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ANTECEDENTS OF MILLENNIALS' SERVICE USAGE INTENTION: ONLINE GROCERY SERVICE IN INDONESIA

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Abstract

Manuscript type: Research Article

Research Aims: The research aims to fill in the gap in the existing literature on the usage intention of online grocery shopping in Indonesia. Further, the study intends to examine the influence of perceived usefulness and perceived ease of use to intention to use.

Design/methodology/approach: The study was performed on 217 millennial respondents in the are of Jakarta and Greater Jakarta. Further, data results were analyzed using Structural Modelling Equation (SEM), specifically Partial Least Squared method with Smart PLS 3.2.8 software.

Research Findings: Further, the research found that enjoyment is the predictor to perceived ease of use; while insignificant to perceived usefulness. E-WOM, perceived web quality and perceived ease of use are key predictors to perceived usefulness; while subjective norm, visibility, perceived risk, and trust are not the influencing factors. E-WOM and perceived web quality are predictors to trust; while trust is not significantly related to perceived usefulness. Moreover perceived ease of use and perceived usefulness to have an influence on the intention to use online grocery service.

Theoretical Contribution/Originality: Numerous previous studies had indicated factors of subjective norm, perceived enjoyment, visibility, perceived risk (Driediger and Bhatiasevi, 2019) and trust (Alalwan et. al, 2015) as factors that influence consumers' acceptance in terms of perceived usefulness and perceived ease of use. In relation with trust, perceived web quality and e-WOM (Al-debei. et. al, 2015) was found to increase the perception of trust that lead to perceived usefulness of online shopping.

Practitioner/Policy Implication: Due to differences in the cultural, social, and demographic background of users, results are inapplicable to subjects in other countries. Further, online shopping platforms have various different business models and therefore results cannot be generalized into one.

Research limitation/Implications: Explore the ground standard model and characteristics of various online grocery retailers.

Keywords: Online Grocery, Millennials, Perceived Usefulness, Perceived Ease of Use, Intention to Use

INTRODUCTION

The rise of e-commerce platforms have redefined the relationship between users and businesses. With Indonesia deemed as one of the fastest growing e-commerce nations driven by millions of users, it shows the country's huge market size for businesses to satisfy. The market is expected to expand further given the increasing awareness to technology, growing confidence over online transaction, and continuous refinement of technological infrastructure. Having comprehensive understanding of factors that influence adoption of online e-commerce is crucially important for businesses. Due to the importance of matter, the author is intrigued to highlight the topic.

The millennial group in their 20-30s accounted for 64% of Indonesian e-commerce users as stated by IPSOS Indonesia (2018). Online grocery buyers are rather young and urban households seek convenience and value through shopping from e-commerce sites. Given these reasons, the millennial consumer group is chosen as it is likely very relevant to the study in the online grocery shopping context.

The study aims to analyze the key predictors influencing perceived usefulness, perceived ease of use and ultimately intention to use online grocery shopping in Indonesia. There had not been many studies done in the

past with online grocery shopping particularly in the scope of Indonesian consumers. Therefore, the researcher wishes to fill in the research gap through conducting the research.

LITERATURE REVIEW

Retailing

Following technological advancements, many retailers' business models have been affected (Sorescu et al. 2011) because both the retail mix from the supply-side and the behavior of consumers from the demand-side have been changed. To remain competitive in the market, many brick-and-mortar players incorporated online stores into their portfolio (Dawes and Nenycz-Thiel, 2014)

Offline Grocery

Within various shopping channels, consumers tend to behave differently. Various assortment of products and pricing strategies argued as the reasons to explain behavioral differences among users. The intangibility inherent within online shopping often can result in lower shares of online purchases, particularly those goods that require a physical examination before purchasing.

Online E-Commerce

E-commerce is a new shopping channel that has developed tremendously following to technological development. Brands entered the online retail landscape through various strategies, three of which by creating an independent unit, adding a new feature to its existing marketing channel (Chen and Chang, 2003). The common consumer behavior theories and behavioral characteristics theories can be used to better understand ecommerce. Davis (1986) technology acceptance model (TAM) theory can be used to identify the associate motivations that lead to shopping behavior on websites.

