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Influencing Factors on the Actual Usage of Mobile Phone Banking in the Shari'ah Banks: A Survey in Palembang City, Indonesia

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Abstract: This research was developed from a study conducted by Talukder, Quazi and Sathye in 2014 whom were tried to discover mobile phone banking usage behavior of banks customers in Canberra, Australia. A research model was set to find the relationship between independent and dependent variables. Independent variables consisted of five variables, namely, Perceived Usefulness (PU), Perceived Ease of Use (PEU), Trust (T), Social Influence (SI) and System Quality (SQ), whilst the dependent variable is Actual Usage (AU) of Mobile banking in the Shari'ah banks. Thus, making this research a multiple regression analysis. A survey was conducted by distributing questionnaires to gather primary data from 126 respondents of Shari'ah banks customers in Palembang City, South Sumatra Province, Indonesia. The findings show evidence that there are positive and significant relationship between all independent variables and the dependent variable. As such variable with the highest impact is PEU (30,3%) whilst the lowest is SI (18%) meaning that perceived ease of use amongst customers of Shari'ah banks in Palembang City gave the highest impact on their actual usage of mobile banking, compared to social influence, which is lower. Therefore, it is recommended that Shari'ah banks in this city should consider to put more attention in to providing their customers with a mobile banking application which is easy to use as well as keeping it up to date with the needs of the customers. As an implication to the providers, financial institutions can capitalize on the finding of this research to enhance the ease of use of their application on mobile banking.

Keywords: Shari'ah Banks, Mobile Phone Bamking, Perceived Ease of Use, Trust, Social Influence, Actual Usage.

Introduction

Mobile banking was launched for the first time in Indonesia by Excelkom at the end of 1995. The background of the launch of this banking service is that banks at that time were strived to gather trusts from their customers by using technology. Technology was used by banks to continuously improved the already existed service qualities. Mobile banking service is a chance to offer value-added as incentives to banks' customers.

Mobile banking is a service provided by banks which allows their customers to be able to do banking transactions using cellular phones by using downloaded applications. The benefit of using mobile banking is to maintain privacy between the banks and their customers, cost-effective and also time effective since customers do not have to go to the banks' offices or queuing up at the ATM machines.

According to the Rules of Indonesian Financial Services Authority (OJK) No. 19/POJK.03/2014, concerning Branchless Financial Service in the matter of Inclusive Finance, "mobile banking is a service to conduct banking transactions via cellular phones, as intended in the stipulation regarding banks' business activities based on core capital".

There are some features that enable customers to conduct via mobile banking, such as fund transfer, bill payments, etc. They can also use it to pay zakah, infaq and sadaqah. This leads to customers' convenience and they find it handy in using mobile banking to conduct their daily financial transactions.

Association of Indonesian Financial Planners (APERKEI), projected that there are very wide open opportunity for mobile banking users in Indonesia, considering internet users have reached 132,7 million and mobile connection users are 318 million. Data from WeAreSocial Asia 2015 mentioned that Indonesia has 318 million users of mobile connection or 125% of the total population. Whilst according to Bank Indonesia, as of May 2016, mobile banking users in four major banks in Indonesia, BCA, BNI, BRI and Mandiri (including Shari'ah commercial and subsidiary units) has only reached 23,65 million, indicating that mobile transaction users are still very low. The mobile transaction will bring many benefits to society, particularly in the matter of time and security. Time saved from mobile banking activities can be used to do other productive and profitable activities.

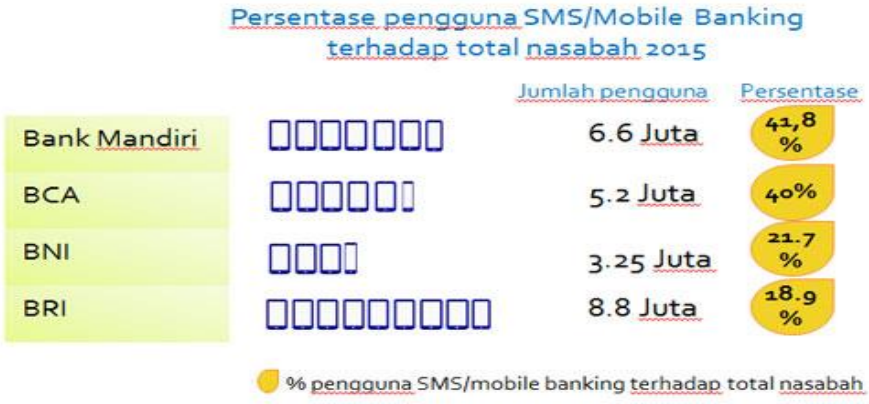
OJK recorded e-banking (sms banking, phone banking, mobile banking, and internet banking) users, has increased by 270% from 13,6 million in 2012 to 50,4 million in 2016. This figure grew along with the change in society's behavior and growing needs in using digital technology for their banking activities.

In the same vein, the transaction frequency of e-banking users also grown by 169% from 150,8 million transactions in 2012 to 405,4 million transactions in 2016 (OJK, 2017). Considering this phenomenon, OJK has called out to the banking industry whom has already implemented digital banking services to establish digital branch as soon as possible, in the form of offices or unit which specifically intended at providing and serve transaction with digital banking.

