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Snapshot on Indonesia Regulation in Mobile Internet Banking Users Attitudes

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Abstract

Abstract. Today, there are an increasing number of people using mobile internet banking to make transactions due to their busy life. The mobile technology enable people to make transactions anytime and anywhere. This phenomena encorage banking industry to provide this service. However, in a developing country like Indonesia, there are very limited regulations governing internet transaction. Consumer knowledge on such regulation and fraud claim procedure will affect their attitude toward mobile internet banking. The purpose of this research is to investigate how the consumer perceptions toward regulation, perceived benefit, and perceived risk influence the consumer attitude toward mobile internet banking. The finding of this research will provide insights for the banking industry and enable them to devise a marketing strategy to encourage their customers to adopt mobile internet banking.

Key words: Regulation, Indonesia; mobile internet banking; perception, attitude.

1. Introduction

Today, busy lifestyles reduce people ability to go to banks to make any transactions. The increasing number of people who need to make transaction regardless time and space encourage banks to provide an electronic service to meet this need, which cannot be fulfilled with the establishment of a branch or Automated Teller Machine (ATM) point. Coupled with the fact that the cost of establishing an electronic banking service is relatively lower than establishing a branch office or an ATM point, more banks are now offering mobile internet banking services.

Mobile internet banking (M-banking) is an application of information technology which integrates hardware, software, and human (brain ware), and is designed to turn data into useful information. A successful implementation of the use of mobile banking services to improve productivity, service quality, and competitiveness. Mobile internet transaction have huge dependency on technology, nevertheless banks must also consider the human aspect of the technology. When new technologies are implemented and the business processes change,

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the consumers are more likely to react to the changes. Their reaction is often unpredictable. Consumer acceptance of the technology will impact the satisfaction and the success of M-banking system.

M-banking system is equipped with an automatic maximum protection preprogrammed since registration. In addition to using a self-selected PIN and listed phone number, every transaction will be encrypted (scrambled) to ensure the security of transactions for every customer. It means that M-banking service is relatively safe because of the layered security systems. However, there are still some risks in M-banking. The safety of an account is in jeopardy when someone steals the hand phone or hacks the account through the internet. Furthermore, there is no sufficient government regulation which able to protect customers' saving account from unauthorized transactions.

Rapid technological development requires legal arrangements concerning to the use of these technologies. Unfortunately, until now, many countries do not have specific legislation in the field of information technology (IT), both in terms of crime and support from government officer to protect the user. Indonesia as a developing country has a limited regulation on IT. A government body in the minister level which handle of information and communication established a law on IT in 2008. Research shows that consumer perception of the law and regulation governing the use of IT in transaction will increase the perceive benefit of the technology (Al Ghamdi, Drew, &Alhussain, 2012). However, to date, there are no research to our knowledge which investigates the perception toward law and regulation on internet and communication technology in Indonesia. The purpose of this research is to investigate the relationship between consumer perceptions toward regulation, perceived benefit, perceived risk and consumer attitude toward M-banking.

2. Theoretical Background

2.1 Regulation and Law

Government protection in terms of law and regulation in internet transaction affect consumers' attitude toward internet transaction because it will increase the perceive benefit and trust of such technology (Al Ghambdi et al, 2012). Gonzalez (2004) conducted a research on eBay in the United States found that consumers would be reluctant to make transaction if they do not get protection from the government. It means that regulation influence perceived risk and attitudes towards regulation.

In Singapore, The Electronic Transactions Act (ETA) has been around since July 10, 1998. The purpose of the act is to create a legal framework concerning the legislation for the Singapore electronic commerce transactions. The detailed purposes of ETA are to:

- Facilitate electronic communications by means of reliable electronic records.
- Facilitate electronic commerce, electronic trade barriers that eliminate unauthorized over writing and signature requirements, and to promote the development of law and business infrastructure necessary to implement the guarantee/secure electronic commerce.
- Facilitate the electronic storage of government documents and the company.
- Minimize the generation of electronic records unintentional and deliberate changes on the archives, and fraud in electronic commerce.
- Help towards uniformity of rules and regulations and the validation and integrity of electronic records.
- Promote trust, integrity and reliability of electronic records and commerce, and to foster and development of electronic commerce through the use of electronic

signatures to ensure the authenticity and integrity of correspondence using electronic media.