Online Grocery Shopping

Online grocery service is technology-based e-commerce that enables individuals and businesses to purchase foodstuffs and various household supplies (Driediger and Bhatiasevi, 2019) through websites or mobile applications. Within the grocery sector, multi-channel retailing becomes the top-of-mind strategy of all major grocery retailers as more shoppers consider to purchase through online. In the context of online grocery, numerous studies have been carried out that focus on the behavior of consumers. Acceptance and familiarity factors do not appear to be sufficient antecedents of the adoption of online shopping (Hand et al. 2009). This highlights the need to conduct further studies on antecedents to adoption.

Technology Acceptance Model

This study is grounded with Technology Acceptance Model (TAM) by Davis et al. (1989) that has been extensively adopted by researchers in predicting and explaining the

acceptance of information technology and technology-related tools. Further, the research used TAM as the underlying theoretical basis to examine the consumers' acceptance of service online grocery in Indonesia. Comprehensive studies regarding TAM had proposed the positive relationship among factors of TAM including perceived ease of use, perceived usefulness, attitude and behavioral intention. Further, many studies also had suggested perceived ease of use to positively affect the perceived usefulness (Davis, 1989). Additional factors were added to the TAM model. These extra factors consider the e-commerce or m-commerce site-specific variables, such as trust and security; demographic characteristics of consumers; social factors, such as perceived enjoyment and social influences; brand equity and past usage experience (Bailey et al., 2017; Groß, 2018; Li et al. 2012; Severi and Ling, 2013; Sun and Chi, 2018; Wang and Li, 2012). Both additional and original factors derived from the TAM model will be used to identify the acceptance and adoption of Indonesian consumers toward online grocery shopping platforms.

Perceived Usefulness

Perceived usefulness is identified by Davis et al. (1989) as one of the key cognitive factors relating to the acceptance intention to use information technology. By definition, perceived usefulness is the level of belief that using technology would improve job

performance (Bonn et al.,2015) and it is influenced by external variables (Davis, 1989). In the website system context, perceived usefulness depends on the technological features, such as services and advanced technology in finding goods (Kim & Song, 2010).

Perceived Ease of Use

Perceived Ease of Use is defined as the extent to which a person believes that a specific information system that he/she used is free of effort (Davis, 1989). Under the context of this study, the information system refers to the online grocery shopping website to use for the buying process. An information technology system when deemed as easy to use will be more likely to be accepted by consumers (Davis, 1989). Further, the term 'effort' does not solely refer to the physical and mental effort in online shopping, but also the level of effort in learning to use (Groß, 2018).

Enjoyment

Individuals have various underlying intrinsic and extrinsic motivations that influence their shopping behavior in different ways. Davis et al. (1992) extended the original Technology Acceptance Model (TAM) to include perceived enjoyment as a hedonic element and an additional determinant of consumers' motivation tool. Similarly, Davis et al. (1992) defined perceived enjoyment as "the extent to which the activity of using the

computer is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated." Among existing studies, perceived enjoyment is also described as the degree to which the activity of using a technology is perceived to be personally enjoyable (Hwang and Kim, 2007) and bring pleasure and fulfillment for their own sake (Rouibah et al. 2016).

Subjective Norm

Individual behavior is prone to influence from external factors. Family, friends and relatives exert perceived pressure on an individual to perform a decision to purchase something (Ajzen, 1991: Laohapensang, 2009). Subjective norm describes a personal perception about a behavior which is influenced by other people (Ajzen & Fishbein, 1978). Thus, it reflects how individuals tend to be lenient to perform a specific behavior and gets affected when significant referent whom they regard as important give approval to the behavior. this study will examine further on the extent to which subjective nor has influence on perceived usefulness, and consequently to intention to use.

Visibility

Visibility is the consumers' awareness of those around them (Bonn et al, 2015). In accordance to network externality studies, individuals tend to think technology will be useful (Shankar & Bayus, 2003) when they witness the usage during the initial phase of its

presence in the market. Higher engaged number of users means greater exposure and broader connectivity.