Technology in the financial sector (financial technology) is growing fast and is predicted to be rapidly developing in 2020. Limited access to banking services is one of the reasons why financial technology is intriguing for customers, specifically banks customers. Digitalization of banking service facilitates customers to conduct their transactions by using computers or cellular phones without having to go and queuing at the bank offices.

Figure 1. The Growth of Mobile Banking Users in Indonesia

Figure 2. Percentage of Mobile Banking Users to Total Customers



The figures above showed the growth percentage of mobile banking users in Indonesia from 50% in 2012, grew 58% in 2013, and 80% in 2014. This significant growth is a big opportunity which must be continuously well managed and observed so that it will continue to be used by prospective customers.

Figure 3. A Snapshot of the Country's Digital Statistical Indicators

To the end of 2017, the amount of internet banking users in Indonesia is still low, yet Bank Mandiri claimed that the growth of digital banking users is improving. Bank Mandiri reported 94% or 3.067 billion of transactions were electronically conducted by customers, without the assistance of tellers for the year of 2017. This fact is giving an opportunity to increase the penetration of electronic transaction in Indonesia. Another survey conducted by the Association of Indonesia Internet Service Provider (APJII) in 2017, reveals that only 7,39% internet users in Indonesia accessing digital banking service. Internet users in Indonesia mostly use chatting application (89,4%) and social media (87%).

This research is trying to conduct an empirical study in the field of Shari'ah bankings. The reason is we are trying to discover the behavior of Shari'ah banks' customers in adopting mobile banking services, specifically in Palembang City, South Sumatra Province, Indonesia, as the Shari'ah banks in this city is continue to grow over the past decade. One of the Shari'ah banks providing mobile banking facility in Indonesia is BCA Syariah. They called their service BCA Syariah Mobile, which giving their customers the ability to access all of their account portfolios including financing account (single relationship model), besides other features such as bill payment and insurance. This service launched in 2014, with 1.105 users and 3.176 transactions generating a total of 3,1 billion IDR. This amount grew 50% every year, and in 2017 were used by 8.790 users and recorded 43.189 transactions amounting more than 46 billion IDR. This amount is increasing 56,84% from 29,34 billion IDR in 2016. The transaction volume is also increased 52,53% from 28.315 to 43.189 transactions per day. Hence, there are still few researches concerning the behavior of customers in adopting mobile banking services provided by Shari'ah banking industry in Indonesia, in which we consider that such research is important and still needed to be conducted.

Literature Review and Development of Hypotheses

Advancements in technology over the years have led many individuals to use technology as a tool to get information and news, communicate, and purchase products or services online. Just like the internet, mobiles phones also could be used to buy goods and services from anywhere and at anytime. One of the new areas of service in the mobile technology is mobile banking. It represents a challenge for financial service providers to launch their own mobile banking

applications and also to retain their current customers and tap into this technology-driven service channel to acquire new technology savvy customers. There are factors that would enable banks to use this technology to influence their customers and to conduct banking transactions on mobile devices. The theoretical foundation of this research is based on the Technology Acceptance Model (TAM).

Technology Acceptance Model

The theory of Technology Acceptance Model (TAM) was proposed by Davis (1986) in adaptation of the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975). TAM is a theoretical model for explaining users' acceptance of information technology. According to the TRA, actual behavior of an individual is determined by his/her intention. Moreover, an individual's behavioral intention is influenced by his/her attitude and subject norm. The attitude is influenced by individual's beliefs and value system (Ajzen & Fishbein, 1980). Revised TAM identified perceived usefulness and perceived ease of use as core salient beliefs explaining users' intention to acceptance of information technology (Davis, Bagozzi & Warshaw, 1989). Perceived usefulness is defined as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989). Ease of use is defined as "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989). Moreover, perceived ease of use positively affect perceived usefulness because the easier IT is to be used, the more useful it will be. TAM is a well-tested model for measuring users' acceptance of IT (Lee, Lee & Kim, 2007; Lin, Fofanah & Liang, 2011; Park, Roman, Lee & Chung, 2009; Riffai, Grant & Edgarc, 2012; Sundarraj & Manochehri, 2011).

Beside the two determinants of TAM, trust is a key construct in e-commerce (Bhattacherjee, 2002; Pavlou, 2003) e-banking (Zhao & Koenig-Lewis, 2010; Mahdi, 2012), and mobile banking (Kim, Shin & Lee, 2009; Zhou, 2011, 2012) because transactions are conducted without interactions with bank's clerks (Gefen, Karahanna & Straub, 2003). Trust is defined as an individual belief that others will behave based on an individual's expectation. It is related to an individual's perceived security of the transactions conducted on the internet or on mobile devices. Some research have been conducted on internet banking, e-commerce and m-commerce, online shopping, the World-Wide Web, micro computers, ERP systems, E-mail usage, financial services, retail electronics, and personal computing (Gu, Lee & Suh, 2009).

The theoretical perspectives presented above lay the foundation for the development of research hypotheses for this research.

Development of Hypotheses

Hypotheses for this research are framed reflecting the following constructs that are supported by the relevant literature.

