*, 204–215.
2. Aggelis, V., 2005. The bible of e-banking. New technologies Publications, Athens
3. Ajzen, I. and Fishbein, M. "Understanding Attitudes and Predicting Social Behavior". Englewood Cliffs, NJ: Prentice-Hall. 1980.
4. Anderson, C., Glassman, M., McAfee, R., Pinelli, T. An investigation of factors affecting how engineers and scientists seek information. *Journal of Engineering and Technologi Management (JET-M)* 18 (2), 131-155. 2001.
5. Blackwell, R. D., Miniard, P. W., and Engel, J. F. (2006). *Consumer Behavior 10th Edition*. Mason: Thomson South-Western.
6. Chong, A. Y.-L., Ooi, K.-B., Lin, B., and Tan, B.-I. (2010). Online banking adoption: an empirical analysis. *International Journal of Bank Marketing Vol. 28 No. 4* , 267-287.
7. Dabholkar, P., A., Bobbitt, L., Lee, E., -J., 2003. Understanding consumer motivation and behavior related to self-scanning in retailing. Implications for strategy and research on technology-based self-service. *International Journal of Service Industry Management*, 14, 1, 59-95

8. Davis, F. D. (1989). Perceived Usefulness, Perceived Ease Of Use, And User Acceptance of Information Technology. *MIS Quarterly Vol. 13 No.3* , 319-340.
9. Davis, F., D., Bagozzi, R., P., Warshaw, P., R., 1989. User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35, 8, 982-1003
10. Devaraj, S., Kohli, R. Performance impacts of information technology: is actual usage the missing links. *Management Science* 49 (3), 273–289. 2003.
11. Epper, K., Kutler, J., 1995. Dinosaur remark by Gates sets off technology alarms. *The American Banker*, January 4, 16
12. Ganesan, S. “Determinants of long-term orientation in buyer-seller relationships”; *Journal of Marketing*, 58 (2), 1-19. 1994.
13. Ghozali, I. (2004). *Model Persamaan Struktural: Konsep and Aplikasi dengan Program AMOS Ver.5.0*. Semarang: Baand Penerbit Universitas Diponegoro.
14. Grandy, T., 1995. Banking in E-Space. *The Banker*, 145, December, pp74-75
15. Guriting, P., and Ndubisi, N. O. (2006). Borneo online banking: evaluating customer perceptions and behavioural intention. *Management Research News Vol. 29 No. 1/2* , 6-15.
16. Hair, J. R., William, C. B., & Barry, J. B. (2006). *Multivariate Data Analysis 6th Edition*. Amerika: Pearson Pentice Hall.
17. Hernandez, J. M., and Mazzon, J. A. (2007). Adoption of internet banking: proposition and implementation of an integrated methodology approach. *International Journal of Bank Marketing Vol. 25 No. 2* , 72-88.
18. Hoyer, W. D., and MacInnis, D. (2007). *Consumer Behavior Fourth Edition*. Boston: Houghton Mifflin.
19. Igbaria, M., Tan, M. The consequences of information technology acceptance on subsequent individual performance. *Information & Management* 32, 113–121. 1997.
20. Jang, S., Liu, Y., and Namkung, Y. (2011). Effects of authentic atmospherics in ethnic restaurants: investigating Chinese restaurants. *International Journal of Contemporary Hospitality Management Vol. 23 No. 5* , 662-680.
21. Jani, D., and Han, H. (2011). Investigating the key factors affecting behavioral intentions Evidence from a full-service restaurant setting. *International Journal of Contemporary Hospitality Management Vol. 23 No. 7* , 1000-1018.
22. Jayasingh, S., and Eze, U. C. (2009). An Empirical Analysis of Consumer Behavioral Intention Toward Mobile Coupons in Malaysia. *International Journal of Business and Information Vol.4 No.2* , 221-242.
23. Kleijnen, Mirella, Martin Wetzels, and Ko de Ruyter. (2004). Consumer acceptance of wireless finance. *Journal of Financial Services Marketing*, Vol 8(3), 206-217.
24. Koenig-Lewis, N., Palmer, A., and Moll, A. (2010). Predicting young consumers’ take up of mobile banking services. *International Journal of Bank Marketing Vol. 28 No. 5* , 410-432.
25. Kolodinsky, J., M., Hogart, J., M., Hilgert, M., A., 2004. The adoption of electronic banking technologies by US consumers. *The International Journal Of Bank Marketing*, 22, 4, 238-259
26. Kuo, Y.-F., and Yen, S.-N. (2009). Towards an understanding of the behavioral intention to use 3G mobile value-added services. *Computers in Human Behavior* 25 , 103–110.
27. Lai, W.-T., and Chen, C.-F. (2011). Behavioral intentions of public transit passengers—The roles of service quality, perceived value, satisfaction and involvement. *Transport Policy* 18 , 318–325.
28. Lin, H.-F. (2007). Predicting consumer intentions to shop online: An empirical test of competing theories. *Electronic Commerce Research and Applications* 6 , 433–442.
29. Lu, J., Liu, C., Yu, C., and Wang, K. (2008). Determinants of accepting wireless mobile data services in China. *Information and Management Vol.45 No.1*, 52–64.
30. Lu, J., Yao, J. E., and Yu, C.-S. (2005). Personal innovativeness, social influences and adoption of wireless Internet services via mobile technology. *Journal of Strategic Information Systems* 14 , 245–268.
