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PREDICTING THE ADOPTION OF MOBILE BUSINESS APPLICATIONS BY CULINARY SMES IN INDONESIA

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ABSTRACT

Objective: This study aims to analyze the adoption of mobile business applications by culinary SMEs in Indonesia using the extended TAM (technology acceptance model). The extended TAM used in this study uses additional variables such as subjective norms, self-efficacy, and facilitating conditions, which the previous study used these variables in the context of technology adoption. **Research Design & Methods:** The sample used was 424 respondents of culinary SMEs in Indonesia. Data collection was found using an online questionnaire, meanwhile, for data processing using the PLS-SEM method. **Findings:** The results show that culinary SMEs will use a mobile business application if the application is useful and easy to use. In addition, they also need to be encouraged by social environmental factors (subjective norms), self-confidence to use the application (self-efficacy), and supporting facilities conditions. **Implications & Recommendations:** Theoretically, this research uses extended TAM which has been used previously but in a different context, namely the adoption of mobile business applications. Practically, this research will provide insight for application development companies to create mobile business applications that can be well adopted by culinary SMEs. **Contribution & Value Added:** This study complements the limitations of previous studies on TAM, subjective norms, self-confidence, self-efficacy, and facilitating conditions in the context of the adoption of mobile business applications by culinary SMEs.

Keywords: facilitating condition; mobile business applications; self-efficacy; subjective norms; technology acceptance model.
JEL codes: M310, O31
Article type: research paper

INTRODUCTION

In the last ten years, various countries proved that technological developments are extraordinary. The use of smartphones is important because it has a lot of influence on social and economic aspects (Wiese & Humbani, 2020). In 2018, there are 171 million internet users (64.8%) of Indonesia's total population (APJII, 2019). The growth of internet users from 2017 to 2018 is more than 27 million users (10.12%) (APJII, 2019). Many internet users in Indonesia create business opportunities for related companies to develop technology-based business opportunities (Akturan & Tezcan, 2012), such as mobile business applications. The popularity of the internet and the rapid penetration of business in developing countries have created enormous opportunities and challenges for businesses (Duncombe & Boateng, 2009). 2.1% of internet users in Indonesia are interested to find product information and 1.7% use the internet for online shopping (APJII, 2019). This shows that people in

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Indonesia have "go online" and provide opportunities for technology-based companies to develop useful mobile applications.

One aspect that supports economic Indonesia is SMEs (Kumorotomo, 2010). The role of SMEs in Indonesia is crucial, for instance, by providing employment opportunities for expansion and labor absorption (Tambunan, 2009). The role of SMEs, which is essential for the country's economy, can be optimized by implementing digitalization (Fajrillah et al., 2020). In addition, encouraging SMEs to use digital marketing can increase the economy by 2% (Deloitte, 2016). A survey by the Ministry of Communication and Informatics of Indonesia on SMEs showed that selling online can increase income by up to 26% (Informatika, 2017). However, it is not easy for SMEs to enter the digitalization era. There are 64.1 million SMEs in Indonesia, but only 12.82 million SMEs (20%) are digitally literate (UMKM, 2018). To help SMEs enter the digital era, technology-based companies in Indonesia are intensively developing mobile business applications. Previous studies have shown the benefits of mobile applications for businesses in various contexts such as tourism (Zhang et al., 2019), banking (Rafdinal & Senalasari, 2021), and e-business (A. Abdullah et al., 2018). Thus, to get the benefits of mobile business applications, this study will analyze the adoption of mobile business applications in Indonesia.

This study uses extended TAM in analyzing the adoption of mobile business applications. This study uses the TAM (Davis, 1989) with external variables (i.e. subjective norms, self-efficacy, and facilitating conditions) and the main variables of TAM (i.e. perceived ease of use, perceived usefulness) (Lavidas et al., 2022; Winarno et al., 2021). The use of these additional variables allows a more comprehensive explanation of technology adoption because subjective norms explain social support factors, self-efficacy explains self-confidence to adopt technology, and facilitating conditions explain conditions that support facilities for application adoption (Scherer et al., 2019). In other previous studies, the extended variables were also used as external variables in the TAM in the context of the learning management system (Lavidas et al., 2022) and mobile apps (Rafdinal & Senalasari, 2021). Thus, this study uses extended TAM with these three additional variables to explain the adoption of mobile business applications that can provide a comprehensive understanding, both theoretically and practically.

This paper is organized into six parts. Starting with the introduction followed by the literature review. The next section describes the research method in the third section, followed by results and testing hypotheses. The next section describes the discussion and theoretical implications. Managerial implications, limitations, and ideas for further research are sequentially in the next section.

LITERATURE REVIEW

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) is the basis of the theory used in this study. TAM is a theory and a research model to determine a person's acceptance of certain technologies (Davis, 1985). TAM, a derived model of TRA (theory of reasoned action), was created to show users' understanding of how external factors can influence the main factors in the form of behavior intention, attitude, and actual use (Davis, 1989). TAM has robust and good explanatory power (Yousafzai et al., 2007). Therefore, based on the explanation of TAM, this model is suitable for research that aims to determine the acceptance of the mobile business application by culinary SMEs in Indonesia.