Perceived Usefulness

The construct concerning perceived usefulness refers to the degree to which an individual feels that his/her performance will improve as a result of using a particular system (Davis, 1989). Usefulness is also defined as the total value a user perceives from using an innovation (Kim, Chan, & Gupta, 2007). Prior research found that perceived usefulness is positivelyassociated with system usage (Al-Gahtani & King, 1999; Igbaria, 1993; Talukder, 2014).

Furthermore, perceived usefulness has been identified as one of the strongest predictors of usages of technological innovation (Agarwal & Prasad, 1998; Talukder, Harris & Mapunda, 2008; Venkatesh & Davis, 2000; Venkatesh, Morris, Davis, & Davis, 2003). Ozok and Wei, 2010 found 'usability' as an important driver of mobile commerce success in the market. Finally, when an individual perceives that an innovation offers a relative advantage over the firm's current practice, it is more likely to be adopted and implemented. Although research is limited on the

specific impact of perceived usefulness on mobile phone usage, exploration of the following hypothesis may produce useful information to resolve this particular issue. Therefore, we have proposed the following hypotheses:

H1: Perceived Usefulness has a positive and significant impact on actual usage of mobile phone banking

Perceived Ease of Use

Perceived ease of use is defined as the degree to which mobile banking is perceived as easy to understand and operate (Lin, 2011). Puschel *et al*. (2010) found that perceived ease of use (PEOU) influences attitude towards mobile banking and this influences adoption and behavioral intentions towards mobile banking besides continuing to use the service. Lin (2011) tested the PEOU and its influence on adoption and asserted that PEOU in fact has a significant effect on adoption or continuing to use mobile banking. The TAM consistently has shown that PEOU is antecedent to perceived usefulness. Davis (1989) defines ease of use as the degree to which users expect the target system to be free of effort. According to Karahanna, Agarwal and Angst (2006), ease of use represents the perceived cognitive burden induced by technology. It is an assessment of the mental effort involved when a new system is employed (Van der Heijden, 2004; Lee, Lee & Kwon, 2004). It is the extent to which an individual believes that using mobile phone banking would increase flexibility without too much effort. Ease of use would influence the intention and thus ultimately relate to the actual use of the technology (Schepers & Wetzels, 2007; Lee, Kim, Rhee & Trimi, 2006). Thus, the following hypothesis is proposed:

H2: Perceived Ease of Use has a positive and significant impact on actual usage of mobile phone banking.

Trust

Trust is defined as the user's relative confidence in the mobile banking service itself. By having trust, it means that the user perceives the service as trustworthy. Mobile banking adoption by users has received attention by researchers. Zhou (2011) constructed a model to test the effect of trust on flow experience and the actual usage of mobile banking. Eriksson, Kerem and Nilsson (2005) have found trust has a positive effect on both perceived ease of use and perceived usefulness. Chen and Chang (2012) found that perceived risk would negatively influence perceived trust and purchase intention.

Perceptions of trust are likely to be important factors in predicting acceptance of mobile phone banking. Research shows that privacy is the number one issue of concern facing the online business environment (Benassi, 1999). Trust can be described as the belief that the other party will behave in a socially responsible manner and by doing so, will fulfill the trusting party's expectations without taking advantage of its vulnerabilities (Gefen 2000). Trust has a positive influence on the development of positive attitude, intention and consequently the usage of a new system (Swan, Bowers & Richardson, 1999).

In this research, it is hypothesized that perceived trust would affect the actual usage of mobile phone banking.

H3: Trust has a positive and significant impact on actual usage of mobile phone banking

Social Influence

Social influence is the extent to which members of a social group influence one another person's adoption of an innovation (Konana & Balasubramanian, 2005; Venkatesh & Brown, 2001). It is perceived pressure and influence that peers feel when adopting an innovation andthis influence is exerted through messages and signals that help to form perceptions of thevalue of

innovation or activity (Fulk & Boyd, 1991). Ajzen and Fishbein (1980) refer to suchinfluences as normative beliefs about the appropriateness of adoption of innovation.

According to this perspective, consumers may adopt an innovation not because of its usefulness but because of perceived social pressure. Such pressure may be perceived as coming from individuals whose beliefs and opinions are important, including peers and people who are in social networks (Igbaria, Parasuraman, & Baroudi, 1996; Talukder, Quazi & Djatikusumo, 2013). According to Abrahamson and Rosenkopf (1997), it is a largelyinternal influence that potential adopters exert on each other that persuades them to adopttechnological innovation. Individuals very often are influenced by peers in the adoption of aninnovation. When peers embrace an innovation, this may signal its importance and certainadvantages which eventually motivate an individual to accept it. It has been suggested that social persuasion and communication from peers are factors that influence the acceptance of an innovation (Davis, Bagozzi, & Warshaw, 1989; Mirvis,Sales, & Hackett, 1991). Adoption of an innovation is also affected by the social environment.

