

DETERMINANTS OF MOBILE ACCOUNTING APP ADOPTION BY MICRO, SMALL, AND MEDIUM ENTERPRISE IN INDONESIA

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Abstract

This study figured out the factors that influence Micro, Small, and Medium Enterprises (MSMEs) in Indonesia to adopt a mobile accounting application as a tool to record business transactions and to prepare financial reports. This research applies the Unified Theory of Acceptance and Use of Technology (UTAUT) with two additional variables, namely perceived risk and perceived trust. Using a combination of purposive, convenience, and snowball sampling techniques, this study distributed questionnaires to MSME owners in Indonesia who know the mobile accounting app. Following that, this study uses the Partial Least Square- Structural Equation Model (PLS-SEM) to analyze the data obtained and to confirm the significance of the causality relationship. Effort expectancy, performance expectancy, social influence, and perceived trust have a significant positive effect on the intention to adopt a mobile accounting app. The study provides knowledge of the factors that influence MSME owners' intentions to choose a mobile accounting app which might help app providers to develop strategies to meet the expectation of MSME owners. This study merely examines the intention to adopt a mobile accounting app, hence further study could examine the user's intention to continue using the mobile accounting app, by using the longitudinal data collection.

Keywords: *Intention, MSMEs, Mobile accounting app, UTAUT.*

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) in Indonesia have a significant role in Indonesia's economic growth. The facts reveal that MSMEs in Indonesia contribute IDR 8,400 billion to gross domestic product (GDP), equivalent to 60% of the total IDR 14,000 billion Indonesia GDP in 2018 (Hartono, 2019). However, MSMEs in Indonesia still have the old problem of lack of capital in running a business due to difficulties in getting access to credit from banks and capital (Thomas, 2019). One of the causes of stress in gaining access to banking and capital

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loans is because MSMEs are unable to prepare financial reports following financial accounting standards (Junianto, 2018; Mahrizal, 2017). Various solutions to these problems have been provided by many parties, including the government and private sectors. One of which is the accounting applications embedded in smartphones. It is expected to facilitate MSMEs in preparing financial reports. A mobile accounting app is an application installed in a smartphone that can be used by business owners to record business transactions for creating a financial statement that conforms to the financial accounting standards. In Indonesia, the development of a mobile accounting app is considered to be the right solution. Bank Indonesia, as a central bank, cooperates with Chartered Accountants Indonesia (IAI) to make a mobile accounting app called Sistem Informasi Aplikasi Pencatatan Informasi Keuangan (SIAPIK) (Bank Indonesia & Ikatan Akuntan Indonesia, 2016). However, the acceptance of MSMEs in Indonesia to the mobile accounting app is not in line with the expectation. Table 1 presents a review of various mobile accounting apps in Indonesia, provided by multiple parties. From Table 1, it can be seen that the highest number of downloads is 100,000+ downloads and at least 5,000+ downloads. Seen from this, it shows that there are still very few business operators who use the mobile accounting app as a tool for recording business, considering that Indonesia has 59.2 Million MSMEs (Departemen Koperasi RI, 2019). Given this fact, it becomes essential to figure out the factors that influence MSMEs in Indonesia to adopt a mobile accounting app as a tool to record business transactions and to prepare financial reports.

Table 1. Review of Mobile Accounting App

Application Name	Release Date	Number of Downloads	Review Score
Akuntansi UKM - Money Manager	December 9, 2014	100.000+	4.5
Teman Bisnis - Aplikasi Pencatatan Keuangan Bisnis	October 25, 2017	50.000+	4.6
Akuntansi Keuangan	October 18, 2015	50.000+	4.5
Jurnal Mobile	June 12, 2017	10.000+	4.0
Zahir Online	February 3, 2018	5.000+	4.4
SI APIK	January 18, 2016	50.000+	3.6

Source: Data processed (Google Play, 2019)

There have been several previous studies regarding the intention of adopting technology-based accounting as business records. Research conducted by Greenberg, Li, and Wing (2012) in the USA using the Technology Acceptance Model (TAM) found that perceived Usefulness affects the intention to adopt an online accounting system. In addition to that, research conducted by Ilias (2013) in Malaysia using TAM found that Perceived Usefulness and Perceived Ease of Use were essential factors in influencing the public sector to adopt a Computerized Accounting System. Meanwhile, research conducted by Chang & Kin (2004) using TAM and Theory of Planned Behavior (TPB) found that perceived Usefulness and perceived behavioral control are the most influential factors for people in business to adopt accounting information systems. Research conducted by Amin, Munira, Azhar, Amin, & Karim, (2016) in Bangladesh using TAM found that TAM could explain the intention of businesses to adopt the Accounting Information System by considering attitude. Lastly, research conducted by Fazli, Sam, Hoshino, & Tahir (2012) also

found that perceived Usefulness significantly affected the intention to adopt the Computerized Accounting System in Malaysia.