The main constructs in TAM are perceived usefulness and perceived ease of use. These two constructs are used as determinants of individual attitudes towards using a system, which influences attitude, intention, and actual use of the system (Davis, 1989). Many studies have developed TAM by adding several external variables to TAM (Huang et al., 2019; Rafdinal & Senalasari, 2021). The involvement of external variables is used to produce a good research formula. Therefore, this study follows the TAM model proposed previous study using external variables (i.e. subjective norms, self-efficacy, and facilitating conditions) (Lavidas et al., 2022; Winarno et al., 2021). These three external variables are used in TAM to get better predictive power in analyzing technology adoption.

External Factor

External factors are types of external variables divided into characteristics, systems, user variables, and others (Yousafzai et al., 2007). The involvement of external variables in TAM plays an essential role because it can provide a better explanation for certain technology (Scherer et al., 2019). The influence of external variables affects four variables in TAM, namely perceived ease of use, perceived usefulness, behavior intention, and actual use. The external variables used are subjective norms, self-efficacy, and facilitating conditions (Lavidas et al., 2022; Winarno et al., 2021). These three variables can support contextual factors. They are often used as external variables to explain the differences in the benefits of the perceived ease of use and perceived usefulness variables (Lavidas et al., 2022; Winarno et al., 2021). To find out more about the external variables that will be used, here is the explanation.

Subjective Norms

The subjective norms variable was popularized from the Theory of Reasoned Action (TRA) by Fishbein and Ajzen and are a continuation of TAM (Rafdinal et al., 2020). The definition of subjective norms is a person's perception that people who are important to him should or should not perform a behavior (Fishbein & Ajzen, 1975). Someone thinks that if many people tell them to take any action, they will be more willing to do something (Yuen & Ma, 2008). In other words, subjective norms refer to individual perceptions of how important other people are in their social environment so that they can influence their behavior. People who are in their environment, want or expect them to behave in a certain way (Choi & Chung, 2013). The subjective norm in this study is meant by how culinary SMEs in Indonesia perceive the significant demands or references of others in using the mobile business application.

In several previous studies, it was found that subjective norms were used as a construct that could be used to predict behavioral intention (Xie et al., 2017). Subjective norms were used as variables in technology acceptance studies regarding mobile commerce. They found that subjective norms were an essential factor in the use of mobile commerce (Wu & Wang, 2006). The previous study proved the relationship between subjective norms, ease of use, and usefulness in using e-learning among students in Korea (Park, 2009). In the context of technology acceptance in education, subjective norms are used as external variables and have a positive and significant effect on perceived ease of use and perceived usefulness (Lavidas et al., 2022; Scherer et al., 2019; Winarno et al., 2021). From several previous studies, the subjective norms are essential for important in analyzing their effect on the usefulness and ease of use in the context of the mobile business application by culinary SMEs in Indonesia. Thus:

H1a: Subjective norms have a significant positive effect on perceived usefulness
H1b: Subjective norms have a significant positive effect on perceived ease of use

Self-Efficacy

Self-efficacy could be a person's level of certainty in their ability to use a specific system (Bandura, 1982). This ability includes how a person masters a task to achieve the desired result (Bandura, 1982). The benefit of self-efficacy has been tested in several previous studies, such as the acceptance of apparel online shipping (Faqih, 2013) and internet usage (Isaac et al., 2017). Furthermore, self-efficacy is also used in research on mobile payments, and there is a positive effect on perceived ease of use and perceived usefulness (Bailey et al., 2017). In the aspect of internet use, the government in Yemen also proves that self-efficacy affects perceived ease of use and perceived usefulness (Isaac et al., 2017). In this study, it is assumed that users who have a high level of self-efficacy will find it easier to use the business mobile application. Thus:

H2a: Self-efficacy has a significant positive effect on perceived usefulness
H2b: Self-efficacy has a significant positive effect on perceived ease of use

Facilitating Condition

Facilitating condition is a variable that indicates the level of confidence that existing infrastructure and techniques support the system (Venkatesh, 2000). Facilitating conditions are considered obstacles or

supports that affect the perception of ease or perceived difficulty in the task (Teo, 2010). Facilitating conditions include the resources and physical environment needed to use any product, service, or technology (Yadav & Pathak, 2016). Facilitating conditions refer to a person's belief about access to the resources necessary to facilitate each service (Cheong et al., 2004). Many previous studies have also proved facilitation conditions as an essential factor in determining significant use intentions for similar technologies such as the internet, mobile commerce, and cellular banking (Amoroso & Magnier-Watanabe, 2012; Lavidas et al., 2022; Winarno et al., 2021). A previous study on teachers and prospective teachers revealed the relationship between facilitation conditions and system convenience and usability (Teo, 2010). The use of e-learning has found a relationship between facilitating conditions, perceived ease of use, and perceived usefulness (F. Abdullah & Ward, 2016). Therefore:

H3a: Facilitating condition has a significant positive effect on perceived usefulness
H3b: Facilitating condition has a significant positive effect on perceived ease of use

Perceived Ease of Use

Perceived ease of use is the original variable of the TAM (Davis, 1989). Perceived ease of use means a person's level of perception that they will not experience difficulties when using a technology system (Davis, 1989). This perception is formed from experience in using technology (Rafdinal & Senalasari, 2021). Perceived ease of use shows that the perception of innovation is not difficult to learn, understand, and operate (Zeithaml, 2002). In this study, perceived ease of use is the perceived ease of using the mobile business application. Perceived ease of use of information systems in e-learning has proved that there is a relationship between perceived usefulness and behavioral intention (Mohammadi, 2015). Furthermore, a study of educational sites in Taiwan found a significant correlation between perceived usefulness and behavioral intentions (Chen & Tseng, 2012). Next, the effect of perceived ease of use on perceived usefulness is the easier for someone to use a system, the more convinced that the system is useful (Rafdinal & Senalasari, 2021). Then, the effect of perceived ease of use on behavior intentions is that the higher convenience when using a system, the higher intention to use the system. Thus, the possibility to use the system is also getting high (Mohammadi, 2015). Therefore, two hypotheses are proposed below:

H4: Perceived ease of use has a significant positive effect on perceived usefulness
H5: Perceived ease of use has a significant positive effect on behavior intention

Perceived Usefulness

Perceived usefulness is a level that makes people believe that using a technological system, will succeed in improving its performance (Davis, 1989). Perceived usefulness that someone feels about the usefulness of a system will be the primary determinant of using the technology system (Pikkarainen et al., 2004). A person's desire to use a particular system in their daily activities depends on their perception of the usefulness of using the system (Hanafizadeh et al., 2014). A system's perceived usefulness can provide financial improvements such as increasing profits and non-finances, such as customer loyalty (Rauniar et al., 2014). A previous study in the context of information systems using e-learning shows a positive relationship between behavioral intention and actual use (Mohammadi, 2015). A study on the acceptance of the e-procurement system also found the influence between behavioral intention and actual use (Brandon-Jones & Kauppi, 2018). The intention of using mobile business applications will arise if culinary SMEs in Indonesia feel the benefits of using this app. It means that the higher benefits that are felt from a system, the more positive intention to use it, and the higher system being used (Mohammadi, 2015). Therefore, the following hypothesis is proposed:

H6: Perceived usefulness has a significant positive effect on behavior intention

Behavior Intention

Behavior intention as the primary dependent variable is defined as the possibility of an individual using a technology system (Davis, 1989). Behavior intention has a crucial role in the use of a new

technology system (Davis, 1989). In the mobile application, behavior intention can predict attitudes to technology, such as the desire to continue to use and motivate other users (Rafdinal & Senalasari, 2021). Behavior intention is also said to be someone's willingness or seriousness to use new technology (Loanata & Tileng, 2016). In other words, behavior intention is closely related to someone's desire to use new technology. In the TAM, the actual use is the final result influenced by behavior intention (Rauniar et al., 2014). Actual use is a real condition of the use of a specific system that is directly impacted by behavioral intention (Tao, 2009). Actual use can show how often users use a certain technology. Actual use is used to evaluate the frequency with which a person uses the system in the context of social media (Rauniar et al., 2014). It was found that behavior intention had a positive influence on actual use (Rauniar et al., 2014). Furthermore, studying information systems using e-learning also found a significant impact between behavioral intention and actual use (Mohammadi, 2015). Therefore, in this study, it is expected that behavior intention positively influences actual use. Thus:

H7: Behavior intention has a significant positive effect on actual use

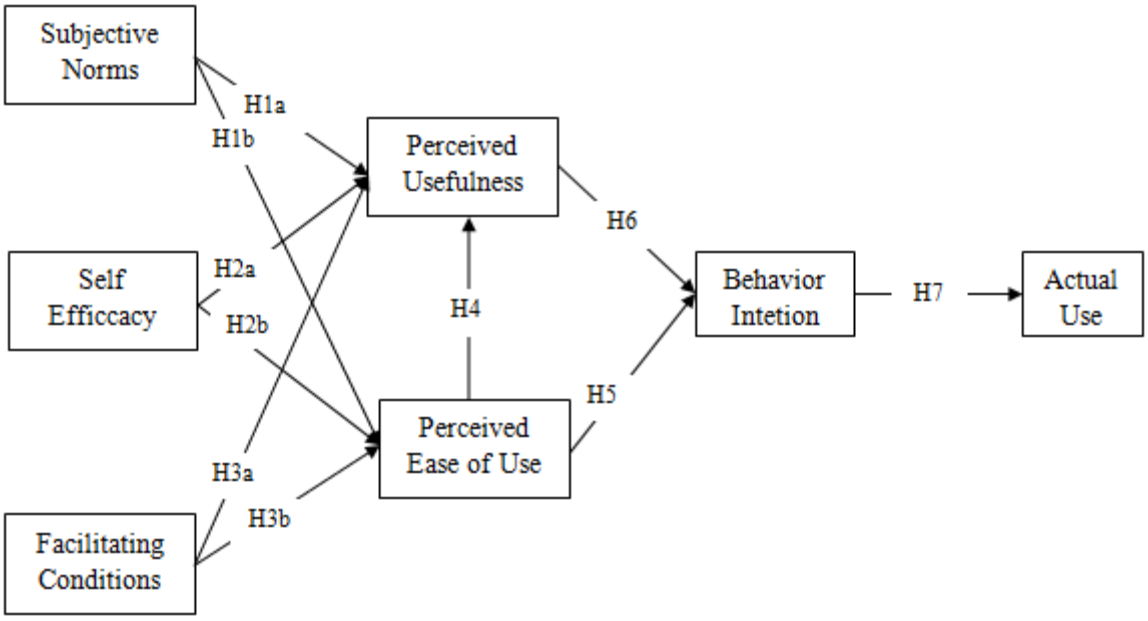

Figure 1. Research Model
Source: Authors

METHODS

This study focuses on SMEs in the culinary sector because the majority of respondents who use mobile business applications are SMEs in the culinary sector. Thus, we focus on this sector and eliminate other sectors. The sample used was 424 respondents of culinary SMEs that have already used the mobile business application for more than six months. In ensuring that the sample size is acceptable, this study uses G*Power to calculate the sample size based on statistical power. The acceptable statistical power value is above 0.8 (Carranza et al., 2020; Hair et al., 2019). The results show the value of the statistical power of the sample size in this study is 0.95, so the sample size in this study is acceptable. To ensure that the distribution of data is not unequal, this research focuses on the SMEs in the culinary sector and excludes other sectors from the list of respondents. Data collection was obtained by using an online questionnaire via a google form. The questionnaire link was distributed through SME social media. The link that was clicked were all filled by SMEs. A total of 460 responses were obtained, but 36 responses could not be analyzed further because some of the questions in the questionnaire were not filled out. We ensure that all questions were filled in by SMEs.

There are three parts to the questionnaire. The first part is about the introduction of the questionnaire that will be filled out by the respondents. The second part asks about the respondent's data. The third part asks about the variables analyzed in this study. The instrument used the Likert Scale from 1 (very bad) to 5 (excellent). Meanwhile, for data processing using the PLS-SEM method to measure the measurement model, structure model, and path analysis (Hair et al., 2019). The technology acceptance model is used by using external variables like the subjective norm, self-efficacy, and facilitation conditions. Variable operations include an explanation of the definition of the variables used, the source or dimension, and indicators that can later be used to compile a research questionnaire. Table 1 explains the external variables and main TAM variables and their indicators.

Table 1. Operational Variable

Variables	Definition	Constructs/Dimensions	Indicators
External factors	The types of external variables are categorized into an organization, system, user personal characteristics, and other variables	Subjective norms (Teo, 2010)	(1) Influenced people (2) Important people
		Self-efficacy (Yoo et al., 2017)	(1) Necessary skill (2) Easy to learn (3) Confident to use
		Facilitating condition (Chung et al., 2015; Teo, 2010)	(1) Guidance availability (2) Assistance availability (3) Instruction availability
Perceived usefulness	A person's level of confidence in using a particular system that will improve job performance	Perceived usefulness (Rafdinal & Senalasari, 2021; Teo, 2010)	(1) Saving time (2) Saving cost (3) Effective (4) Efficient
Perceived Ease of Use	Is the extent to which a person believes in using a system will be free of effort	Perceived ease of use (Rafdinal & Senalasari, 2021; Teo, 2010)	(1) Easy to use (2) Easy to learn (3) Easy to access (4) Easy to understand
Behavior intention	The subjective opportunities of the person who wants to do certain behaviors	Behavior intention (Rafdinal & Senalasari, 2021; Teo, 2010)	(1) Tendency usage (2) Trust (3) Possibility usage
Actual use	Adoption or concrete steps in the use and acceptance of technology	Actual use (Isaac et al., 2017; Kwon & Wen, 2010)	(1) Periodically usage (2) Frequently usage (3) Frequently involved

FINDINGS

Respondent Profile

Table 2. Respondent Profile

Characteristic		Frequency	Percentage
Gender	Male	190	44.9
	Female	234	55.1
Age	18-25	139	32.8
	26-33	153	36.1
	34-41	73	17.2
	42-49	40	9.5
	> 49	19	4.4
Last Education Level	< High school	38	8.8
	High school	148	35.1
	University	238	56.1
Income / month	< 1 Million	93	22
	1 – 3 Million	172	40.5
	3.1 – 6 Million	80	18.9
	> 6 Million	79	18.6
Frequency of using mobile business application/day	< 10 times	262	61.8
	10 – 30 times	133	31.4
	> 30 times	29	6.8

Source: Data processed

In this study, all respondents were asked to fill in demographic data when they filled out the research questionnaire. In this study, demographic data only focuses on several aspects such as gender, age, education, income per month, and frequency of mobile business application usage.