Perceived Risk

The perceived risk arising from the technology use is defined as a negative factor that affects customer trust in online transactions (Rouibah et al, 2016). In this context, perceived risk is considered as an element of uncertainty to a potential outcome (Chang and Tseng, 2013) over the condition of the groceries and service performance that might not be fulfilled by the vendors through online transaction.

E-WOM

E-WOM is described by Hennig-Thurau et al. (2004) as statements made by various consumers about a product or company that is widely accessible to anyone through the internet. In the study by Hennig-Thurau et al. (2004), E-WOM contributors within the internet are driven by their personal willingness to help others followed with desires for social connectedness.

Perceived Web Quality

The concept of web quality has been gaining attention within the e-commerce sector, and is defined as the quality and overall performance of an online shopping web site (Al-Debei et al., 2015). Consumers lack the sensory experience from online shopping; therefore detailed information is essential to be provided for decision-making. Website

features contribute to the web quality and generate user response from the interaction between the user and website (Gao and Bai, 2014).

Trust

Trust is more crucial in the e-commerce landscape than in brick-and-mortar stores due to the environment being lack sensory evaluation that give more uncertainty and risks. By definition, trust is the "willingness of a person to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor the other party." (Mayer, Davis, & Schoorman, 1995).

As an indicator that plays an important role in examining the actual behavior of the consumer (Akroush & Al-Debei, 2015), trust is a crucial variable that has a certain degree of influence for the success of an online enterprise or initiative (Beldad et al. 2010).

Intention to Use

The original Technology Acceptance Model (TAM) by Davis (1989) considers relationships between perceived ease of use, perceived usefulness and intention to use. Davis (1989) considers intention to use information systems as one of the factors in the Technology Acceptance Model (TAM). The model suggests the actual use of an information technology depends on the intention to use that system, which is

supported by the attitude towards it. Intention refers to the extent individuals perform a certain behavior (Rehman et al, 2019). The information regarding the website is still unclear and thus more research on the system is required.

RESEARCH METHOD

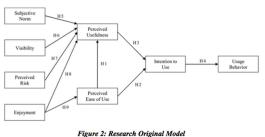
Research Design

This research examines subjective norm, enjoyment, perceived risk, visibility, trust, along with e-WOM and perceived web quality, on their influence on the intention to use online grocery service in Indonesia. Further, the study uses conclusive research method, specifically descriptive research in order to test out hypotheses, examine possible relationships that might arise between variables. The primary data collection will be gathered using quantitative methods, particularly surveys in the form of questionnaires. In addition to that, secondary data information will be collected from relevant academic journals, books, literature studies and websites. Further, this study is considered as a cross-sectional that takes place, collected and analyzed at one specific point of time.

Research Model

There are several reference journals used to formulate the conceptual model of this study. The main journal is by Driediger and Bhatiasevi (2019) that examined the consumer behavior on adoption and usage

intention of online grocery shopping of Thai consumers living in Bangkok, Thailand. In the study, 450 respondents in Bangkok were tested to understand the factors to which they accept or reject online grocery shopping. The results emphasized that perceived ease of use, perceived usefulness, intention to use, subjective norm and perceived enjoyment have a significant relationship on the acceptance of online grocery shopping. Usage behavior variable is omitted for the purpose of this research due to the unit of data being different from the others. The theoretical model below is used as the fundamental model for this study.



Source: Driediger and Bhatiasevi (2019)

Further, a study conducted by Alalwan et al. (2016) on the adoption of tele-banking had resulted in a theoretical framework below, which will be used for the research additional variable model of this study. Trust variable is taken from the model in order to fill in the gap of existing literature on the adoption of online grocery shopping in Indonesia. In addition, trust will be examined its influence on perceived usefulness. The study conducted by Alalwan et. al (2016) found trust to have a significant relationship towards perceived

usefulness of tele-banking in Jordanian context.