Communication between members of a social network can enhance the degree of innovation adoption. The participation of individuals in an organization in informal networks facilitatesthe spread of information about the innovation, which consequently influences the probabilityof an adoption (Yi, Jackson, Park, & Probst, 2006; Talukder, Quazi & Keating, 2014). Nodirection has been postulated apriori for the following hypothesis because social influencemay have a positive or negative impact on the actual usageof mobile phone banking. Thehypothesis below is therefore developed:

H4: Social Influence has a positive and significant impact on actual usage of mobile phone banking

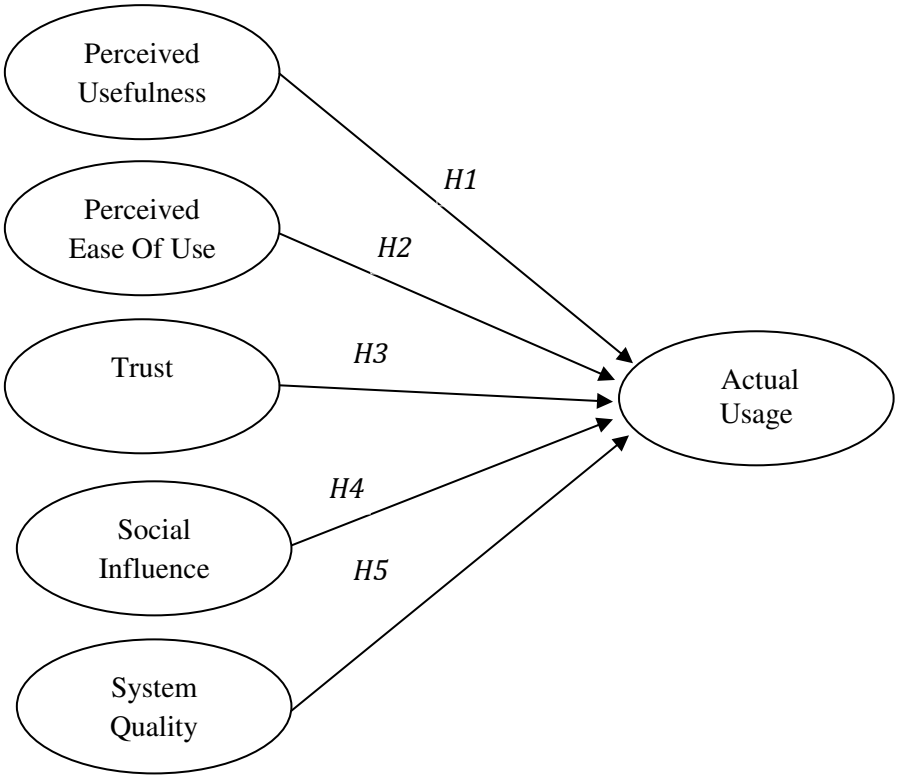
System Quality

System quality represents both the technical quality of the mobile system itself and the quality of the information being provided to customers. Technical quality is concerned withthe consistency of the user interface, system accessibility, ease of use, system reliability, dataaccuracy, response time and system flexibility (Lin, 2008; DeLone & McLean, 1992). Information quality is concerned with issues such as reliability, timeliness, relevance, completeness and accuracy of information generated by mobile phone banking (Chiu, Hsu, &Wang, 2006; Lin, 2008). A number of studies found the technicality of a system as animportant determinant of usage (DeLone & McLean, 1992) and success (Jennex, Amoroso & Adelakun, 2004) of an e-based system. Therefore, we need to test the hypotheses below:

H5: System Quality has a positive and significant impact on actual usage of mobile phone banking

The above stated five hypotheses and their relationship to the actual usage of mobile phone banking are depicted in the following diagram:

Figure 4: Research Model for Actual Usage of Mobile Banking



The above diagram shows the hypotheses developed from the relationship of Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Trust (T), Social Influence (SI), and System Quality (SQ) on the Actual Usage of Mobile Banking in the Shari'ah Banks in Palembang City.

The table below shows the constructs and their items developed from each variable used in the research.

Table 1. Constructs and Their Items

Constructs	Item	Reference
Perceived Usefulness	PU1: I think using M-banking would enable me to accomplish my tasks more quickly	Lee (2009); Moore & Benbaset (1996)
	PU2: I think using M-banking would make it easier for me to carry out my tasks	
	PU3: I think M-Banking is useful	
	PU4: Overall, I think using the M-banking is advantageous	
Perceived Ease of Use	PE1: I think learning to use M-banking would be easy	Lin (2011); Lee (2009)
	PE2: I think the interaction with M-Banking does not require a lot of mental effort	
	PE3: I think it is easy to use M-banking to accomplish my banking tasks	
Trust	T1: M-banking is trustworthy	
	T2: M-banking keeps its promises	

Constructs	Item	Reference
	T3: M-banking keeps customers' interests in mind	Luom Li, Zhang & Shim (2010); Gu, Lee & Suh (2009)
	T4: I trust in the technology M-banking is using	
Social Influence	SI1: People think I should use M-banking	Venkatesh & Brown (2001); Talukder & Quazi (2011)
	SI2: people think using M-banking is valuable	
	SI3: People's opinions are important	
	SI4: I learned how to use it from my friends	
System quality	SQ1: M-banking is a stable system	Lee & Chung (2009); Lin (2011)
	SQ2: The speed of M-banking is quick and fast	
	SQ3: M-banking is an easily navigable system	
Actual Usage of M-Banking	AU1: How frequently do you use M-banking?	Iqbaria, Zinatelli, Cragg & Cavaye (1997); Lin (2011)
	AU2: How much time do you spend to use M-banking?	
	AU3: Usage of different M-banking applications	