Although there have been several studies on the adoption of technology-based accounting, this research is critical to do because of the following points. Firstly, this research focuses on the intention of MSMEs to adopt a mobile accounting app attached in smartphones to record various business transactions. This research is different from previous research, which focused a lot on the adoption of Computerized Accounting Systems based on a computer (Amin et al., 2016; Chang & Kin, 2004; Fazli et al., 2012; Greenberg et al., 2012; Ilias, 2013). This difference is essential to distinguish because the research model that explains a person's behavior is limited by specified functions of the technology used (Cho, 2016). Secondly, this study uses the Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh, Morris, Davis, & Davis (2003). Did not use TAM which has been widely used by previous studies in the context of information technology adoption in accounting records, such as Amin et al., (2016); Chang & Kin, (2004); Fazli et al., (2012); Greenberg et al., (2012); Suryaningrum (2012); Ilias, (2013).

This research also extends UTAUT by adding Perceived Trust and Perceived Risk variables. Perceived risk was added in this study, given the premise that smartphone use is riskier than using a computer in recording transactions. For example, smartphones can be easily lost than computers because smartphones are easier to move than computers and data input on small screens is far more risky than using input computer keyboard (Evon, 2016). With regard to perceived risk, there have been many studies that have tried to add perceived risk to UTAUT such as Cao & Niu, (2019); Cruz, Neto, Munoz-Gallego, & Laukkanen, (2010); Evon, (2016); Kholid, (2019). Meanwhile, the perceived trust was added bearing in mind that MSMEs must make financial reports according to financial accounting standards. In this regard, the confidence of MSMEs in the mobile accounting app, that the mobile accounting app is able to produce financial reports according to standards is an important factor. Previous research on adopting accounting systems also confirms the importance of trust (Greenberg et al., 2012).

UTAUT is the result of the synthesis of 8 theories taken from both psychological and sociological theories (Venkatesh et al., 2003). UTAUT proposes performance expectancy (PE), Effort Expectancy (EE), Facilitating Condition (FC), and Social Influence (SI), which are determinants of information technology adoption (Venkatesh et al., 2003). Effort expectancy is the extent of effort that the individual needs to exert in using information technology (Venkatesh et al., 2003). In the context of a mobile accounting app, effort expectancy is the user's perception that using a mobile accounting app is easy and does not require more effort in using it. MSMEs will have a firm intention to adopt a mobile accounting app if they consider that using a mobile accounting app is easy. The positive effect of effort expectancy on information technology adoption intentions has been confirmed by several studies, such as Sultana (2019), Rahi, Mustafa, Mansour, Alghizzawi, & Alnaser, (2019) and Escobar-Rodriguez & Carvajal-Trujillo, (2014). The first hypothesis of this research is:

H1: MSME owners with higher effort expectancy will have a higher intention to adopt mobile accounting app

Performance expectancy is the extent an individual believes that his or her task performance would be improved through the usage of particular information technology (Venkatesh et al., 2003). In the context of a mobile accounting app, performance expectancy is an

individual's belief that using a mobile accounting app can provide benefits and increase the speed of accounting records and be able to produce financial reports. If the MSMEs business owner believes that using a mobile accounting app will provide many benefits to produce financial statements faster, then the MSMEs owners will have a higher intention to adopt the mobile accounting app. Several studies found a positive effect on performance expectancy on the intention to adopt information technology (Evon, 2016; Kholid, 2019). The second hypothesis of this research is:

H2: MSME owners with better performance expectancy will have a higher intention to adopt mobile accounting app

As part of the explanation of the effect on adoption intentions, effort expectancy is believed to influence performance expectancy (Venkatesh et al., 2003). In the context of TAM, perceived ease of use influences perceived Usefulness (Davis, 1989). This perceived Usefulness means, when users of information technology find it easy to use information technology, they will have the notion that information technology is useful (Chaouali, Ben, & Souiden, 2016; Venkatesh et al., 2003). When MSME owners consider that using a mobile accounting app is easy, they will judge that a mobile accounting app is useful. The third hypothesis of this research is:

H3: MSME owners with higher effort expectancy will have a higher performance expectancy to adopt mobile accounting app

Social influence is the perception of information technology users that their closest people (family, friends) suggest they must use particular information technology (Venkatesh et al., 2003). In the context of the mobile accounting app, social influence is the perception of MSME owners that those closest to them suggest that MSME owners must use the mobile accounting app. When the people closest to them encourage the use of specific information technology, then the individual can be influenced to use the same information technology (Cao & Niu, 2019). Previous research conducted by Bhatiasevi (2016); Evon, (2016), and Escobar-Rodriguez and Carvajal-Trujillo (2014) reveal that social influence has a positive impact on the intention to adopt information technology. The fourth hypothesis of this research is:

H4: MSMEs owners with more considerable social influence will have a higher intention to adopt mobile accounting app