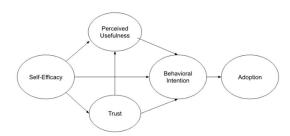


Figure 3: Research Additional Variable Model Source: Alalwan et al (2016)

Additional variables and relationships were adopted from the study conducted by Al-Debei et al. (2015) and Liao et al. (2006) on Jordanian consumer attitudes and roles of habit and website quality, both respectively in e-commerce. Perceived web quality and E-WOM variables are considered for this study to see the influence of these factors on trust and perceived usefulness. The proposed theoretical models by Al-Debei et al. (2015) and Liao et al. (2006) are shown on the following:

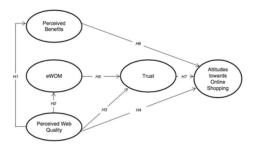


Figure 4: Research Additional Variable Model
Source: Al-Debei et al. (2015)

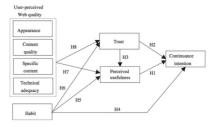


Figure 5: Research Additional Variable Model
Source: C. Liao et al. (2006)

Besides above-mentioned variables, another reference journal is adopted from the study of Parry et al. (2013) on the impact of personal and virtual word-of-mouth on the Technology Acceptance Model. In this case, the word virtual WOM and electronic WOM is often used interchangeably. The model below is used to identify the relationship between virtual word of mouth (vWOM) or electronic word of mouth (E-WOM) on perceived usefulness.

For the simplicity of this research, features of the website including appearance, content quality, specific content and technical adequacy are all regarded as singular under perceived web quality. Hence from the abovementioned reference journals, this study's conceptual model highlights the driving factors that influence intention to use of Indonesian online grocery shopping service.

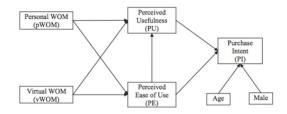


Figure 6: Research Additional Variable Model

Source: Parry et al. (2013)

The research model used as the basis by Driediger and Bhatiasevi (2019) came with several exogenous variables including subjective norm, visibility, perceived risk and enjoyment as the antecedents of perceived usefulness and perceived ease of use. This model is further developed by adding two exogenous variables that represent trust to perceived usefulness, namely e-WOM and perceived web quality that were derived from Al- Debei et al., (2015). Thus in total six exogenous variables will be used in this study.

Given the two additional exogenous models, there is a variable to include that results from some of the exogenous variables mentioned. The added variable namely trust is derived from Alalwan et. al (2016) as the writer wants to consider another factor of perceived usefulness to which filling the research gap in the context of online grocery shopping. Alongside exogenous variables, endogenous variables under this research are trust, perceived usefulness, perceived ease of use, and intention to use (Driediger and Bhatiasevi, 2019; Al-Debei et al., 2015; Alalwan et al., 2016). Incorporating variables from the above-mentioned models, the author proposed a theoretical model as shown on the following:

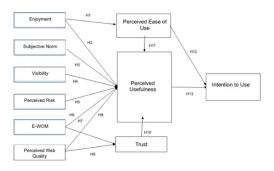


Figure 7: Modified Research Model
Source: Author

Hypotheses

In examining the relationship between the perceived ease of use, perceived usefulness and intention to use; there will be numerous hypotheses to be tested that are on the following:

3.3.1 Enjoyment towards Perceived Ease of Use and Perceived Usefulness

Prior studies done by Mun and Hwang (2003) within web-based IT system found the positive relationship between enjoyment and perceived ease of use, and between enjoyment and perceived usefulness. Considering the past literature and the purpose of this study, the proposed hypotheses are stated below:

H1: Enjoyment is positively related to the Perceived Ease of Use of online grocery shopping

H2: Enjoyment is positively related to the Perceived Usefulness of online grocery shopping

3.3.2 Subjective Norm towards Perceived Usefulness

Subjective norm has been stated to positively affect perceived usefulness (Venkatesh et al., 2003) as the extension of Technology Acceptance Model (TAM) (Venkatesh and Davis, 2000). Therefore, the proposed hypothesis is:

H3: Subjective Norm is positively related to the Perceived Usefulness of online grocery shopping