With the data above (Table 2), it can be seen that from a total of 424 respondents, 234 were female. For ages 18-25 years, there are 139 respondents. Meanwhile, there were 153 people aged 34 - 41 years. It means that the age of 18-41 years is the most productive age for work, especially in the field of SMEs. The highest number of education levels was at the university level with 238 people. It means that the respondents in this study have a good educational background. For monthly income, most of them are in the range of 1-3 million per month. It means that the income of SMEs is not too high. Finally, the frequency of using the mobile business application in a day is at most <10 times a day. It means that SMEs do not use mobile business applications too often.

Measurement Model

In testing the measurement model, first, analyze the reliability of the measurement scale on each construct. Then in analyzing the reliability of individual items, the outer loadings on each item are examined. The outer loading must be greater than 0.708 (Hair et al., 2019). Furthermore, in measuring the measurement model, Cronbach's alpha (α), composite reliability (CR), and average variance extracted were also evaluated (AVE) (Hair et al., 2019). The results of the measurement model are shown in Table 3.

Table 3. Outer Model

Construct	Loading	α	CR	AVE
Subjective norms		0.836	0.924	0.859
People who influence my behavior tell me to use a mobile business application	0.932			
People who are important to me tell me to use a mobile business application	0.922			
Self-efficacy		0.925	0.952	0.869
I have the necessary skills for using a mobile business application	0.903			
It is easy to learn how to use a mobile business application to manage my business	0.960			
I'm confident that I could figure out how to use a mobile business application to manage my business	0.932			
Facilitating condition		0.882	0.927	0.809
I have the resources needed to use a mobile business application	0.884			
I have the knowledge needed to use a mobile business application	0.897			
Mobile business application is appropriate with the technology I use	0.916			
Perceived usefulness		0.887	0.924	0.755
Saving time	0.916			
Saving cost	0.935			
Effective and efficient	0.896			
Increase performance	0.709			
Perceived ease of use		0.884	0.921	0.747
Easy to use	0.736			
Easy to learn	0.910			
Easy to access	0.903			
Easy to understand	0.896			
Behavior intention		0.918	0.948	0.859
I tend to use a mobile business application	0.917			
I will use a mobile business application in the future	0.937			
I advise others to use a mobile business application	0.925			
Actual use		0.898	0.937	0.831
I use a mobile business application every day	0.883			
I use a mobile business application frequently	0.935			
I often get involved with a mobile business application	0.916			

Source: Data processed

The measurement of validity can be measured from the convergent validity test by observing the Average Variance Extracted (AVE) value on the condition that it has an AVE value greater than 0.5 (Hair et al., 2019). In Table 3, all variables have a value above 0.5, so it can be said that the variables used in this study are valid. In other words, this study has met the requirements in evaluating the outer model using the validity test. Test discriminant validity using the Fornell-Lacker criterion (Henseler et al., 2015). The Fornell-Lacker criterion requires that all latent variables have more variance to the related indicator variable than share with other constructs in the same model (Fornell & Larcker, 1981). In Table 4, it can be seen that the variance of a latent variable has the highest value when compared to the value of other latent variables. In other words, the results of the discriminant validity in this study are valid.

Table 4 Fornell-Larcker Criterion

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Actual use	0.912						
(2) Behavior intention	0.523	0.927					
(3) Facilitating condition	0.602	0.532	0.899				
(4) Perceived ease of use	0.494	0.623	0.589	0.864			
(5) Perceived usefulness	0.641	0.623	0.674	0.670	0.869		
(6) Self-efficacy	0.366	0.517	0.432	0.498	0.567	0.932	
(7) Subjective norms	0.811	0.460	0.543	0.477	0.619	0.400	0.927

Source: Data processed

Table 5 Goodness of Fit, R^2, and Q^2

Variable	AVE	R^2	Q^2
Subjective norms	0.859		
Self-efficacy	0.869		
Facilitating condition	0.809		
Perceived usefulness	0.755	0.650	0.482
Perceived ease of use	0.747	0.438	0.308
Behavior intention	0.859	0.465	0.393
Actual use	0.831	0.273	0.224
Average score	0.818	0.457	
AVE × R^2	0.373		
GoF = √(AVE × R^2)	0.611		

Source: Data processed

Table 6 Effect Size

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Actual use							
(2) Behavior intention	0.376						
(3) Facilitating condition				0.173	0.129		
(4) Perceived ease of use		0.144			0.128		
(5) Perceived usefulness		0.144					
(6) Self-efficacy				0.098	0.084		
(7) Subjective norms				0.031	0.115		

