The Indirect Effect of Computer Self-Efficacy of E-Commerce Users on Intention to Use

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Abstract

Indonesia's E-commerce market has tremendous growth and is predicted to become a significant contributor to Foreign Direct Investment. Millennials, profoundly affected by technology and the Internet, are considered the driver's growth of e-commerce. Applying the modified Technology Acceptance Model (TAM) theory, this research analyzes whether perceived ease of use and perceived usefulness mediate the impact of computer self-efficacy on e-commerce users' behavior to use the Lazada platform. The study was a quantitative study with an online questionnaire. Structural Equation Modelling analyzed 200 respondents' data, and the result shows that computer self-efficacy indirectly affects behavioral intention to use through perceived ease of use. Perceived usefulness and attitude towards use are not significant mediators because of their insignificance on their intention. Computer self-efficacy significantly impacts behavioral intention mediated by perceived ease of use, but not by perceived usefulness.

Keywords: Computer self-efficacy; ease of use; usefulness; e-commerce; intention to use.

1. Introduction

The Internet has made businesses being conducted differently nowadays. People no longer need to go to physical stores to buy what they need. Instead, they only need to go online, scroll through the selection of goods, look at reviews, and purchase at any store regardless of location. The numerous benefits of online purchases, such as convenience and easy price comparison, have made more people switch to online purchases or e-commerce (Putera, 2018). As of 2017, e-commerce sales worldwide accounted for 2.3 trillion dollars, almost twice the total sales of 1.3 trillion dollars in 2014 (Statista, 2018).

Indonesia is still in the early education process of adapting e-commerce since many people in Indonesia have not been familiar with online shopping (Makki, 2018). According to Bisara (2019), online retail only contributed 8% of Indonesia's total retail sales as of 2018. However, despite the small contribution and a high number of people who are still unaware of online shopping, it was projected that the e-commerce market in Indonesia would even grow in a staggering number, which was up to 65 million dollars in 2022, from 7 million dollars in 2017 (Nurfadilah, 2018). In 2017, Indonesia's e-commerce market had a remarkable growth of 78% from 45% in 2016, making Indonesia the fastest growing e-commerce market globally (Rolfe, 2018). Correspondingly, this condition attracted foreign investors. Head of BKPM in Indonesia, Thomas Lembong, predicted that e-commerce sectors contributed 15% to 20% of Indonesia's Foreign Direct Investment annually (Pablo, 2019).

Looking deeper at the demographic profile of online shoppers in Indonesia, Millennials are considered the driver's growth of Indonesia's e-commerce industry as they shop more in e-commerce. Many items being bought, from clothes, gadgets to electricity tokens (Muchtar, 2018). Moreover, Millennials were expected to dominate the current and future Indonesian market since their population was expected to be the largest in 2020-2035 (Alvara Strategic Research, 2019). Millennials were born in 1983-2000, and they are heavily affected by the Internet and technology (Valentine & Powers, 2013). Hence, it is crucial to analyze these Millennials' online shopping behavior since they are the biggest consumers for the e-commerce market.

IPSOS Indonesia, one of Indonesia's largest marketing research companies, research in 2018 about E-Commerce Outlook 2018 (IPSOS Indonesia, 2018). The research focused on comparing Millennials' shopping habits and non-Millennials, and the result showed that the order of the top five most e-commerce sites visited by Millennials and non-Millennials was different. The top five most visited e-commerce companies by Millennials were Shopee (51%), Tokopedia (44%), Bukalapak (38%), Lazada (35%), Blibli.com (17%), and JD.ID (11%). On the other hand, the top five most visited e-commerce companies by non-Millennials were Tokopedia (57%), Lazada (46%), Bukalapak (38%), and Shopee (34%). As can be seen, Lazada is quite popular among non-Millennials, but it is not that popular among Millennials. Considering the significance of Millennials in Indonesia's e-commerce

market, Lazada needs to find out the elements that affect this generation's shopping behavior to be more willing to visit and use Lazada for their online shopping.

Established by Rocket Internet in 2011, Lazada is an online shopping platform that offers a wide variety of products, starting from electronics, food, health products, cosmetics, household appliances, and many others (Yusuf, 2018). Besides Indonesia, Lazada has been established in other ASEAN countries also (Aria, 2018). However, being the biggest pioneer of e-commerce in Indonesia, Lazada has not fully grabbed the whole Indonesian market. As of 2016, its online retail only covered 1.6% of the total retail market in Indonesia (Sidik, 2017). Looking at the small market share and the unpopularity of Lazada among Millennials in Indonesia, Lazada must understand the behaviors of potential e-commerce users to take advantage of the growing e-commerce market.