3.3.3 Visibility towards Perceived Usefulness

Visibility as stated before, originates from the diffusion of theory model by Rogers (1995). Studies investigating the effect of visibility on perceived usefulness is still limited (Driediger and Bhatiasevi, 2019). With this research, the author hopes to fill in this gap by incorporating the added variable to the TAM model in order to see the effects on perceived usefulness of online grocery shopping. The proposed hypothesis is:

H4: Visibility is positively related to the Perceived Usefulness of online grocery shopping

3.3.4 Perceived Risk towards Perceived Usefulness

Due to the nature of online grocery, one of the risks involved is the condition of products received by the consumers that do not meet their expectations upon the provider. As there seemed to be studies, as per author's knowledge, that support the negative relationship, therefore the hypothesis is formulated:

H5: Perceived Risk is negatively related to the Perceived Usefulness of online grocery shopping

3.3.5 E-WOM towards Trust

In the study conducted by Parry et al. (2012), E-WOM is found to be positive and significant in the case of smartphone technology.

Therefore, the proposed hypothesis is:

H6: E-WOM is positively related to perceptions of trust of online grocery shopping

H7: E-WOM is positively related to perceived usefulness of online grocery shopping

3.3.6 Perceived Web Quality towards Trust

Liao et al. (2006) had found high-quality websites to increase consumers' beliefs of perceived usefulness. Therefore, the proposed hypothesis is:

H8: Perceived website quality is positively related to perceptions of trust of online grocery shopping

H9: Perceived website quality is positively related to perceived usefulness of online grocery shopping.

3.3.7 Trust towards Perceived Usefulness

Trust is highly crucial in the context of online shopping transaction, particularly on consumables-like food and groceries (Citrin et al. 2003). Further, trust improves the chances that consumers will gain the expected benefits from the website (Gefen et al. 2003). With this in mind, trust could have an effect on perceived usefulness. Thus, the proposed hypothesis is stated on the following:

H10: Trust is positively related with Perceived Usefulness of online grocery shopping

3.3.8 Perceived Ease of Use towards Perceived Usefulness

In previous studies, it is found that indicated that PEU could positively strengthen PU (Nassuora, 2013). Hence the following hypothesis is proposed:

H11: Perceived Ease of Use is positively related to the Perceived Usefulness of online grocery shopping

3.3.9 Perceived Ease of Use towards Intention to Use

In a study that investigated the effect of cognitive factors in the original TAM Model by Saade and Bahli (2005) confirmed the positive relationship between perceived ease of use and intention to use. Therefore, the formulated hypothesis is as stated:

H12: Perceived Ease of Use is positively related to the Intention to Use of online grocery shopping

3.3.10 Perceived Usefulness towards Intention to Use

This research will focus on perceived usefulness in the sense perception of

consumers towards internet technology increases the intention to purchase and conduct shopping activity using the internet. Past empirical results show that perceived usefulness is the main predictor of intention to use the system (Davis et al., 1989; Gefen and Straub, 2003; Hsu and Lu, 2004). Therefore, the hypothesis is stated as below:

H13: Perceived Usefulness is positively related to the Intention to Use of online grocery shopping

Measurement

The study measures eleven variables that include subjective norm, visibility, perceived risk, enjoyment, trust, perceived web quality, E-WOM, perceived ease of use, perceived usefulness, and intention to use. Each of them will be depicted with a 40-item questionnaire measured in 6-point Likert scale. All items used in the questionnaire are within the online grocery service context in Indonesia.

Both exogenous and endogenous variables are present in the study. Exogenous variables of online grocery shopping include subjective norm, visibility, perceived risk, enjoyment, e-WOM and perceived web quality, which each is measured by several items to determine the degree of effect on others. Further, the endogenous models of this study are trust, perceived usefulness, perceived ease of use, and intention to use, which are taken from the academic literature of Driediger and Bhatiasevi (2019) and Alalwan et al. (2015).

Data Collection Method

The author used convenience sampling as the sampling method to select the respondents. Further, self-administered questionnaire were distributed to respondents through social media platforms in both Indonesian and English. With the research topic, millennials are the target respondents for the study. The study also used secondary data to support the primary data results from respondents. The sources include existing relevant academic journals, websites, books, reports and government publications.