Methodology

This research used a quantitative approach, whilst its type is survey research, wherein gathering samples from a population and using questionnaires as its tool to collect primary data. The type of data is primary data, as in answers from selected respondents to the questions given from the distributed questionnaires. Locations of data collecting were 4 major Shari'ah banks in Palembang city, namely, BNI Syariah, Bank Syariah Mandiri, Bank BCA Syariah, and Bank BRI Syariah, (all at their Branch Offices).

The population is the customers, particularly active and individual customers being selected as samples. Samples were chosen using purposive sampling, in which selected using considerations and certain criteria which were: (1) active customers; and (2) individual customer. The samples size is 100 or using the ratio 5-10 times the number of observations for every indicator used. (Hair, 2006) Therefore, 21 (indicators) x 6 = 126 respondents are selected using convenience sampling technique.

The data for this study was collected using survey questionnaires distributed to bank customers residing in the Palembang City, South Sumatra Province, Indonesia. The data was collected from May to August 2018. All questionnaires were distributed manually, generating 126 usable responses. The profile of the respondents is summarized in Table 2.

Data Analysis

From the demographic characteristics of the respondents, we found that most of the respondents are male (53,17%), at the range of 30-39 years of age (45,23%), holds bachelor degrees (53,17%), have monthly income in the range of 5-10 million IDR per month (53,96%), government employees (44,44%), and having the experience of using mobile phone banking service for 1-3 years (43,65%).

Table 2. Demographic Characteristics of the Respondents

Variable		N	%
Gender	Male	67	53,17%
	Female	59	46,83%
Marital status	Single	45	35,72%
	Married	81	64,28%
Age (years)	20-29	57	45,23%
	30-39	46	36,50%
	40-49	21	16,66%
	>50	2	1,58%
Education	Diploma	13	10,31%
	Bachelor	67	53,17%
	Master	46	36,50%
Monthly Income	IDR 5-10m	68	53,96%
	IDR 11-15m	41	32,53%
	IDR 15-20m	15	11,90%
	>IDR 20m	2	1,58%
Occupation	Government employee	56	44,44%
	Private employee	47	37,30%
	Self-employed	18	14,28%
	Student	5	3,96%
Mobile banking experience	<6 months	10	7,93%
	6months – 1 year	47	37,30%
	1 – 3 years	55	43,65%
	>3 years	14	11,11%

Source: Processed Questionnaires

Validity Test

Validity test is utilized to measure the validity of indicators or questionnaires from all research variables respectively. The test was conducted by comparing r count and r table. The score of r count is the result of correlation from respondents' answers in each question in every variable which was being analyzed with SPSS software and its output is called corrected item correlation. Whilst to get r table, we used r product moment table, which determined $\alpha = 0,05$ and then n (sample) = 126, therefore we have two sides r table score of (n-2) = 0,1750. The level of indicator validity or questionnaires is determined if r count > r table = valid and r count < r table = not valid. The completed results of validity tests are presented in Table 3:

Table 3. Result of Validity Test

Variable	No. Item Question	R Count	R table	Explanation
PU	PU1	0.555	0,1750	Valid
	PU2	0.403		
	PU3	0.567		
	PU4	0.751		
PEU	PEU1	0.812		
	PEU2	0.825		
	PEU3	0.920		
T	T1	0.521		
	T2	0.626		
	T3	0.715		
	T4	0.768		

Variable	No. Item Question	R Count	R table	Explanation
SI	SI1	0.597		
	SI2	0.467		
	SI3	0.615		
	SI4	0.789		
SQ	SQ1	0.919		
	SQ2	0.952		
	SQ3	0.940		
AU	AU1	0.888		
	AU2	0.950		
	AU3	0.937		

Source : Results of Primary Data Process, 2018

Results of validity test are presented in Table 3, which indicate that the score of r count from each indicator of the variable is higher than the score of r table, therefore indicator used by each variable is valid to be used as the tool of variable measurement.

Reliability Test

Reliability test is used to find whether indicator used in a research is reliable as a tool of variable measurement. The reliability of an indicator is able to be seen by its score of Cronbach's alpha (α), if it's higher (>) 0,60, means that indicator is reliable, otherwise, if its α is lower (<) than 0,60, it is not reliable. (Nunnally, 1978). The reliability test result for this research can be seen in the table 4 below:

Table 4. Result of Reliability Test

Variables	*Cronbach's Alpha*	Reliability Standard	Explanation
PU	0.759	0,60	Reliable
PEU	0.919	0,60	Reliable
T	0.827	0,60	Reliable
SI	0.795	0,60	Reliable
SQ	0.965	0,60	Reliable
AU	0.948	0,60	Reliable

Source : Results of Primary Data Process, 2018

The score of Cronbach's alpha for all variables are higher than 0,60 as presented in table 4. Therefore, it may be concluded that all indicators are reliable to be used as the tool of variable measurement.