Facilitating condition is technical support available to users while using technology (Venkatesh et al., 2003). To adopt a mobile accounting app, MSME owners need some expertise, such as how to use a smartphone and install a mobile accounting app. MSME owners who have better access to facilitating conditions, such as tutorials on using mobile accounting apps, support chat if there are problems, will have a higher intention to adopt a mobile accounting app (Baptista & Oliveira, 2015; Venkatesh et al., 2003). Although the effect of facilitating conditions on the intention to adopt information technology is not hypothesized in the UTAUT, previous research has sought to understand the impact of promoting conditions on the intention to adopt the technology. In various types of information technology, such as studies that examined the adoption of mobile banking (Raza, Shah, & Ali, 2019); adoption of flight ticket booking (Jeon, Ali, & Lee, 2018); as well as mobile learning (Kumar & Bervell, 2019). The fifth hypothesis of this research is:

H5: MSME owners with a better facilitating condition will have a higher intention to adopt mobile accounting app

Perceived risk is the level of individual perception about the risk of using specific information technology (Cao & Niu, 2019; Pavlou, 2003). Specifically, perceived risk is the level of outcome uncertainty and security uncertainty from the use of information technology (Cruz et al., 2010). Users will be reluctant to adopt information technology if there is uncertainty about the use of information technology (Evon, 2016). Perceived risk in the context of the mobile accounting app relates to risks regarding the uncertainty of the security of data or information entered in the mobile accounting app. The higher the level of data security uncertainty from the mobile accounting app, MSME owners will be reluctant to adopt the mobile accounting app. Having said that, the sixth hypothesis of this research is:

H6: MSME owners with higher perceived risk will have a lower intention to adopt mobile accounting app

Perceived trust is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action necessary to the trustor, irrespective of the ability to monitor or control that other party (Mayer, Davis, & Schoorman, 1995). Perceived trust refers to potential users' subjective belief that a service provider will fulfill its obligations (Giovanis, Assimakopoulos, & Sarmaniotis, 2018). In the context of mobile accounting app, perceived trust the users' subjective belief that the mobile accounting app can fulfill the obligation to produce financial statements. Trust is crucial for any business relationship and is an important driver for the adoption and use of services because it reduces the uncertainty inherent in technology and increases the credibility of service providers (Giovanis et al., 2018; Slade, Dwivedi, Piercy, & Williams, 2015). The higher the trust of MSMEs owners that the mobile accounting app can help produce financial reports quickly, the higher the intention of MSME owners to adopt mobile accounting app. The seventh hypothesis of this research is:

H7: MSME owners with better-perceived trust will have a higher intention to adopt mobile accounting app

Besides, the mobile accounting app could also help to reduce the high perceived risk since trust allows users to overcome the uncertainty or anxiousness overconfident attitude and the expected outcome (Mcknight, Choudhury, & Kacmar, 2002). Research in the qualitative context found that trust in information technology could reduce the perceived risk toward information technology (Mallat, 2007). A study in the quantitative context also confirmed the negative relationship between perceived trust and perceived risk (Lu, Yang, Chau, & Cao, 2011; Slade et al., 2015). The eighth hypothesis of this research is:

H8: MSME owners with better-perceived trust will have a lower perceived risk to adopt mobile accounting app

Based on the hypotheses development, Figure 1 depicts the research model of the mobile accounting app.