One of the most well-known research models created by Davis (1989) is called the Technology Acceptance Model (TAM). It has been widely used to evaluate the behavior of an individual, precisely someone's intention to use a particular technology or system (Amin, 2007; Hasan, 2007; He et al., 2018; Holden & Rada, 2011; Lai, 2008; Munoz-Leiva et al., 2017; Redzuan et al., 2016; Sun & Jeyaraj, 2013; Yasa et al., 2014). Two antecedents influence individuals in accepting and using a particular technology or system. Those two are perceived usefulness and ease of use (Davis, 1989), which will later be called usefulness and ease of use.

With the attitude in online shopping, variables that can affect usefulness and ease of use also need to be explored. Computer self-efficacy is one of the factors found to be a prominent determinant of both ease of use and utilization of certain technology or systems (Holden & Rada, 2011; Venkatesh et al., 2000). Jeng and Tseng (2018) also found that computer self-efficacy indirectly influenced an online group's buying intention through the ease of use. On the other hand, the relation between computer self-efficacy and usefulness has shown inconsistent results (Hasan, 2007; Lai, 2008). It varies across different populations or technologies, which lead to a variety of outcomes in the e-commerce environment, especially concerning attitude and intention to use (Jeng & Tseng, 2018; Lim & Ting, 2012).

This research is intended to seek out the mediation impact of Lazada users' ease of use and usefulness on the relationship between computer self-efficacy and intention to use Lazada. With the use of the extended TAM by Hasan (2007) and Holden and

Rada (2011), this research would like to analyze whether computer self-efficacy, perceptions on ease of use, and usefulness influence Lazada's users.

2. Literature Review

2.1. Computer Self-Efficacy

Self-efficacy itself is the subjective judgment of an individual in his/her capability to successfully work on a task and get a favorable outcome (Bandura et al., 1997). Venkatesh (2000) mentioned, "self-efficacy can be conceptualized as computer self-efficacy" in the field of Information Technology (IT).

Computer self-efficacy could be explained as someone's subjective belief in his/her competence in utilizing the computer (Compeau & Higgins, 1995). In defining what a computer is, people often have a misconception that computers are personal computers only. Boulos et al. (2011) claimed that smartphones are classified as computers, specifically handheld computers. With smartphones, computing can be done wirelessly, known as mobile computing (Barkhuus & Polichar, 2011). Therefore, computer self-efficacy is not only for personal computers but also for other devices such as smartphones. There are three dimensions to measure computer self-efficacy, which are magnitude, strength, and generality (Compeau & Higgins, 1995).

2.2. Ease of Use

Perceived ease of use is an essential element affecting user acceptance and utilization of a technology or system (Venkatesh et al., 2000). Davis (1989) explained ease of use as "an individual's subjective opinion on whether using a particular technology or system is free of any kind of effort." Similarly, Venkatesh and Davis (1996) defined ease of use as "one's perception of how easy it is to use a technology or system." Ease of use measures how easy the user utilizes and learns a particular system (Redzuan et al., 2016).

In conclusion, ease of use can be described as someone's subjective evaluation of the extent of effort needed to utilize a particular technology or system. It has three main dimensions: physical effort, mental effort, and ease of learning (Davis, 1989).

2.3. Usefulness

Perceived usefulness is "one's subjective judgment of whether using a particular system would

enhance his/her performance" (Davis, 1989). Similarly, Renny et al. (2013) defined usefulness as one's subjective expectation that utilizing a specific technology or system will create improved performance. Hence, the research will define the usefulness of using a certain technology or system to improve an individual's performance. Usefulness has four main dimensions: job effectiveness, productivity, time-saving, and the meaning (importance) of the system to someone's job (Davis, 1989).

2.4. Attitude to Use

Numerous studies (Munoz-Leiva et al., 2017; Venkatesh et al., 2003) have verified the pertinent of one's attitude in influencing him/her to accept and utilize technology or system. Because one's cognitive abilities towards a system are reflected in his/her thoughts and feelings, which will eventually affect his/her attitude towards the system (He et al., 2018), about IT industry, Venkatesh et al. (2003) defined attitude as one's behavior towards using IT. Hence, it can be said that one's attitude towards e-commerce can be indicated by his/her favorable or unfavorable feelings related to using technology or system to fulfill his/her task (Chiu et al., 2005). Li and Zhang (2002) have developed four dimensions to determine one's attitude towards e-commerce: to accept the Internet as a shopping channel, the appeal of a specific Internet store, tolerance for risk of a specific Internet store, and trust in a specific Internet store.