Normality Test

Table 5. Result of Normality Test

	Unstandardized Residual
Kolmogrov-Smirnov Z	0,528
Asymp. Sig. (2-tailed)	0,943

Source : Results of Primary Data Process, 2018

According to table 5, the score of KSZ is 0,528 and Asymp. Sig is 0,943 which are higher than 0,05. Therefore data in this research is concluded to be normally distributed.

Multicollinearity Test

Table 6. Result of Multicollinearity Test with *Tolerance* dan VIF

Model	Tolerance	VIF
PU	0.544	1.838
PEU	0.619	1.615
T	0.631	1.586
SI	0.965	1.036
SQ	0.864	1.157

Source : Results of Primary Data Process, 2018

Based on the results presented in table 6, the score of tolerance from all independent variables is> 0,10. The score of VIF from all independent variables is <10,00. According to the decision making criterion, we may conclude that there is no issue of multicollinearity.

Autocorrelation Test

Table 7. Result of Autocorrelation Test with Durbin-Watson

Model	Durbin Watson
1	2,099

Source : Results of Primary Data Process, 2018

Based on the table 7, the score of DW 2,099. The score of DL at K (independent variable) = 5 and n (samples) = 126 according to the Durbin Watson table is 1,6276, whilst DU score is 1,7923. Based on the decision making criterion, the score for du<DW<4-du, meaning that there is no issue of autocorrelation.

Heteroscedasticity Test

Table 8. Result of Heteroscedasticity Test using Glejser Method

Variables	**Sig**
PU	0.861
PEU	0.827
T	0.152
SI	0.463
SQ	0.132

Source : Results of Primary Data Process, 2018

The output results show a significant score of the independent variable against absolute residual is higher than 0,05. Since its sig score >0,05, we may conclude that there is no issue of heteroscedasticity in the study as the results in Table 8 show.

Linearity Test

The simplest method to determine linearity is using Sig. Linearity and Sig. Deviation from linearity test. If the sig. score < $\alpha = 0,05$, this means that the regression model is linear and vice- versa.

Table 9. Linearity Test AU and PU

		Sig.
AU*	*Linearity*	0,000
PU	*Deviation from linearity*	0,052

Source : Results of Primary Data Process, 2018

Based on the table 9, the Sig. Linearity score is 000 < α = 0,05, which means linear regression is able to be used to explain the effect between the variable PU and AU.

Table 10. LinearityTest AU and PEU

	Sig.
AU* *Linearity*	0,000
PEU *Deviation from linearity*	0,298

Source : Results of Primary Data Process, 2018

Based on the table 10, the Sig. Linearity score is 000 < α = 0,05, which means linear regression is able to be used to explain the effect between the variable PEU and AU.

Table 11. Linearity Test AU and T

	Sig.
AU* *Linearity*	0,000
T *Deviation from linearity*	0,038

Source : Results of Primary Data Process, 2018

Based on the table 11, the Sig. Linearity score is 000 < α = 0,05, which means linear regression is able to be used to explain the effect between the variable AU and T.

Table 12. Linearity Test AU and SI

	Sig.
AU* *Linearity*	0,030
SI *Deviation from linearity*	0,001

Source : Results of Primary Data Process, 2018

Based on the table 12, the Sig. Linearity score is 000 < α = 0,05, which means linear regression is able to be used to explain the effect between the variable AU and SI.

Table 13. Linearity Test AU and SQ

	Sig.
AU* *Linearity*	0,000
SQ *Deviation from linearity*	0,048

Source : Results of Primary Data Process, 2018

Based on the table 13, the Sig. Linearity score is 000 < α = 0,05, which means linear regression is able to be used to explain the effect between the variable AU and SQ.

Multiple Regression Analysis

Multiple regression analysis utilized in this research with the purpose to prove the hypothesis regarding the effect of independent variables (PU, PEU, T, SI, and SQ) partially and simultaneously to the dependent variable (AU). The statistic calculation in the multiple regression analysis is using SPSS software. The results of the calculation can be seen in the table 14 below:

Table 14. Regression Coefficient

Model	Unstandardized Coefficients	t	Sig.
	Beta		
(Constant)	-5,513	-3,381	0,001
PU	0,240	3,229	0,002
PEU	0,303	3,226	0,002
T	0,280	3,779	0,000
SI	0,182	2,887	0,005
SQ	0,225	2,599	0,011

Source : Results of Primary Data Process, 2018

Based on the table 14, the equation for the multiple regression is as follow:

AU = -5,513 + 0,240 PU + 0,303 PEU + 0,280 T + 0,182 SI + 0,225 SQ

From the regression results presented in table 14, the explanation is that if Constant score is -5,513, this means that if there are no factors of PU, PEU, T, SI, and SQ, the AU variable would still be at the position of -5,513. The results also show that the independent variables with the most impact on the dependent variable is PEU, with the coefficient score of 0,303, whilst the lowest effect is SI, with coefficient score 0,182. From the equation, we may also conclude that all independent variables (PU, PEU, T, SI, and SQ) have positive and significant effect on AU, which means that the higher the perception of respondents on the PU, PEU, T, SI, and SQ, it will have effect on the increase of AU as well.