In Indonesia, the law regarding the use of IT is arranged in ITE (*InformasidanTeknologiElektronik*/Electronic Information and Technology) Law, Law no. 11 of 2008. The law jurisdiction cover legal acts take place in Indonesia and/or performed by a citizen of Indonesia, legal actions committed outside the Indonesia jurisdiction either by Indonesian citizens or foreign citizens or Indonesian legal entities and foreign legal entities that have legal effect in Indonesia, given the use of IT for information and electronic transactions are not restricted to territorial boundaries. The ITE law covers:

- Illegal content, consisting of, among others: obscenity, gambling, defamation / libel, threats and extortion (Article 27, Article 28 and Article 29 of UU ITE)
- Illegal access (Article 30);
- Illegal interception (Article 31);
- Disruption to the data (data interference, Article 32 UU ITE)
- Disruption to the system (system interference, Article 33 of UU ITE),
- Misuse of tools and equipment (misuse of devices, Article 34 of UU ITE);

Breaching the Act in Indonesia can result in six to eight years imprisonment and a fine. If the law is enforced, consumers may have a favorable perception toward the law. A good reputation of regulation from consumer perspective will encourage user's trust in using that technology (Gonzales 2004).

2.2 Attitudes

Attitude in Technology Acceptance Model is conceptualized as attitudes toward the use of systems, the form of acceptance or rejection as its result when someone uses technology in his work (Solomon, 2008).

According to Tricomponent Attitude Model (Schiffman & Kanuk, 2010; Engel, Backwell, & Miriad, 2009), attitude consists of three components: cognitive, affective, and conative. Cognitive is often referred to the knowledge and confidence of consumers. Affective describes the emotions and feelings of consumers (Schiffman and Kanuk, 2010) called it as primarily evaluative in nature, which shows direct and general assessment of a product, whether the product is liked or disliked, or whether the product is good or bad. Conative tendencies indicate a person's actions or behavior towards an object (Engel, et al, 2009) and are often referred to the intention.

There is a relationship between consumer attitudes with perceived risk and internet adoption (Rogers, 2008). Perceived risk, perceived benefit had significant effect to use intention, a conative component of attitude, in online payment (He & Mykytyn, 2007). Level of use of a technology can be seen from the user's attitude toward technology as a motivation to continue to use and the desire to motivate other users.

2.3 User perception

User is a very important factor to be considered in the implementation of system, because the level of readiness of users to accept the new system has great influence in determining the success of the system. In this section we will discuss about the perceived benefit and perceived risk.

Perceived benefit is defined as the degree to which the user believes that using the technology/system will improve the performance of their work. Nor, Sutanonpaiboon, and Mastor (2010) defined usefulness perception as a construct of one's belief that the use of a particular technology will be able to improve their performance. It is related to the perception of usefulness productivity and effectiveness of the system in the task of overall usability to

improve the performance of people who use the system. Clearprocedures of law and regulation are connected tobeperceivedbenefits factorsthatalso ensurecustomer attitudes and the non-existenceofane- commercelawall contributetothedistrust andconsumerattitudes (Al Ghambdi et al, 2012)

Perceived risk is defined as a subjective estimate of the consumer to suffer losses in receiving the desired results (Ozkan, Bindusara, & Hacney, 2010). If the risk is increased from just information until the decision of product purchasing (transaction), the action taken by the bank to reduce the risk of internet banking use can influence the perceived risk. The actions taken by the bank to reduce risk are expected to have a positive impact on consumer interest on the offered technology.

3. Methodology

The study was conducted through the combination of qualitative and quantitative approaches. For preliminary research this research used unstructured interview with some experts in mobile banking. For quantitative approach, we used questionnaire. The population in this research is people who live in Bandung and Jakarta with age range 21-55 and are using M-banking services. The sample size for this research is 529 respondents. The sampling technique which used in this study was non probability sampling, because we employed convenience sampling. The questionnaire was originally made in English. Since the questionnaire was distributed in Indonesia, the questionnaire was translated into Indonesian. The questions in the survey were rated using Likert scale. Likert scale requires respondents to indicate a degree of agreement or disagreement in every each statement in questionnaires using a five-point format where 1 = strongly disagree to 5 = strongly agree.

3.1 Data analysis

Descriptive statistic was used to analyze respondent profile. Explanatory factor analysis was employed to validate the construct. The last stage for data processing was regression analysis using SPSS 20 program. We used regression analysis to examine and investigate the relationships between all variables that are proposed in this study.