2.5. Intention to Use

Dixon et al. (2014) defined behavioral intention as "someone has perceived probability that he/she would engage in a given behavior." Furthermore, Wolters (2003) argued that behavioral intention could be presumed to predict one's intention at a future time point. Concerning e-commerce, Pavlou, and Fygenson (2006) elaborated that online shopping intention is "the extent to which an individual intends to do a transaction online." Therefore, the intention to use in the current study is defined as the extent of one's personal intention to make an online transaction.

There are three measurement items to evaluate the intention to use: (1) one's intention to use an e-commerce website when he/she is given a chance, (2) one's prediction that he/she would use an e-commerce website in the future when he/she is given an opportunity, (3) the likelihood that one will purchase online through an e-commerce website shortly (Ajzen, 2005; Venkatesh & Bala, 2008). These three measurement items will be applied to evaluate the intention to use in this research.
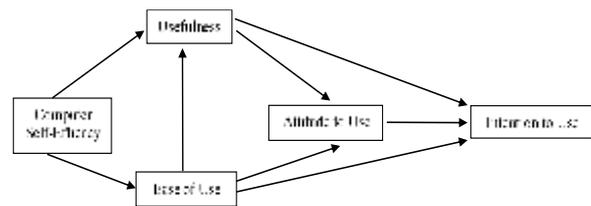

Figure 1. Theoretical Framework

The essential element influencing one's technology acceptance and usage is computer self-efficacy (Amin, 2007). When a person is more confident of his/her capability in using a computer, it will be more likely for him/her to believe that using a particular system is effortless (Holden & Rada, 2011; Lai, 2008). Higher computer self-efficacy will create a more supportive perception that utilizing a particular technology or system will develop individuals' performance (Lai, 2008). When individuals believe they can finish a task using a computer, it amplifies their perception that adopting a particular technology or system will provide more excellent benefits. Besides, computer self-efficacy was indirectly associated with online shopping through the ease of use (Hasan, 2007; Jeng & Tseng, 2018). Hence, the first hypothesis is:

H1a: Computer self-efficacy impacts ease of use significantly.

H1b: Computer self-efficacy impacts usefulness significantly.

The more positive someone's belief of using a specific system is effortless, the more supportive one's attitude towards using the system (Davis, 1989; Hasan, 2007; Munoz-Leiva et al., 2017; Park et al., 2014). Juniwati (2014) also has validated that ease of use significantly affected e-commerce, and easier usage will evoke a more positive attitude. Additionally, ease of use affects the system's attitude towards use indirectly through usefulness (Davis et al., 1989; Hasan, 2007; Lim & Ting, 2012; Munoz-Leiva et al., 2017).

Meanwhile, if someone accepts that utilizing a particular technology or system will raise his/her accomplishment of work, the more supportive his/her attitude towards the system will be (Davis, 1989). On the other hand, users will have a more positive attitude towards e-commerce or a particular technology because of the perceived benefits that the system provides (Chiu et al., 2005; Hasan, 2007; Holden & Rada, 2011; Juniwati, 2014; Munoz-Leiva et al., 2017). This leads to a second and the third hypotheses, which are:

H2a: Ease of use impacts the attitude to use significantly.

H2b: Usefulness impacts the attitude to use significantly.

H3: Ease of use impacts usefulness significantly.

Venkatesh and Davis (1996) disclosed that ease of use and usefulness directly affected using a specific system. The same results were also demonstrated in information technology usage (Hasan, 2007; Sun & Jeyaraj, 2013) and online buying behavior (Chiu et al., 2005; Jeng & Tseng, 2018; Sin et al., 2012). In the online shopping environment, the effect towards intention to use can be indirect through usefulness, as the more comfortable the use of technology, the more beneficial it can be (Venkatesh et al., 2000). Referring to the information, the fourth hypothesis is:

H4a: Ease of use impacts the intention to use significantly.

H4b: Usefulness impacts the intention to use significantly.