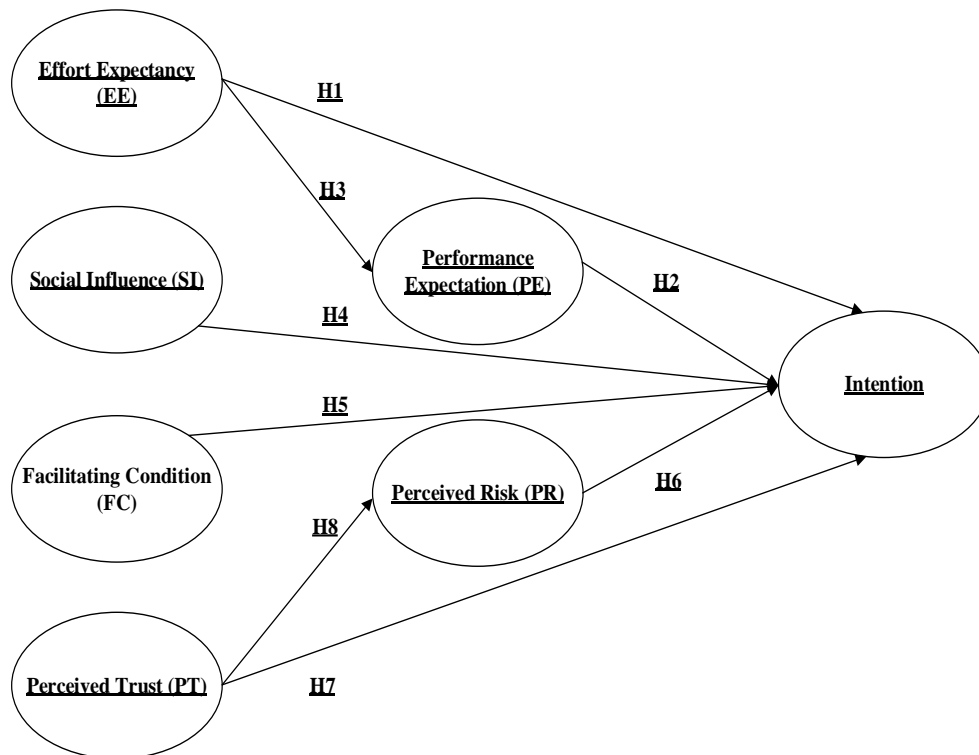


Figure 1. Research Model

RESEARCH METHOD

Participants and Procedures

Participants in this study are Indonesian people who are MSME owners who know about the mobile accounting app. This criterion is following previous research, which also selected participants who were limited in knowing the information technology under study. Furthermore, participants were not yet users of information technology objects, such as research conducted by Hsiao, (2017) that tested the adoption of smartwatch, research by Lee & Kozar, (2008) that tested adoption anti-spyware software, and research by Teng, (2010) that examined the adoption of PDA phones. A combination of purposive, convenience, and snowball sampling techniques were used in this study. This combination is in line with the information technology adoption research conducted by Urumsah (2015), which was also done in Indonesia. Convenience is used to find potential respondents and wants to participate. Purposive sampling is used to select samples that fit the criteria. Snowball sampling is used to find the next participant who meets the requirements based on recommendations from previous participants.

Technically, the procedure, potential participants who know SIAPIK selected based on convenience and purposive sampling, are contacted personally. After that, the participants explained the purpose and objectives of the survey. Then, the participants were asked to fill in a research questionnaire, and at the end of the survey participants were asked to provide recommendations on who the participant's friends were who also knew about the mobile accounting app. For the sample size of this study using the guidelines provided by (Hair, Money,

Samouel, & Page, 2007). A study that seeks factor analysis must obtain responses five times or ten times greater than the accumulated items (Hair et al., 2007). For that reason, this study needs a minimum of 110 (22x5) respondents and a maximum of 220 (22x10) respondents.

Measures

This study uses a 6 Likert scale ranging from 1 "strongly disagree" to 6 "strongly agree." The use of the Likert 6 scale is commonly used in the adoption of information technology in Indonesia, such as research conducted by Kholid, (2019); Urumsah, (2015). Measurements in this study were adopted from previous studies and then adjusted to the context of the research being carried out. Each of the three items to measure performance expectancy, effort expectancy, facilitating conditions, social influence and the behavioral intention was adopted from AbuShanab & Pearson, (2007); Hoque & Sorwar, (2017); Venkatesh et al., (2003). Meanwhile, four items to measure perceived risk were adopted from Abrahao, Moriguchi, & Andrade, (2016), and three questions to measure perceived trust were taken from Giovanis et al., (2018). Appendix 1 presents a detailed measurement of each variable.

Data analysis method

This study uses the Structural Equation Model (SEM) to confirm the significance of the causality relationship. Because this study is predictive and explains the target construct, this research uses explicitly PLS-SEM, which is a variance base as suggested by Hair, Hult, Ringle, & Sarstedt, (2017); Hair, Ringle, & Sarstedt, (2011). SEM was estimated using a two-step approach, including measurement model and structural model (Hair et al., 2017, 2011). Measurement model tests include a test of convergent validity, internal consistency, dan discriminant validity (Hair et al., 2017). Meanwhile, structural model tests include assessing the structural model for collinearity issues, the significance, and relevance of the structural model relationships, evaluate the level of R^2 and evaluate the predictive relevance Q^2 (Hair et al., 2017). Related to PLS-SEM, this study uses SmartPLS 3.0 software to analyze data.

RESULTS AND DISCUSSION

Results

Sample Profile

The demographic analysis shows that the majority of respondents have an age of 20-25 years, namely 81 (55%) respondents, while respondents who have the age of 25-30 years are 51 (34%) respondents and respondents who have an age over 30 years 16 (11%) respondent. Seen from the type of business 88 (59%) respondents deal for the kind of trading business, 24 (16%) of respondents own a business in manufacturing, 30 (20%) of respondents have a business in service, and only 6 (4%) of respondents have a business that not included in services, trade, and manufacturing. The results of the demographic analysis also showed that 79 (53%) of new respondents had a business of less than one year. Thirty (20%) of respondents had businesses between 1 and 2 years, 18 (12%) respondents had a business of 2 to 3 years, 5 (3 %) respondents have owned business for 3-4 years, and the remaining 16 (11%) respondents have owned business for more than five years.

Measurement Model

Table 2 presents the results of testing reliability and convergent validity. Evaluation of convergent validity involves testing the outer loadings of the indicators and the average variance extracted (AVE). The general rule is that the outer loading value must be at least 0.7. If the outer loading value is below 0.7, it must be considered to be deleted if it can later increase the composite reliability value (Hair et al., 2017).