31. Lu, J., Yu, C. S., Liu, C. and Yao, J. E. “Technology acceptance model for wireless Internet”; *Internet Research*, 13(3), 206–222. 2003.
32. Lu, Y., Zhou, T., and Wang, B. (2009). Exploring Chinese users’ acceptance of instant messaging using the theory of planned behavior, the technology acceptance model, and the flow theory. *Computers in Human Behavior* 25 , 29–39.
33. Luarn, P., and Lin, H.-H. (2005). Toward an understanding of the behavioral intention to use mobile banking. *Computers in Human Behavior* 21 , 873–891.
34. Lymperopoulos, C., 1994. *Strategic bank marketing*. Interbooks Publications, Athens
35. Molinari, L., and Blaber, S. (2002). Customer Service and its Effects on Customer Retention and Defection. *Midwest Academy of Management 2002 Proceedings Annual Conference “Outpacing the Competition: How do*

- Speed, Sustainability, Technology, and Teamwork Lead to the Winner's Circle?*"(p. ...). Indianapolis: University of Southern Indiana.
36. Moon, J.-W., and Kim, Y.-G. (2001). Extending the TAM for a World-Wide-Web context. *Information and Management* 38 , 217-230.
 37. Moore, G. C., and Benbasat, I. (1991). Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation. *Information Research Vol.2 No.3* , 192-222.
 38. Namkung, Y. and Jang, S.C. (2007). Does Food Quality Really Matter in Restaurant? Its Impact on Customer Satisfaction and Behavioral Intentions. *Journal of Hospitality and Tourism Research* Vol. 46, 279.
 39. Ndubisi, N. O., and Jantan, M. (2003). Evaluating IS usage in Malaysian small and medium-sized firms using the technology acceptance model. *Logistics Information Management Vol. 16* , 440-450.
 40. Pollard, C. Exploring continued and discontinued use of IT: a case study of OptionFinder, a group support system. *Group Decision and Negotiation* 12 (3), 171–193. 2003.
 41. Premkumar, G. and Bhattacharjee, Anol. (2008). Explaining information technology usage:A test of competing models. *Omega* 36, 64 – 75.
 42. Puschel, J., Mazzon, J. A., and Hernandez, J. M. (2010). Mobile banking: proposition of an integrated adoption intention framework. *International Journal of Bank Marketing Vol. 28 No. 5* , 389-409.
 43. Sadiq-Sohail, M., Shanmugham, B., 2003. E-banking and customer preferences in Malaysia: an empirical investigation. *Information Sciences*, 150, ¾, 207-217
 44. Sambasivan, M., and et.al. (2010). User acceptance of a G2B system:a case of electronic procurement system in Malaysia. *Internet Research Vol. 20 No. 2* , 169-187.
 45. Santoso, S. (2000). *Buku Latihan SPSS Statistik Parametrik*. PT Elex Media Komputindo.
 46. Schierz, P. G., Schilke, O., and Wirtz, B. W. (2010). Understanding consumer acceptance of mobile payment services: An empirical analysis. *Electronic Commerce Research and Applications* 9 , 209–216.
 47. Schiffman, L. G., and Kanuk, L. L. (2007). *Consumer Behavior 9th Edition* . New Jersey: Pearson Prentice Hall.
 48. Serenko, A. (2008). A model of user adoption of interface agents for email notification. *Interacting with Computers* 20 , 461–472.
 49. Shih, Y., -Y., Fang, K., 2006. Effects of network quality attributes on customer adoption intentions of internet banking. *Total Quality Management*, 17, 1,61-77
 50. Shin, D.-H. (2009). Towards an understanding of the consumer acceptance of mobile wallet. *Computers in Human Behavior* 25 , 1343–1354.
 51. Taylor, S., Todd, P. Understanding information technologi usage: a test of competing model. *Information System Research* 6 (2), 144-176. 1995.
 52. Thompson, R.L., C. Higgins and J. M. Howell. (1991). Personal Computing: Towards a Conceptual Model of Utilization. *MIS Quarterly*, Vol. 15(1), 125-143
 53. Turner, M., Kitchenham, B., Brereton, P., Charters, S., and Budgen, D. (2010). Does the technology acceptance model predict actual use? A systematic literature review. *Information and Software Technology* 52 , 463–479.
 54. Venkatesh, V., Morris, M., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly Vol. 3*, 425–478.
 55. Wang, Y., Lo, H. P., & Hui, Y. V. (2003). The Antecedents of Service Quality and Product Quality and Their Influences on Bank Reputation: Evidence From The Banking Industry in China. *Managing Service Quality* , 72-83.
 56. Yang, K. C. C. (2005). Exploring factors affecting the adoption of mobile commerce in Singapore. *Telematics and Informatics*, Vol. 22(3), 257–277.
 57. Zeithmal, V. A., Bitner, M. J., and Gremler, D. D. (2009). *Service Marketing Integrating Customer Focus Across the Firm Fifth Edition*. New York : McGraw-Hill.
 58. <http://sp2010.bps.go.id/>
 59. <http://tonnymarezcو.wordpress.com/2014/04/17/sejarah-internet-banking/>
 60. www.bi.go.id
 61. www.internetworldstats.com/stats3.