Someone's attitude is an essential element that can influence him/her to accept and utilize technology or system (Munoz-Leiva et al., 2017; Venkatesh et al., 2003). His/her cognitive abilities towards a system are reflected in his/her thoughts and feelings, which will evoke a positive attitude towards the technology or system (He et al., 2018). A more positive attitude will generate a higher intention to utilize technology or system in e-commerce (Lim & Ting, 2012). Hence, the fifth hypothesis is:

H5: Attitude to use impacts the intention to use significantly.

3. Methods

As this research was quantitative, the researchers surveyed by distributing questionnaires with 20 measurement items. Three categories of data were used: nominal, ordinal, and interval. Nominal data were used for screening questions, such as gender, and the scale used was dichotomous. Ordinal data were for questions such as education level, and the scale used was a category. Interval data was for all exogenous and endogenous variables. These interval data used a 5-point Likert Scale to represent strongly disagree to agree strongly.

The respondents of the research are millennials who have ever used Lazada. A simple random sampling method is applied in this research by distributing the questionnaires online, utilizing social media, and making it accessible. Total respondents of 239 filled in the questionnaire, but there were only 200 valid respondents. Kline (2011) stated that the sample size should be at least 100 or 200 samples to be reliable. Larger sample size will prevent sampling error, improper solution, and lower accuracy of parameter estimates.

The female respondents comprised 50.45% of the total population, whereas the rest were male. Furthermore, the age of respondents was between 19 to 24 years old (45.09%), between 25 to 30 years (37.05%), and between 31 to 36 years old (17.86%). The education level of the majority of the respondents was a bachelor's degree (66.96%), followed by senior high (17.41%), diploma (8.93%), and the rest had a master's degree. Afterward, all data were processed by applying Structural Equation Modelling (SEM) and analyzed by Amos software.

4. Results

Table 1 exhibited the mean, standard deviation, and correlation. The average ranged from 3.0263-3.2883. Correlation analysis was performed to know the existence of multicollinearity, and all variables showed a correlation of less than 0.7, meaning there was no multicollinearity (Hair et al., 2010).

Table 1. Descriptive Analysis

	Mean	*SD*	*CSE*	*PEU*	*PU*	*AU*	*BI*
CSE	3,0983	1,5704	1				
PEU	3,1650	1,5411	0,1719	1			
PU	3,2017	1,4994	0,1674	0,0773	1		
AU	3,0263	1,4986	0,3977	0,2560	0,2080	1	
BI	3,2883	1,5305	0,0882	0,1433	0,1383	0,0978	1

Notes: SD: Standard Deviation, CSE: Computer Self Efficacy, PEU: Ease of use, PU: Usefulness, AU: Attitude to Use, BI: Intention to Use

4.1. Reliability and Validity Analysis

In SEM analysis, both reliability and validity can be assessed using several confirmatory Factory Analysis (CFA) (Hair et al., 2010). According to Table 2, the factor loading of each indicator was above 0.5. The AVE for both exogenous and endogenous variables was above 0.5, and Construct reliability (CR) for both exogenous and endogenous variables showed a value greater than 0.7. Since the models for exogenous and endogenous variables have passed convergent validity and construct reliability, the measurement model for all variables was valid and reliable. Table 3 showed the goodness of fit measures summary, which demonstrated a good fit with all data, and analyzing the path parameters' process could be continued.

Table 2. Validity and Reliability – All Variables

Variable	Constructs	Factor Loading	AVE	CR
Computer Self Efficacy (CSE)	→ CSE1	1.37	1.943	1.1932
	→ CSE2	1.45		
	→ CSE3	1.36		
Usefulness (PU)	→ PU1	0.773	0.630	0.836
	→ PU2	0.831		
	→ PU3	0.819		
Ease of use (PEU)	→ PEU1	0.745	0.653	0.849
	→ PEU2	0.842		
	→ PEU3	0.791		
Attitude to Use (AU)	→ AU1	0.773	0.681	0.895
	→ AU2	0.807		
	→ AU3	0.887		
	→ AU4	0.830		
Intention to Use (BI)	→ BI1	0.859	0.770	0.909
	→ BI2	0.923		
	→ BI3	0.849		

Table 3. Model Fit Summary

Model Fit Measurement	Acceptable Fit	Result
CMIN/DF	≤ 3	1.609
GFI	≥ 0.85	0.913
AGFI	≥ 0.85	0.877
RMSEA	≤ 0.08	0.055
TLI	≥ 0.85	0.961
NFI	≥ 0.85	0.923

Notes: GFI – Goodness of fit index; AGFI – Adjusted Goodness of fit index; RMSEA – Root mean square error of approximation; TLI – Tucker Lewis index; NFI – Normed fit index
Source: Hair et al., (2008), Kline (2011)