Table 2. Measurement Model Assessment (Reliability, Convergent Validity)

Items	Loading	CA	CR	AVE
<i>Behavioral Intention (BI)</i>		0.909	0.943	0.846
BI1	0.914			
BI2	0.924			
BI3	0.923			
<i>Effort Expectancy (EE)</i>		0.888	0.931	0.818
EE1	0.927			
EE2	0.907			
EE3	0.878			
<i>Facilitating Condition (FC)</i>		0.766	0.895	0.810
FC2	0.895			
FC3	0.905			
<i>Performance Expectancy (PE)</i>		0.823	0.895	0.739
PE1	0.869			
PE2	0.888			
PE3	0.821			
<i>Social Influence (SI)</i>		0.867	0.919	0.791
SI1	0.839			
SI2	0.934			
SI3	0.893			
<i>Perceived Risk (PR)</i>		0.898	0.929	0.765
PR1	0.841			
PR2	0.902			
PR3	0.887			
PR4	0.867			
<i>Perceived Trust (PT)</i>		0.894	0.934	0.825
PT1	0.906			
PT2	0.893			
PT3	0.926			

Source: Data Processed (2019)

From Table 2, the first item of facilitating condition is not presented in the table because the outer loading value is 0.442, so it is deleted and not displayed in table 3 and is not used for other tests.

In addition to these items, it can be seen that the outer loading value for each measurement item is above 0.7 so that it meets the conditions. The average variance extracted (AVE), indicating the amount of variation captured by the construct concerning the variation due to measurement error, was used to assess convergent validity.

As seen in table 2, the AVE value for each variable is above 0.5, which means it can meet the convergent validity test (Hair et al., 2017). The reliability of all constructs was tested using Cronbach's α and composite reliability (CR) measurements. Internal consistency is considered sufficient if the value of Cronbach's α and composite reliability (CR) is at least 0.7 (Hair et al., 2017). Table 2 presents the fact that the Cronbach's α and composite reliability (CR) values for each variable above 0.7 indicate that all measurement items are good indicators of the variable. Meanwhile, the Fornell – Larcker Criteria are used to test discriminant validity by comparing the square root of AVE of each construct with the correlation between constructs. As shown in Table 3, the square root of AVE is higher than the variants of each construct, which means that discriminant validity testing can be met (Hair et al., 2017).

Structural Model

The structural model assessment includes hypothesis testing. The significance and relevance of the path were tested using the bootstrapping procedure. The path estimates, t-statistics, and confidence interval values were calculated for the hypothesized relationships. Figure 2 presents the results of hypothesis testing, determinant coefficients (R^2), and Predictive Relevance (Q^2). Tests of this research model that integrates UTAUT with perceived trust and perceived risk shows that the model in the study can explain the variance of the intention to adopt mobile accounting app in Indonesia by $R^2=50.20\%$. Effort expectancy has a significant positive effect on intention to adopt mobile accounting app (EE -> IN; $\beta = 0.335$; significance = $p < 0.01$). Likewise, effort expectancy also has a significant positive effect on performance expectancy (EE -> PE; $\beta = 0.498$; significance = $p < 0.01$). Meanwhile, performance expectancy can be confirmed to have a positive effect on the intention to adopt mobile accounting app (PE -> IN; $\beta = 0.165$; significance = $p < 0.01$). Social influence also has a significant positive effect on intention to adopt mobile accounting app (SI -> IN; $\beta = 0.241$; significance = $p < 0.01$).

Table 3. Measurement Model Assessment (Discriminant Validity)

	EE	FC	IN	PE	PR	PT	SI
Effort Expectancy (EE)	<i>0.904</i>						
Facilitating Condition (FC)	0.493	<i>0.900</i>					
Behavioral Intention (BI)	0.559	0.287	<i>0.920</i>				
Performance Expectancy (PE)	0.498	0.332	0.488	<i>0.860</i>			
Perceived Risk (PR)	-0.273	-0.260	-0.362	-0.328	<i>0.874</i>		
Perceived Trust (PT)	0.341	0.126	0.509	0.386	-0.467	<i>0.908</i>	
Social Influence (SI)	0.319	0.409	0.434	0.267	-0.267	0.231	<i>0.890</i>

Note: Diagonal terms (in italic) are the square roots of the AVE

Source: Data Processed (2019)

With regard to the last UTAUT variable, facilitating conditions were found to have no effect on the intention to adopt mobile accounting app (FC → IN; $\beta = -0.077$; t-value = 0.941). The test results show that the perceived trust has a significant positive effect on the intention to adopt mobile accounting app (PT → IN; $\beta = 0.261$; t-value = 3.455; significance = $p < 0.01$). Perceived trust was also found to have a significant negative effect on perceived risk (PT → PR; $\beta = -0.049$; t-value = 7.327; significance = $p < 0.01$). Lastly, the effect of perceived risk cannot be confirmed as influencing the intention to adopt a mobile accounting app (PR → IN; $\beta = -0.049$; t-value = 0.584).