Hypotheses test of the Multiple Linear Regression

Simultaneous significant Test (F Test)

The F test is used to show whether all independent variables in the model have simultaneous significant effect on the dependent variable.

Table 15. Result of ANOVA Test

Model	F	Sig.
Regression	29,301	0,000
Residual		
Total		

Source : Results of Primary Data Process, 2018

The test show that F score is 29,301 with probability 0,000 at the significant level of 95% (α=0,05). Significant score 0,000<0,05. This means that the regression model is able to be used to predict AU. In other words, the independent variables (PU, PEU, T, SI, and SQ) have simultaneous significant effect on the AU variable.

Hypotheses Test

T test or partial test is used to discover how high are the effects of PU, PEU, T, SI and SQ to AU. The result is as follow:

Table 16. Result of Hypotheses Test

Model	T	Sig.
(Constant)	-3,381	0,001
PU	3,229	0,002
PEU	3,226	0,002
T	3,779	0,000
SI	2,887	0,005
SQ	2,599	0,011

Source : Results of Primary Data Process, 2018

Based on the t count:
If t count > t table, Ho is rejected, meaning it has effect.
If t count< t table, Ho is accepted, meaning there is no effect.

The partial test conclusions are as follow:

PU
Variable item PU, from PU1 to PU4 in total, have positive and significant effect on AU with the t score = 3,229 whereas t table 1,65765 (t count> t table), p = 0,002 significant at p<0,05. This result means "Hypothesis 1 is accepted. "

PEU
Variable item PEU, from PEU1 to PEU3 in total, have positive and significant effect to AU with the t score = 3,226 whereas t table 1,65765 (t count> t tabel), p = 0,002 significant at p < 0,05. This result means "Hypothesis 2 is accepted. "

T
Variable itemT, from T1 to T4in tota,l have positive and significant effect on AU with the t score = 3,779 whereas t table 1,65765 (t count> t tabel), p = 0,000significant at p < 0,05. This result means "Hypothesis 3 is accepted. "

SI
Variable itemSI, from SI1 to SI3 in total, have positive and significant effect on AU with the t score = 2,887whereas t table 1,65765 (t count> t tabel), p = 0,005significant at p < 0,05. This result means "Hypothesis 4 is accepted. "

SQ
Variable itemSQ, from SQ1 to SQ3 in total, have positive and significant effect on AU with the t score = 2,599whereas t table 1,65765 (t count> t tabel), p = 0,011significant at p < 0,05. This result means "Hypothesis 5 is accepted. "

Determination Coefficient (R^2)

Determination coefficient (R^2) is conducted to discover the relationship of inter variables in a research, which is shown by the fluctuation of independent variables (PU, PEU, T, SI, and SQ) which will be followed by AU variable at the same portion. This test is observing R square score ranging from 0 to 1. A low R^2 score means that the ability of independent variables to explain the variation of dependent variables are limited. A score close to 1 means that independent variables could explain almost all pieces of information needed to predict the dependent variable.

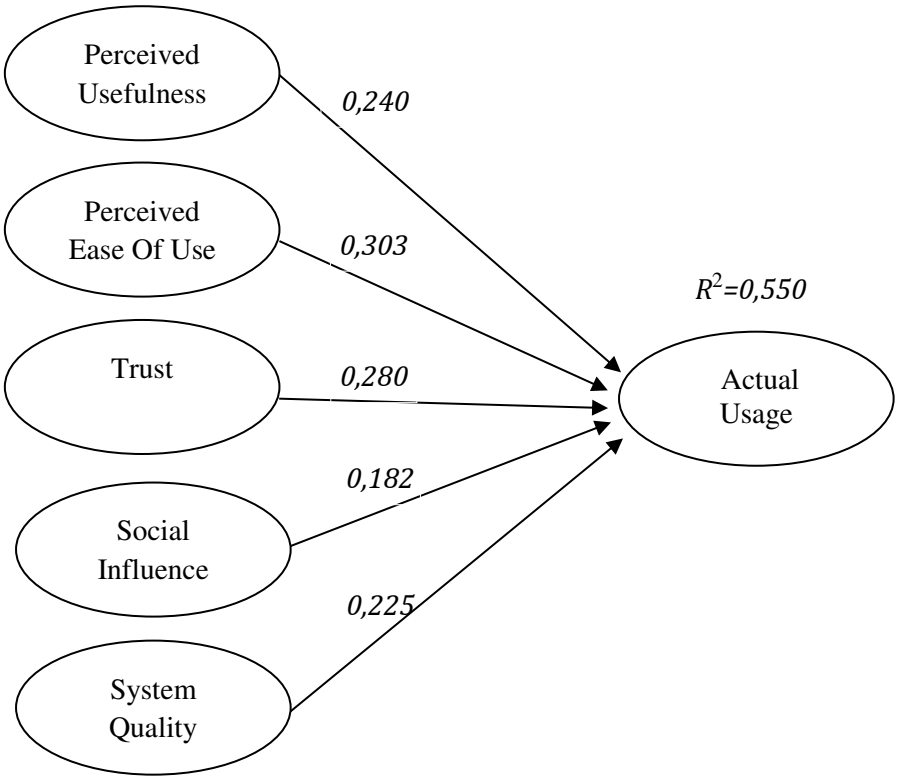
Table 17. Result of Determination Coefficient Test

Model	*R Square*
1	0.550

Source : Results of Primary Data Process, 2018

The table above shows that determination coefficient (R^2) score is 0,550, which means 55% of the AU variable is being able to be explained by the variables of PU, PEU, T, SI and SQ. Whilst the 45% (100%-55%) is outside the variation of this model.