Table 4. Non-Standardized Coefficients of The Models

Hypothesis	Estimates	Standard Error	p-value
H1a: CSE → PEU	0.214	0.069	0.002**
H1b : CSE → PU	0.234	0.076	0.002**
H2a : PEU → AU	0.327	0.077	***
H2b : PU → AU	0.310	0.076	***
H3 : PEU → PU	0.059	0.086	0.491
H4a : PEU → BI	0.192	0.097	0.049*
H4b : PU → BI	0.183	0.096	0.057
H5 : AU → BI	0.032	0.104	0.757

Notes: *p < 0.10; **p< 0.05 and *** p < 0.01

Based on Table 4, the following are the outcome of the relationship between the variables:
1. The p-value was < 0.05, and thus, H1a and H1b were accepted. This means that computer self-efficacy impacts the ease of use and usefulness significantly. The impacts are 0.214 and 0.234, respectively.
2. The p-value was < 0.05, and thus, H2a and H4a were accepted. This means that ease of use impacts

attitude to use and intention to use significantly. The impacts are 0.327 and 0.192, respectively.
3. The p-value was < 0.05, and thus, H2b was accepted. This means that usefulness has a significant impact on the attitude to use. The amount of the impact is 0.310.
4. The p-value was > 0.05, and thus, H3 was rejected. This means that there is no significant influence of ease of use on usefulness.
5. The p-value was > 0.05, H4b was rejected. This means that there is no significant impact of use on the intention to use.
6. The p-value was > 0.05 and thus, H5 was rejected. This means that attitude to use has no significant impact on intention to use.

5. Discussion

5.1. Computer Self-Efficacy on Ease of Use and Usefulness

The result shows that computer self-efficacy impacts the ease of use and usefulness significantly. This result is aligned with past studies, which showed that computer self-efficacy significantly impacts the ease of use and usefulness. The higher someone's confidence in his/her skill to utilize a computer, the higher his belief that utilizing a specific system will be effortless (Hasan, 2007; Holden & Rada, 2011; Lai, 2008). Furthermore, when an individual is confident with his/her computer skills, that person also believes more than utilizing a particular system will raise his/her accomplishment of work (Hasan, 2007; Holden & Rada, 2011).

5.2. Ease of use and Usefulness on Attitude to Use

The result shows that perceived ease and usefulness affect attitude to use significantly. This result is aligned with past studies, which found that when a person thought the certain system was effortless, that person would have a more supportive attitude towards using the system (Davis, 1989; Hasan, 2007; Munoz-Leiva et al., 2017; Park et al., 2014). Previous studies also showed that when someone believed that a system was beneficial to develop his/her work, his/her attitude toward using that system would be more positive (Davis, 1989; Hasan, 2007; Holden & Rada, 2011; Munoz-Leiva et al., 2017).

Besides, past studies also showed that the relation of ease of use on attitude to use could also be indirect through usefulness (Davis, 1989; Hasan, 2007; Lim & Ting, 2012; Munoz-Leiva et al., 2017). On the

contrary, this research cannot prove that ease of use affect usefulness. This result means that the indirect effect of ease of use on attitude through usefulness is insignificant. This result is aligned with the past studies by Huang (2015), Lee and Lehto (2013), and Pai and Yeh (2013). People can understand that a certain system is beneficial for them, but they might find it inconvenient to utilize it. In this case, the effort to utilize the system does not pay off the benefits of using a particular system.

5.3. Ease of Use and Usefulness on Intention to Use

The result of the research exhibits that ease of use has a significant impact on intention to use. This result is consistent with previous studies (Davis & Venkatesh, 1996; Hasan, 2007; Sin et al., 2012; Sun & Jeyaraj, 2013). A simple innovation is adopted more quickly than a change that requires new skills and understandings.

Previous studies also showed that the relation of ease of use on the intention to use could be mediated by usefulness (Davis, 1989; Hasan, 2007; Venkatesh et al., 2003). However, this research shows that ease of use has no significant impact on usefulness and usefulness and has no impact on intention to use, consistent with Chiu et al. (2005) and Munoz-Leiva et al. (2017). Hence, there is no proof for the mediation impact of ease of use on the relationship between ease of use and intention. According to Adams et al. (1992), when the differences in interfaces are substantial while those in functions are small, ease of use can be more prominent than usefulness since it is a primary differentiation feature. In this case, Lazada has a similar function as other online shopping platforms, and the main difference between those online shopping platforms is only on the interface. This might be why ease of use is verified to impact intention significantly to use while usefulness is not.