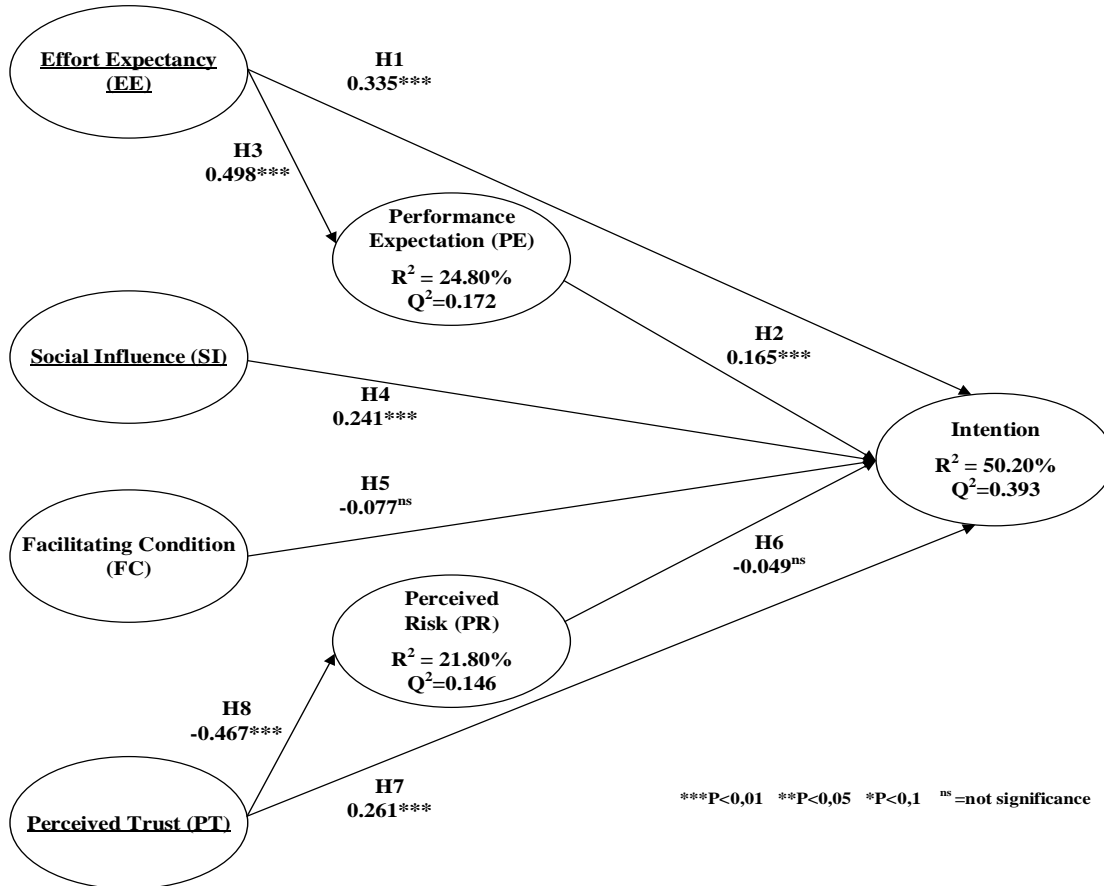


Figure 2. Results of Hypothesis Testing, Coefficient of Determination & Predictive Relevance

Other than examining the R^2 , this study also needs to investigate the ability of the model to predict (Hair et al., 2011). The primary measurement of predictive relevance is Stone-Geisser's Q^2 value, which postulates that the research model has to be able to predict accurately any endogenous latent construct indicator (Hair et al., 2011). Q^2 score is obtained by blindfolding procedure (Hair et al., 2017, 2011). Guidance to fulfill predictive relevance is by looking at the Q^2 score. If Q^2 is more than 0, it indicates that exogenous constructs have predictive significance toward endogenous constructs (Hair et al., 2011). As depicted in Figure 2, intention to adopt mobile accounting app, performance expectancy, and perceived risk has Q^2 of 0.393, 0.172, and

0.146, respectively, which indicates that this research model fits the criteria of predictive relevance.

This research expands by applying the Importance Performance Matrix Analysis (IPMA) that will help understand the importance of the factor separately. Previous research emphasizes the importance of IPMA analysis (Rahi et al., 2019). IPMA in IPMA evaluation of the significance and performance value is calculated through original rescaling data from 0 to 100, where the higher, the better (Hair et al., 2017). The total effect in IPMA represents the importance of constructs in shaping the target construct (Hair et al., 2017). Table 4 presents the IPMA results of this study. From Table 4, effort expectancy (0.370: 63.751) is the most powerful variable that determines the intention to adopt a mobile accounting app, followed by the perceived trust (0.290: 71.179) and performance expectancy (0.208: 72.042).

Table 4. Importance of performance matrix analysis (IPMA)

Variables	Importance Values/Total Effect	Performance Index Values
<i>Intention to Adopt Mobile Accounting App</i>		
Effort Expectancy (EE)	0.370	63.751
Performance Expectancy (PE)	0.208	72.042
Perceived Risk (PR)	-0.037	31.595
Perceived Trust (PT)	0.290	71.179
Social Influence (SI)	0.161	68.579
Facilitating Condition (FC)	-0.052	69.881

Source: Data Processed (2019)

Discussion

From a theoretical perspective, findings in research make a significant contribution by integrating the flow of accounting and technology research. Mainly, this research expands the UTAUT framework by incorporating it with perceived trust and perceived risk. Analysis using PLS-SEM has revealed that the value of R^2 indicates that the variable in UTAUT with the addition of perceived risk and perceived trust can explain 50.20% of the variance in the intention of adopting a mobile accounting app by MSMEs in Indonesia. The findings also indicate that the model in this study is not in the weak model category. Although the model in this research is still in the moderate category, the value of $R^2 = 50.20\%$ in this research is higher than those in previous research related to accounting information system using TAM such as the research conducted by Ilias (2013) with the value of $R^2 = 38.30\%$ and another research conducted by Amin et al. (2016) with the value of $R^2 = 45.85\%$. It can be concluded. This study contributes to the existing literature by examining extended UTAUT in the context of the adoption of mobile accounting app in developing countries. To the author's knowledge, this is the first study attempted to test the UTAUT in the object of mobile accounting app technology.