Figure 5: Test of the Research Model



Discussion and Implications of the Findings

The results of data analysis reveal that all independent variables have direct positive and significant effect on the dependent variable. The variable with the highest impact on the Actual Usage of Mobile phone banking in Shari'ah banks in Palembang is Perceived Ease of Use, whilst the lowest is Social Influence. This might be correlated with the demographic characteristic of the respondents wherein most respondent with the experience of using mobile phone banking service for 1-3 years (43,65%). The usage of mobile phone banking service for over 1-3 year means that they are no longer consider others' opinion or suggestion (social influence variable). This also concludes that respondents mostly consider perceived ease of use in the actual usage of mobile phone banking.

This finding is contradictory to the study by Al Jabri, (2015) wherein he found that Perceived usefulness and PEOU had no significant effect on customer's intention to use mobile banking in Saudi Arabia. Neither PEOU nor perceived usefulness affected the intention to use. One possible explanation is that most of the sample respondents (67%) never used mobile banking at all, because either they use other alternative channels or are not able to express their perceptions accurately toward mobile banking experience. Thus, they had difficulty evaluating the ease of use and usefulness of mobile banking. Or they may perceive mobile banking as easy and useful as any other channels, like ATM, telephone, or even internet banking.

Similar findings are found in Puschel et al. (2010) where they found that perceived ease of use (PEOU) influences attitude towards mobile banking and this influence adoption and behavioral intention towards mobile banking besides continuing to use the service. Lin (2011) also tested the PEOU and its influence on adoption and asserted that PEOU, in fact, has a significant effect on adoption or continuing to use mobile banking.

Conclusion and Recommendations

The research has discovered some interesting facts about the drivers of mobile phone usage in Palembang City, Indonesia which can be considered as advancement over the extant research in the related field. In particular, the research has empirically established that perceived usefulness, perceived ease of use, trust, system quality and social influence have positive and significant impact on the usage of mobile phones in the Shari'ah banking industry in Palembang city, Indonesia. These findings facilitate the advancement of the Theory of Reasoned Action (TRA) and the Technology Acceptance Model (TAM) in an Indonesian setting. While the above determinants are well established in the literature in reference to technology adoption ingeneral, these factors are rarely explored empirically in terms of usage of mobile phonesparticularly in financial transactions in Indonesia.

This research was developed from a study conducted by Talukder, Quazi and Sathye in 2014. They tried to discover mobile phone banking usage behavior of banks customers in Canberra, Australia. The findings are relatively similar concerning all determinants have positive and significant effect on the actual usage. Yet, it has a contrary result regarding the effect of perceived ease of use and social influence. Perceived ease of use is the highest determinant of actual usage of mobile banking in Shari'ah banking, whilst social influence has emerged as the least striking determinant. This finding is inconsistent with the study of technology adoption conducted by Talukder et.al (2014) whom had found that Social Influence is the determinant with the most significant effect on the intention to use and behavioral usage of mobile banking in Australia.

As an implication to the providers, financial institutions can capitalize on this finding to enhance the ease of use of their application on mobile banking. They also can check on the updates of the mobile banking applications regularly in order to keep it up to dates to the advancement of technology. This strategic approach would be appropriate for exploiting the sentiments of usersand especially the young cohort of customers who are professional and innovative in theirapproaches to new technology.

Limitations and avenues of future research

This research has few limitations. First, the use of mobile banking in Indonesia is still in its infancy stage. Few banks offer mobile banking with few and limited numbers of services. Therefore, this study may need to be replicated when the usage becomes more mature.

Second, researchers need to explore other factors that are suitable for the mobile banking context, like ubiquity, convenience, security, and personal innovativeness that may affect the actual usage of mobile banking. Other factors that may need to be included in the model of this research are age and gender.

The technology acceptance literature points a strong relationship between age and the acceptance of new technologies, [e.g. Gattiker, (1992), Harrison et al., (1992)]. Older customers are found to have problems with new technologies, and hence, are expected to have negative attitudes towards innovations. Trocchia and Janda (2000), for instance, indicate that many older consumers possess more negative intention to change. However, they argue that a person's overall perception of technology affects more than the age.

Gender has also been suggested as a factor of mobile banking adoption. Some studies argue that mobile usage and internet is male-dominated. In Finland, the research counts that 45% of Internet users are female (Statistics Finland, 2000).

Third, this research is a cross-sectional study. Since user behavior is dynamic, a longitudinal study may provide more insights into user behavior dynamics and development. This research only conducted in 4 banks and in one city only. A few more banks and wider region might give different results and generalization.

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