5.4. Attitude to Use and Intention to Use

The statistical result demonstrates that attitude to use does not impact the intention to use significantly. It contradicts with the past studies (Chiu et al., 2005; Lim & Ting, 2012; Munoz-Leiva et al., 2017; Venkatesh & Bala, 2008), which showed a positive attitude to use a system would result in higher intention to make use of it. However, studies by Hasan (2007), Lu (2013), and Heiny et al. (2019) show that attitude to use a system was not a significant predictor for intention to use the system. In this case, the different results among studies on the relationship between attitude and intention to use can be due to different contextual conditions (Fishbein & Ajzen, 2010).

5.5. Indirect Effect of Computer Self-Efficacy on Intention to Use

Figure 1 shows that the relationship of computer self-efficacy and intention to use can be mediated by several variables, i.e., ease of use, usefulness, and attitude to use. However, the research result shows that only ease of use significantly mediates the impact of computer self-efficacy on the intention to use, since usefulness and attitude to use do not exhibit any significant relationship to use. The result is aligned with the past studies by Jeng and Tseng (2018) and Hasan (2007), which showed that computer self-efficacy was indirectly related to online purchase behavior or usage intention of particular technology through the ease of use. Someone who has high computer self-efficacy is also someone that has confidence in his/her computer skills. Thus, that individual tends to believe that using a new system will be easier, increasing his/her intention to use a new system.

The mediation impact of attitude to use on the relationship between computer self-efficacy and intention has been inconclusive over the past years. Some research (Chi, 2018; Holden & Rada, 2011; López-Bonilla & López-Bonilla, 2011; Yasa et al., 2014) includes attitude as a mediator model (Original TAM). There are researchers (Davis et al., 1989; Teo & Noyes, 2011; Ursavaş, 2013; Venkatesh et al., 2000) who favor the exclusion of attitude in the model (Revised TAM). Both models are still extensively used until now, and none of them seems to prevail over the other (López-Bonilla & López-Bonilla, 2017). In this research, the insignificant mediation impact of attitude towards use supports the revised TAM model.

Aside from the model, different statistical tools might also explain the discrepancies among studies. Research by Lopez-Bonilla and Lopez-Bonilla (2016) tried to compare original TAM and revised TAM using two SEM methods: Covariance Based Structural Equations Modelling (CB-SEM) and Partial Least Squares SEM (PLS-SEM). The research results show that the original TAM with attitude is a better model than the revised TAM when CB-SEM is applied. On the other hand, revised TAM without attitude is a better one when PLS-SEM is used. This research used AMOS, which is part of CB-SEM, and therefore, this might explain the insignificance of attitude as a mediator.

6.   Conclusions

The research finding shows an indirect effect of computer self-efficacy on the intention to use through the ease of use. The higher the confidence level of an

individual in his/her computer skills, the higher the perception that a particular system's utilization is effortless, and thus, the higher the intention to use the system. On the other hand, usefulness and attitude to use are verified not to demonstrate significant mediation impact because of their insignificance on the intention to use.

Considering the importance of computer self-efficacy on the intention to use, Lazada should educate people to enhance their computer self-efficacy. Lazada can teach how to use computers or other technological devices to help finish the works. By doing so, people will have more confidence in their computer skills. Furthermore, Lazada should also ensure that its website and mobile application is easy to use. The process from browsing until buying the products should be simple and easy.

Despite the findings, the research also has some limitations. First, the research model only considers computer self-efficacy as the element that influences the intention to use. Further research may want to integrate more details that can influence the intention to use. The suggested features can be technology self-efficacy, which was verified to significantly impact the ease of use and usefulness (Holden & Rada, 2011). Technology self-efficacy is similar to computer self-efficacy, but it focuses more on an individual's ability to perform tasks using a specific technology instead of a computer (Holden & Rada, 2011). Furthermore, Chi (2018) also found out that brand equity dimensions and website quality dimensions also significantly influence the intention to use indirectly through the ease of use, usefulness, and attitude to use. In this case, future research can include these factors in the model.

Second, this research included attitude to use in the research model, and the finding shows that attitude to use is a not significant mediator. Previous studies show that there has been inconclusive decision whether attitude should be included or excluded. Further research can try to eliminate attitude and compare the findings with this research.

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