Source: Data processed

Structural Model

Goodness-of-Fit (GoF) needs to be analyzed to measure the fitness level of the inner model (Tenenhaus et al., 2005). GoF scores are divided into three categories, namely 0.10 (small), 0.25 (medium), and 0.36 (great) (Daryanto et al., 2010). In Table 5, the GoF value is presented as a result of calculating the root of multiplying the AVE value with R^2. In this study, the GoF value is 0.611, it can be included in the great category because it has a value of more than 0.36. Based on the GoF analysis, it can be said that this study has a good quality and accurate model to illustrate the research hypothesis (Daryanto et al., 2010).

Evaluating the R^2 can be used to determine the coefficient determination. R^2 values are categorized into three categories, namely 0.19 (weak), 0.33 (moderate) and 0.67 (strong) (Hair et al., 2019). Based on the proposed research model and the value of R^2, the subjective norms, self-efficacy, facilitating

condition, and perceived ease of use simultaneously predict perceived usefulness of 65% (R^2 = 0.650). Furthermore, subjective norms, self-efficacy, and facilitating conditions simultaneously predict perceived ease of use of 43.8% (R^2 = 0.438). Then, perceived usefulness and perceived ease of use simultaneously predict a behavior intention of 46.5% (R^2 = 0.465). Meanwhile, behavior intention predicts actual use of 27.3% (R^2 = 0.273). Thus, it can be concluded that the prediction of perceived usefulness of 65% is categorized as having a strong effect, the prediction of perceived ease of use is 43.8%, and the prediction of behavior intention of 46.5% is categorized as having a moderate effect. The prediction of actual use is equal to 27.3% categorized as having a weak effect.

Evaluation of Q^2 is needed to assess the predictive relevance of each variable provided that the Q^2 value must be greater than 0 (Henseler et al., 2015). In Stone-Geisser's Q^2 research, it is often used to reflect the scoring criteria for cross-validated predictions of the PLS pathway model (Hair et al., 2019). Furthermore, as shown in Table 5 Goodness of fit, R^2, and Q^2 of perceived usefulness, perceived ease of use, behavior intention, and actual use have a value greater than 0. In other words, the model used has good relevance predictions (Henseler et al., 2015).

The effect size (f^2) needs to be calculated because it is useful for knowing the size of the impact between each variable. The value of f^2 shows the magnitude of the effects of any path model (Hair et al., 2019). The value of f^2 is categorized into three categories, namely small (0.02), medium (0.15), and significant (0.35) (Hair et al., 2019).

Based on the f^2 value, subjective norms (0.115), self-efficacy (0.084), facilitating condition (0.129), and perceived ease of use (0.128) have f^2 value in the weak category on perceived usefulness (see Table 6). The effect of the impact of subjective norms (0.031) and self-efficacy (0.098) on perceived ease of use falls into the weak category. Meanwhile, the facilitating condition (0.173) on perceived ease of use has an effect size that falls into the medium category. The effect of perceived usefulness (0.144) and perceived ease of use (0.144) on behavior intention is in the medium category. The effect of the behavior intention variable (0.376) on actual use is in a strong category.

Hypotheses Testing

In evaluating the path analysis, a bootstrap method was applied using 5000 sub-samples to evaluate path analysis (Hair et al., 2019). The threshold used is 1.96, which means the significance is at the 0.05 level or the 95% confidence level.

Table 7 Path Analysis

Path	Direct		Hypothesis Test	Indirect		Total Effect	
	β	t-value		β	t-value	B	t-value
BI -> AU	0.523	13.249	Accepted			0.523	13.249
FC -> AU				0.152	7.796	0.152	7.796
FC -> BI				0.292	10.005	0.292	10.005
FC -> PEUO	0.387	9.827	Accepted			0.387	9.827
FC -> PU	0.285	6.501	Accepted	0.109	6.117	0.394	8.732
PEUO -> AU				0.250	9.341	0.250	9.341
PEUO -> BI	0.373	7.704	Accepted	0.105	5.222	0.478	12.656
PEUO -> PU	0.282	7.529	Accepted			0.282	7.529
PU -> AU				0.195	5.859	0.195	5.859
PU -> BI	0.373	7.569	Accepted			0.373	7.569
SE -> AU				0.107	6.622	0.107	6.622
SE -> BI				0.204	7.687	0.204	7.687
SE -> PEUO	0.267	6.660	Accepted			0.267	6.660
SE -> PU	0.204	5.043	Accepted	0.075	5.125	0.279	6.866
SN -> AU				0.089	4.531	0.089	4.531
SN -> BI				0.169	5.661	0.169	5.661
SN -> PEUO	0.160	3.752	Accepted			0.160	3.752
SN -> PU	0.249	5.341	Accepted	0.045	3.277	0.294	6.013

Note (s): AU: Actual use, BI: Behavior intention, FC: Facilitating condition, PEOU: Perceived ease of use, PU: Perceived usefulness, SE: Self-efficacy, SN: Subjective norms
Source: Data processed

In the direct effect criterion with the most significant effect, there is an effect on behavioral intention towards actual use with a β value of 0.523 (see Table 7). This means that behavior intention has a direct effect of 0.523 on actual use. As for the direct effect, there is an effect of subjective norms on perceived ease of use with a β value of 0.16. This means that subjective norms have a direct effect of 0.16 on perceived ease of use.