Also, this study extends the UTAUT framework with the addition of new variables as well as confirms the validity of the UTAUT extended model. Finally, this study was able to determine and find significant predictors of MSME owners' intentions to adopt a mobile accounting app. Based on these points, the theoretical framework proposed and tested in this research model can be used as a basis for further studies. From a practical perspective, knowledge of the factors that

influence MSME owners' intentions to adopt a mobile accounting app can help develop strategies that can encourage MSMEs to choose a mobile accounting app as a tool for recording and producing financial statements.

Effort Expectancy

The result of this research shows that effort expectancy has a significant positive impact on performance expectancy and intention of MSME owners to adopt mobile accounting app. The result of this research is in line with the existing research conducted by Escobar-Rodriguez & Carvajal-Trujillo, (2014); Rahi et al., (2019); Sultana, (2019); Evon, (2016). Looking at the IPMA results of this research model confirms that effort expectancy is the most powerful variable that influences the adoption intention of MSMEs to the mobile accounting app. The result is in line with the research conducted by Rahi et al. (2019), where effort expectancy is the most critical variable affecting the intention to adopt information technology compared to other UTAUT variables. In this regard, mobile accounting app providers must be able to design mobile accounting apps that are user friendly, so MSMEs do not need much effort to use the application. Mobile accounting app providers must also be able to create applications that are concise and straightforward transaction input procedures. Besides, the application provider also needs to provide clear guidelines on how to use it, so that mobile accounting app users will find it easy to use the mobile accounting app (Evon, 2016).

In summary, the mobile accounting app provider must be able to create a mobile accounting app that has a friendly and easy-to-use interface and has a fast response to any recording and reporting activities that MSME owners want. This function is certainly not easy considering the small screen size of the smartphones, which certainly have limitations. Still, if the mobile accounting app provider can fulfill this, then this will be the key to the success of the development of the mobile accounting app. That is because the mobile accounting app that is easy to use is not only able to attract MSME owners who have high technical skills, but also those who have low technical skills.

Performance Expectancy

This study found that performance expectancy affects MSME principals' intention to use the mobile accounting app. The result of this study is in line with the previous research conducted by Abrahao et al., (2016); Evon, (2016); Kholid, (2019); Rahi et al., (2019). This result indicates that SME practitioners have an interest in the performance of the mobile accounting app and the benefits it receives. In this regard, the mobile accounting app provider must pay close attention to the design of the developed mobile accounting app and ensure that the mobile accounting app has many functional features to attract MSME owners to use the mobile accounting app. These features, for example, mobile accounting capabilities, are not only able to produce financial reports but also help MSME owners to conduct a business analysis. Another example, the mobile accounting app can provide information on financial ratios, reminders of accounts receivable or due dates, analysis of customer performance or supplier, the ability to synchronize with tax needs, and so forth.

But once the addition of features is not enough, the mobile accounting app provider must also be able to communicate the advantages of the features it possesses while delivering the benefits gained when MSMEs use the mobile accounting app (Kholid, 2019). These advantages, such as the mobile accounting app, provide easy and quick access in producing financial reports,

the ability to improve work productivity, take notes wherever and whenever easily, and so forth. If the mobile accounting app provider can present these features and can communicate well to the MSME performers, it will be able to improve the performance expectancy of MSME performers. It can increase the intention of MSME performers to use the mobile accounting app.

Social Influence

This research also confirms that social influence influences the intention of MSME owners to adopt a mobile accounting app. Bhatiasevi (2016) also found a positive and significant impact (Escobar-Rodriguez & Carvajal-Trujillo, 2014; Evon, 2016). This result is reasonable, considering Indonesia as the country with a low individualism score (14), which ultimately makes Indonesia as a collectivist society (Hofstede-insights, 2019). It means that an individual has a high commitment to families, extended families, and extended relationships (Bhatiasevi, 2016). In the context of this study, this could mean that MSME practitioners have the intention to use the mobile accounting app because they imagine that their closest people, such as friends, family, and colleagues think they should use the mobile accounting app. Therefore, mobile accounting performance communication is not only done to MSME owners but also those closest to MSME owners.