4. Results

4.1 Qualitative Approach

To investigate the regulation and consumer protection in Indonesia, 10 interviews were conducted with experts who understand about mobile banking. From the expert interviews (nonbank officer), the first problem found was the remedy for the loss of material (such as the loss of some money in the bank account) suffered M-banking users internet banking mechanism. The material loss can be caused by the fault of M-banking users, the fault of the banks, or the fault of a third party. Second concern is about who is responsible (in civil cases) against loss material.

Based on the interviews, if the material losses suffered is caused by the mechanism of internet banking, the M-banking users can file a claim or demand accountability from the bank or a third party, based on the provisions of the Civil Code, the Banking Act No. 10 of 1998, Consumer Protection Act No. 8 of 1999, and the Telecommunications Act No. 36 of 1999.

According to bank officer expert, if the material losses suffered by M-banking users are caused by the fault of users -due to their lack of proficiency- they cannot file a lawsuit against the bank. Conversely, if it is found that the material losses suffered by bank mobile

internet banking users caused by the fault of the bank, then the bank must meet the demands of M-banking users and are responsible for providing compensation in accordance with the losses that have been suffered by M-banking users.

However, from our observations we found that the problem appears in the claiming and protection procedure. The existing law does not explain about the procedure for claiming. In every bank we observed did not have any information about the protection in their M-banking brochure. Only several middle bank officers that we interviewed understand about the regulation and protection procedure. According to them, the victim must have letter from the police department before making any claim. This procedure usually takes time. Based on these findings, we can conclude that the existing conditions cannot provide sufficient protection to M-banking user. Furthermore, should this case appear, there usually problems in the verification of electronic evidence and incompetent of legal officer.

4.2 Quantitative Approach

For the quantitative approach, we will describe the respondent profile, the reliability test, the validity test, and the results from the regression analysis.

4.2.1 Respondent profile

Five hundred twenty nine respondents, mobile banking users, participated in this research. The majority of the respondents are female, 270 people, or 51.04%, while the rest are male respondents, 259 people or 48.96%. Ages majority of respondents who are between "21-30" is 248 people or 46.88% while the least number is of respondents who are ">50" of which the total number is 16 people or 3.02%. The majority is of respondents whose occupation is "private Sector Employee", of which the total number is 248 people or 53.69%, while the least number of respondent is of "student/ College student" of which the total number is 29 people or 5.48%. The majority is of respondents accomplishing the banking transaction in a week for "1 time", of which the total is 216 people or 40.,83% while the least number is of respondent accomplishing banking transaction in a week for ">6 times" of which the total is 34 people or 6.43%.

4.2.2 Reliability Test

Reliability test was analyzed by using *alpha cronbach*. From the analysis we found that the alpha cronbach for each variable being studied was higher than 0,60. Thus we can conclude that all of variables are reliable.

4.2.3 Validity Test

To test the validity of the variables in this research, we conducted exploratory factor analysis. The results of the analysis are shown in Table 1.

Table 1. Explanatory Factor Analysis

Variable	KMO	Total Variance Extracted (%)	Created Factor
Perceived Benefit	0.820	66.86	1
Perceived Risk	0.707	76.28	1
Attitudes	0.728	77.55	1
Regulation	0.696	75.282	1

Based on the results in Table 1, the KMO value of each variable is higher than 0.5. It means that those variables are valid and can be used for further analysis.

The results from the subsequent analyses are presented in four sections, namely user perception toward regulation, the impact of regulation on perceived risk, the impact of regulation on perceived benefit, and the impact of regulation on attitudes.

4.2.4 User perception toward law and regulation

The M-banking user perceptions toward law and regulation are presented in Table 2.

Table 2 Regulation Variable

Statement	Scale					
	1	2	3	4	5	Total
I believe that the government regulation and law about electronic transaction will prevent fraud	13	77	198	172	69	529
	2.5%	14.6%	37.4%	32.5%	13.0%	100%
I believe using the law of electronic transaction will help me in reporting those who did fraud	10	53	207	195	64	529
	1.9%	10.0%	39.1%	36.9%	12.1%	100%
I believe that government, banks, and law enforcer will help me if there is a fraud in banking transaction	12	60	202	186	69	529
	2.3%	11.3%	38.2%	35.2%	13.0%	100%

The finding from Table 2 shows that 47.56% consumers believe the regulation will protect them from fraud. This fact implies that more than half of consumers do not believe the regulation in Indonesia will protect them from fraud. M-banking user in Indonesia still has low perception of the regulation and government act that will help them if unexpected things happen. In addition, the results from the qualitative analysis show that the regulations in claiming and protection procedures were not well distributed to the M-banking users. The lack of knowledge on the claiming and protection procedures may cause M-banking user to perceive that the law and regulation cannot fully protect them.