According to the indirect effect criteria, the most significant effect is facilitating condition on behavior intention with a β value of 0.292. In other words, facilitating condition has an indirect effect of 0.292 on behavior intention. Furthermore, the indirect effect criterion with the smallest effect is the effect of subjective norms on perceived usefulness with a β value of 0.045. This means that subjective norms have an indirect influence of 0.045 on perceived usefulness.

The total effect criteria show that the most significant and smallest effects are the same as those of the direct effect. The most significant total effect is the effect of behavior intention on actual use. At the same time, the smallest total effect is on the effect of subjective norms on perceived ease of use. It can be seen that in Figure 2 the effect value (β), significance value (t-value), p-value, and R2 are shown in the context of the use of the mobile business application by culinary SMEs in Indonesia.

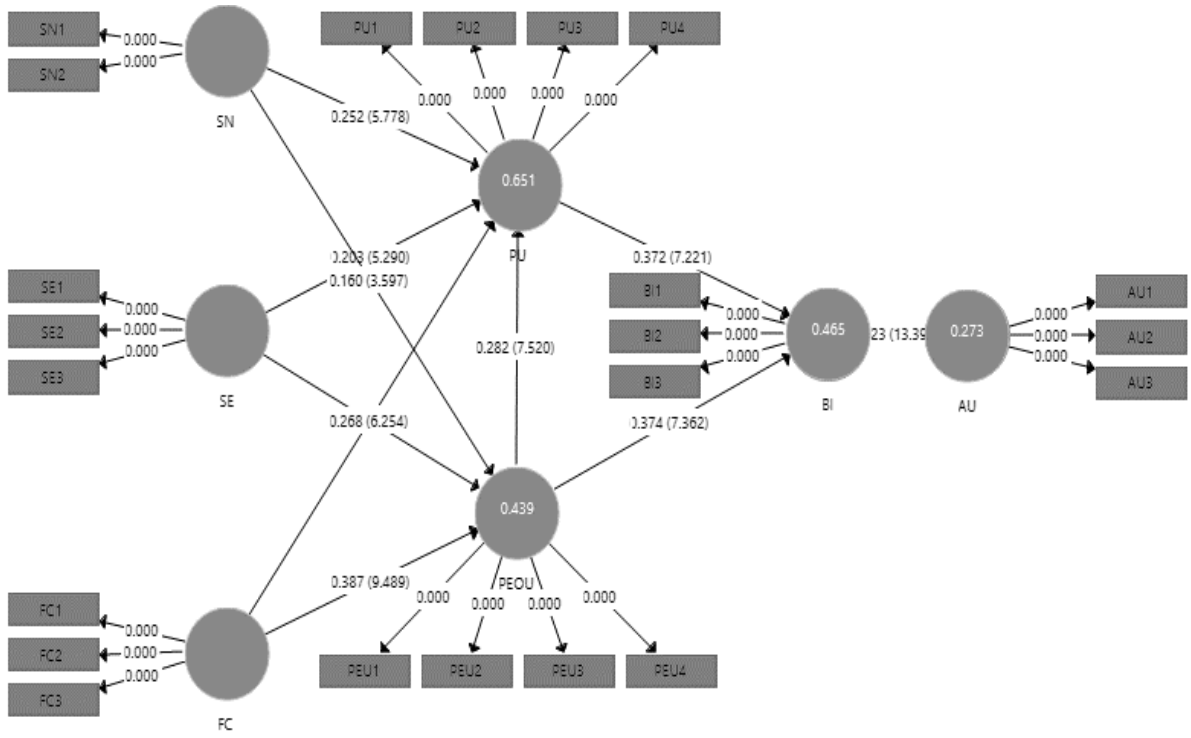

Figure 2. Path Analysis

Note (s): AU: Actual use, BI: Behavior intention, FC: Facilitating condition, PEOU: Perceived ease of use, PU: Perceived usefulness, SE: Self-efficacy, SN: Subjective norms

Source: Data processed

DISCUSSION

In starting the discussion, from the results of data analysis, it was found that the relationship between subjective norms has a positive and significant effect on perceived ease of use and perceived usefulness in the context of mobile business application adoption by culinary SMEs in Indonesia. This can be interpreted that culinary SMEs are encouraged to use the mobile business application, and this has a positive effect on the ease of use of the application. With the existence of many people who recommend using the mobile business application, there is a belief in the minds of culinary SMEs that the mobile business application is useful for their business. This statement is supported by Scherer et al. (2019) who found a positive relationship between perceived ease of use and perceived usefulness of the system. Park (2009) also found a positive relationship between subjective norms and perceived

ease of use in the context of acceptance of e-learning technology. Choi & Chung (2013) also found a relationship between subjective norms and perceived usefulness in the context of social networking. Thus, these results prove that social factors represented by subjective norms affect two variables in TAM, namely perceived usefulness and perceived ease of use.