The study will use Structural Equation Method (SEM) in seeking the significance of relationships between variables.

3.6 Sampling Method

The sampling method used will be non-probability sampling, in particular is convenience sampling method. Convenience sampling is chosen to gather the data conveniently at the better interest of respondents. With this method, the associated time and cost to find respondents are relatively smaller compared to other ways of sampling.

RESULT AND DISCUSSION

Prior to the main test, this study conducted both wording tests and pretests to minimize the risk from invalid data. Some wordings and structure of the questions are considered as vague by the wording test participants due to errors resulting from the author's translation from English to Indonesian. By taking into account these feedbacks, items had changes with focus remain similar to original context.

Pretesting is done to ensure the primary data collection method is valid and reliable, and in line with the desired accuracy and consistency of the research. Responses from 37 respondents were successfully gathered within two-days of pre-test period with only 34 individuals passed the screening criterions and can be further analyzed as the sample of target respondents. The researcher used her personal contact and Google Forms platform to distribute the questionnaire, and SPSS software to analyze the data.

Pretesting involves the measurement of validity and reliability of the scale. The indicators used to assess validity include Kaiser-Meyer-Olkin (KMO), Bartlett's Test and Factor Loading. Moreover, reliability is assessed with Cronbach's Alpha. Overall, the items (Appendix 1) are considered to be valid and reliable as the levels of each respective indicator satisfied the ideal requirements. Hence, these variable items can be further used and such modification is not necessary.

The study uses Structural Equation Modelling (SEM) to determine relationship among variables.

Table 1. Analysis result

Hypothesis	Path	T-	F	
	coefficient	values		
H1	0.719	14.400	1.060	
H2	0.154	1.591	0.027	
Н3	0.032	0.579	0.002	
H4	0.056	1.426	0.008	
H5	-0.058	1.442	0.004	
H6	0.108	1.665	0.015	
H7	0.150	2.365	0.521	
H8	0.628	9.195	0.520	
H9	0.318	4.181	0.111	
H10	-0.024	0.369	0.001	
H11	0.391	3.615	0.090	
H12	0.293	3.091	0.089	
H13	0.485	4.985	0.244	

In overall, the results supported most hypotheses in the research. Enjoyment of online grocery shopping are positively related to the perceived ease of use. However, enjoyment is not found as an influencing factor to perceived usefulness. Further, the subjective norm is found to not be positively related to the perceived usefulness, meaning contradicting the emphasis on social influence with regard to online grocery shopping. Visibility is positively related to the perceived usefulness of online grocery shopping, which is in line to the study by Driediger and Bhatiasevi (2019) with Thai consumers on the research. Further, our finding shows that perceived risk not to be a key factor on perceived usefulness. The researcher

predicted E-WOM and perceived online shopping website is predicted to have a positive relationship to trust of online grocery shopping and is supported with the result. Similarly, both variables are also significant to influence perceived usefulness. Trust is resulted as not positively related with perceived usefulness. Further, perceived usefulness is not heavily influenced by perceived ease of use. Ultimately, both perceived ease of use and perceived usefulness can be stated as key predictors to intention to use of online grocery shopping.

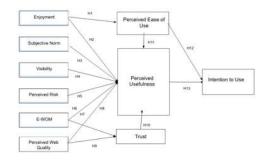


Figure 1. Initial Research Model

Table 2. Summary of R-Square result

Variables	R Square	Adjusted R		
		Square		
Trust	0.482	0.477		
Perceived Ease of	0.514	0.512		
Use				
Perceived	0.649	0.635		
Usefulness				
Intention to Use	0.522	0.518		

Based on the R-Square summary, all variables tested have moderate results in terms of level of predictive accuracy.