The relationships between variable can be seen in Table 3 and Figure 1.

Table 3 Path Analysis

Intervening Variable (X)	Independent Variable (X)	Dependent Variable (Y)	Indirect Variable				Total Indirect	Direct Variable (Y – Z)	Sig.	Total Effect
			Y-X	Sig.	X-Z	Sig.				
Perceived Risk	Regulation	Attitudes	0.223	0.000	0.276	0.000	0.062	0.448	0.000	0.510
Perceived Benefit	Regulation	Attitudes	0.415	0.000	0.712	0.000	0.295	0.448	0.000	0.743

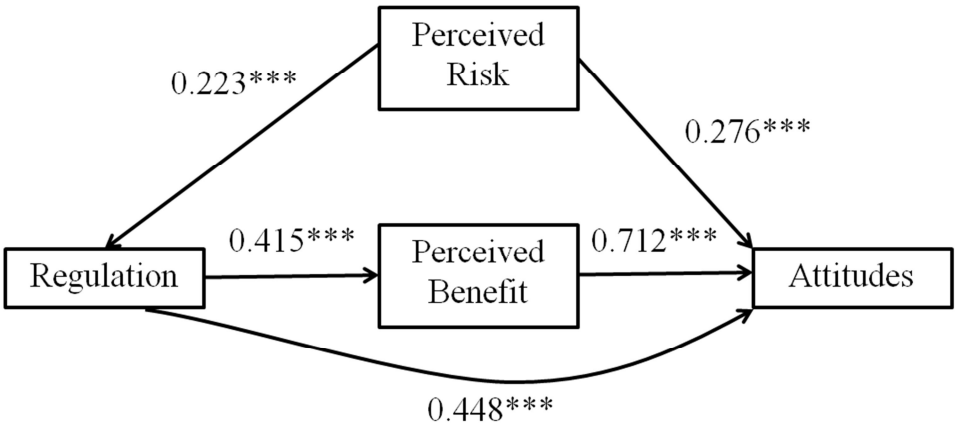

Figure 1 Path Analysis

4.2.5The impact of regulation on perceived risk

The output of SPSS above shows the impact of Regulation on perceived risk is 22.3 %.

4.2.6The impact of regulation on perceived benefits

The SPSS output in Table 3, we can see that the correlation coefficient between regulation and perceived benefits is 0.415. It suggests that there is a moderate relationship between regulation and perceived benefits. The impact of regulation on perceived benefits is 41.5%. It implies that consumer of M-banking will have a positive attitudes toward mobile banking if they have the knowledge and belief in the regulation.

4.2.7 The impact of regulation on attitudes

The output of SPSS in Table 3 shows that there is a significant correlation between regulation (X) and attitudes (Z) because the p-value (direct and indirect) is lower than α (0,05) with the total direct impact is 44.8%. This suggests that there is a moderate relationship between regulation and attitudes.

5. Conclusion

The finding of this research shows that regulation is significantly influence perceived risk and benefits. This finding supported Gonzales (2004) findings. However, the results also showed that the regulation has larger impact to perceived benefits than perceived risk. This finding may imply that users assumed that the regulation can be the benefits in M-banking if the ITE regulation was well-managed well. From the qualitative approach we found that the existing law and regulation can protect the M-banking user but there is no socialization from the bank regarding this issue. The matter becomes more and more important when fraud occurs. Due to the limited knowledge on the law and regulation regarding fraud and claiming procedure in M-banking, consumers feel that there is no protection against fraud in M-banking. Based on these findings, banks should aim their marketing communications to increase the perceived benefit of M-banking. As the party with direct contact with the M-banking users, banks should inform consumers about the law and regulations, including claiming procedures, when fraud occurs.

5.1 Suggestion for the future researchers

There are several suggestions for future research. This research can be extended on the other bank services in order to obtain a comprehensive result about consumers' toward regulation which can serve as a reference for the development of banking industry. Subsequently, in the similar context of M-banking, this research can be extended to see the difference between user attitudes between M-banking users in different areas in Indonesia because there are several different rules and regulation between capital government and regional government.

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