Perceived Trust

As a result of the previous study conducted by Giovanis et al. (2018) and Slade et al. (2015), their research also finds a significant positive impact of perceived trust toward the intention to adopt information technology. This study also reveals that perceived trust can cause a decrease in perceived risk, which is in line with the research of Slade et al. (2015). Moreover, this study confirms that perceived trust is the second strongest variable after effort expectancy, which influences MSME owners' intentions to adopt a mobile accounting app. In this regard, to increase the level of confidence of MSMEs in the mobile accounting app, the application provider must be able to guarantee the security of the data contained in the mobile accounting app. Such protection ensures that business information held by the MSME principals is not spread freely; the mobile accounting app can produce financial reports that are honest and reliable and under financial accounting standards. To support this, application providers must always improve the security features of the mobile accounting app and update applications when there are changes to existing financial accounting standards.

If many MSME owners feel that the information and systems in the mobile accounting app can be trusted, then there is a greater tendency for MSME owners to have the intention to use the mobile accounting app. Increasing the trust of MSME owners can also be increased by conducting real collaboration between mobile accounting app providers with banks and accountants' ties. The partnership of mobile accounting app providers with banks will ease mobile accounting app providers in providing information to prospective users about the various conveniences and benefits obtained by MSME owners by using the mobile accounting app. Besides, cooperation with accountants is believed to increase the confidence of mobile accounting app users, that the output of financial statements can meet applicable financial accounting standards.

Facilitating Condition

Unlike the previous research conducted by Kumar & Bervell, (2019); Raza et al., (2019) which found a significant positive impact of facilitating condition toward the intention to adopt information technology, this research reveals that facilitating condition does not affect the intention to take. This result supports the statement of Venkatesh et al. (2003) as the initiator of UTAUT, stated that facilitating conditions is no longer significant in influencing the intention to adopt when performance expectancy and effort expectancy has significantly changed the intention to adopt information technology. The result of this study shows that performance expectancy and effort expectancy influence the intention to adopt mobile accounting app, however facilitating condition does not influence the intention to adopt mobile accounting app. The previous research also confirm that when performance expectancy and effort expectancy could significantly influence, facilitating condition will no longer influence the intention to adopt information technology (Farah, Hasni, & Abbas, 2018; Hoque & Sorwar, 2017; Sultana, 2019).

Perceived Risk

The result of this research shows that perceived risk does not significantly influence the intention to adopt a mobile accounting app. This result is not in line with the previous study conducted by Giovanis et al. (2018) and Slade et al. (2015). Even so, the other research found no significant impact of perceived risk toward the intention to adopt information technology, such as Chauhan, Gupta, & Jaiswal, (2018); Farah et al., (2018). The result is not surprising because other researchers assume that perceived risk has failed to explain the intention to adopt information technology, and new construct, perceived credibility, could better explain the intention to adopt information technology (Farah et al., 2018). Therefore, the researcher could take advantage of involving the perceived credibility in the further research.

CONCLUSION

This research investigates the factors affecting the intention of MSME owners to adopt mobile accounting app. The results of the study reveal that performance expectancy, effort expectancy, social influence, and perceived trust have a significant positive effect on the MSME owners to adopt mobile accounting app. Based on these results, the mobile accounting app provider must be able to provide a mobile accounting app that is easy to use and communicate to MSME owners that the mobile accounting app is useful. Besides, the mobile account app provider must also be able to guarantee that the mobile accounting app is capable of producing financial reports that are following financial accounting standards.

Even though this research can explain the intention to adopt a mobile accounting app, there are still some limitations that are expected to be completed by future research. First, this research model is in the moderate category. Further studies might incorporate other factors that might better explain the adoption of the mobile accounting app. Secondly, the data collected in this study was done at a single point. The longitudinal method of data collection might serve as a better approach to collecting data in the future. Thirdly, this research examines the adoption of the mobile accounting app, which is the initial stage in the use of information technology. Further research is suggested to focus on the intention to continue using the mobile accounting app.

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Appendix 1.

Measurement items used in the study

Behavioral Intention

BI1. I intend to use SIAPIK in the future

BI.2 I will always use SIAPIK for my business recording

BI.3 I plan to use SIAPIK frequently

Performance Expectancy

PE.1 SIAPIK is useful for my business recording

PE.2 Using SIAPIK can fasten my business recording process

PE.3 Using SIAPIK can save my time due to the automatic system

Social Influence

SI.1 People who are important to me think that I should use SIAPIK

SI.2 People who influence my behavior think that I should use SIAPIK

SI.3 People whose opinions that I value prefer that I use SIAPIK

Facilitating Condition

FC.1 I have necessary devices to use SIAPIK

FC.2 I have sufficient knowledge to use SIAPIK

FC.3 information on how to use SIAPIK is easily found

Effort Expectancy

EE.1 learning to use SIAPIK will be easy for me

EE.2 I expect it would be easy for me to become skillful at using SIAPIK

EE.3 I expect SIAPIK to be easy to use

Perceived Risk

PR.1 I am not sure about the data security in SIAPIK

PR.2 I am afraid of losing my business data in SIAPIK

PR.3 I feel not safe for saving my business data in a mobile accounting app

PR.4 There might be a high possibility of error in using SIAPIK

Perceived Trust

PT.1 I trust SIAPIK to be reliable

PT.2 I trust SIAPIK to be secure

PT.3 I trust SIAPIK