Self-efficacy has a significant effect on perceived ease of use and perceived usefulness. This means that the level of confidence in self-efficacy by culinary SMEs influences the perception of the usefulness of the mobile business application. This finding is supported by Scherer et al. (2019), users will feel more confident if the system is easy to use and provides benefits. Another finding by Isaac et al. (2017) states that the ease of use of the internet in Yemen will increase user confidence. Bailey et al. (2017) found a relationship between the level of confidence in abilities and perceived usefulness in the context of using mobile payments in retail stores in America. Thus, culinary SMEs are having to dare to try and explore the features of the mobile business application. By having the courage to try and explore the features of the mobile business application, users will be more skilled so they can experience the convenience and benefits of the application. Thus, this proves that there is an important role for the self-efficacy of the user on the perceived ease of use and perceived usefulness of the application.

Facilitating conditions have a significant effect on perceived ease of use and perceived usefulness. The ease of using the mobile business application is influenced by the availability of facilities to support application usage. The more facilities are accessible to culinary SMEs, the ease of using the mobile business application and the usefulness of the application will increase. The infrastructure provided influences someone's easiness to use a system and increases confidence about the benefits of the system (Lavidas et al., 2022; Scherer et al., 2019). A previous study has also said that possible obstacles that will arise when using the system can be overcome by the availability of adequate infrastructure, which will then increase the ease of use (F. Abdullah & Ward, 2016). This proves that facilitating conditions can increase perceived usefulness and ease of use. From these results, it can be concluded that external variables (subjective norm, self-efficacy, and facilitating condition) are important variables in influencing perceived usefulness and perceived ease of use, which are two important constructs in TAM.

In the TAM, perceived ease of use has a significant effect on perceived usefulness and behavior intention in the context of using the mobile business application by SMEs. Supported to a previous study, ease of use positively affects usability and behavioral intention in the context of online shopping (Gefen et al., 2003). Then, convenience can also increase perceived usefulness and behavior intention towards sites (Kim & Song, 2010). Pinho & Soares (2011) support the relationship between perceived ease of use in the context of social networks. Meanwhile, Rafdinal et al. (2020) found perceived ease of use positively affects behavior intention. Thus, this proves that the ease of use of the application will make the application useful which will then affect behavior intention. These results prove that the two main variables of TAM can influence behavior intention in the context of mobile business application adoption.

Lastly, it was found that behavior intention had a positive and significant effect on actual use in the context of using the mobile business application by culinary SMEs. That means that the higher the intention of culinary SMEs to use the mobile business application, the higher its actual use. This finding is supported by a study from Rauniar et al. (2014), which states that behavioral intention has a positive effect on actual use in the context of social networks. Besides, research conducted by Wu & Wang (2006) also shows the same results regarding behavioral intention having a positive effect on actual use in the context of mobile commerce. For culinary SMEs to have a good level of actual use, it must be encouraged by the behavioral intention to use the mobile business application. Thus, these results prove that the more someone intends to use the application, the more likely they are to use it.

CONCLUSION

Knowing the acceptance of technology by culinary SMEs is essential and needs to be known by mobile business service providers. Based on the results of the research and discussion previously

described, it can be generally said that the acceptance of technology in the use of mobile business applications by culinary SMEs is excellent. Furthermore, mobile business service providers must be able to maintain and improve this by considering several variables that are factors in the acceptance of this technology. Facilitating conditions are one of the most influential factors in this study. This means, that to increase the use of the mobile business application by culinary SMEs, mobile business service providers must pay attention to facilitating conditions. One of the things that affect the behavior of SMEs in using mobile business applications is the availability of facilities. The facilities provided by mobile business service providers are believed to have a positive impact on their sales performance. Thus, the mobile business service provider must offer facilities that can encourage the use of mobile business applications by culinary SMEs. In addition, the ease and usefulness of the mobile business application also need to be improved because this will affect behavior intention which then affects actual use.

This research has some limitations that can be used in the next future research. First, to measure the acceptance of the mobile business application by culinary SMEs the researcher can use the mixed-method, quantitative and qualitative methods. The use of mixed methods to ask researchers to get more in-depth answers about technology acceptance by SMEs. Second, for the external variables, we can use other variables. From these external variables, we can know what factors that can influence the acceptance of technology by culinary SMEs. Third, this study is only limited to users of one mobile business application in Indonesia. Thus, the results may be different if analyzed in other applications in other countries.

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