In the matter of perceived usefulness, indicators such as E-WOM, perceived web quality, and perceived ease of use to be significantly important in predicting the

perceived usefulness of online grocery shopping service. Given the idea of online grocery, shopping activity is seen as enjoyable, consumers would not regard the use of online grocery shopping websites to be easy to navigate and free of effort. Subjective norms and enjoyment that were predicted by Driedieger and Bhatiasevi (2019) in the context of Thailand to be positively related to perceived usefulness were rather insignificant under this research. Differences in culture might explain the outcomes in between both studies. Indicators such as visibility, perceived risk, and trust were found not to be key predictors of perceived usefulness. Further, the research also gave interesting insights that extend the number of key predictors of perceived usefulness. E- WOM and perceived web quality of online grocery retailers were found to significantly influence the perception of usefulness, confirming the studies of Liao et al. (2006) and Parry et al. (2012) similarly in the context of e-commerce.

CONCLUSION

First and foremost, this research aims to examine the factors influencing the adoption and acceptance of online grocery shopping among Indonesian millennials consumers. The results were sufficient to demonstrate relevant insights to fill in the research gaps that had not been discussed as per the author's knowledge. With other variables mentioned in the previous section to have contributed to perceived usefulness and perceived ease of

use, these two indicators again found as the key predictors to the intention to use a technology system. Further these results are similar to what has been found in the past (Davis et al., 1989; Gefen and Straub, 2000; Hsu and Lu, 2004; Saade and Bahli 2005; Ha and Stoel, 2009; and Dridieger and Bhatiasevi, 2019).

In accordance with the demographic profiles of respondents, most of them are working, meaning online grocery shopping appeals to those who have less free time on the daily basis. Given the time-pressed lifestyle, they would seek convenience and time-saving activities yet support their productivity. The results emphasize how various factors contribute to the adoption and acceptance of online grocery service despite the system is relatively infant in Indonesia.

There are limitations pertaining to the study. First, the clear distinction between online grocery providers remains blurred to a certain extent. According to Yadav and Vijay (2012), retailers can be classified in terms of the number of products and the level of purchase experiences they seek to offer to consumers. However, existing platforms selling grocery vary in terms of number of products and the level of purchase experience to offer to consumers. Secondly, respondents might generalize online grocery retailers without taking into account the differences in each operational strategy. Lastly, the research cannot be generalized to pertain to other

groups. Future researchers may attempt to fill in these gaps in the upcoming study.

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Appendix

Appendix 1 Summary of Pre-test Result

Variables	Items	Cronbach's Alpha	Reliability	кмо	Bariett's Test	Factor Analysis	Result
Subjective	ubjective SN1	0.851	Reliable	0.793	0.00	0.866	Valid
Norm	SN2	1				0.749	1
	SN3	1				0.818	1
	SN4	1				0.895	1
Visibility	VISI	0.711	Reliable	0.643	0.00	0.718	Valid
	VIS2					0.849	
	VIS3	1				0.818	
E-WOM	EWOM1	0.913	Reliable	0.859	0.00	0.894	Valid
	EWOM2					0.827	
	EWOM3					0.788	
	EWOM4					0.909	
	EWOM5					0.915	
Perceived	PWQ1	0.894	Reliable	0.788	0.00	0.760	Valid
Web	PWQ2					0.797	
Quality	PWQ3					0.674	
	PWQ4					0.817	
Trust	TR1	0.894	Reliable	0.798	0.00	0.781	Valid
	TR2					0.868	
	TR3					0.814	
	TR4					0.586	
Perceived Risk	PR1	0.879	Reliable	0.889	0.00	0.782	Valid
	PR2	1				0.758	1
	PR3	1			1	0.616	+
	PR4	1			9	0.727	⊣ ∣
	PR5	1				0.759	-

Enjoyment	ENJI	0.934	Reliable	0.857	0.00	0.898	Valid
	ENJ2					0.930	
	ENJ3					0.922	
	ENJ4					0.904	
Perceived Ease of Use	PEOU1	0.906	Reliable	0.824	0.00	0.778	Valid
	PEOU2					0.815	
	PEOU3					0.815	
	PEOU4					0.730	
Perceived Usefulness	PU1	0.896	Reliable	0.778	0.00	0.755	Valid
	PU2					0.730	
	PU3	-				0.661	
	PU4					0.903	
Intention to Use	ITUI	0.937	Reliable	0.756	756 0.00	0.924	Valid
	ITU2	1				0.953	
	ITU3	1				0.952	

Source: Author's findings