An empirical study on the effect of e-service quality on online customer satisfaction and loyalty

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Abstract: *Acceptance level of e-commerce and online transactions have been tremendously increased. The acceptance rate increases every year and slowly the usage of it become wider covering all aspects of life. This research is about the role of e-service quality towards customer satisfaction and customer loyalty. Customer satisfaction is also tested as mediator in between e-service quality towards customer loyalty. Both play important roles in order to serve customer better and gain the advantages over the competition. The quantitative approached used in this research with a total of 220 respondents from all type of ages who have experienced using the e-services. This research used questionnaire with 25 items using 5 points Likert-scales. Respondent was among the public based on purposive sampling. Overall it took 5 days for the researchers to complete the process. The results indicate that e-service quality and customer satisfaction is positively related to customer loyalty. Both e-service quality and customer satisfaction are important roles as predictors. At the same time customer satisfaction is also show positive results as a control variable between e-service quality and customer loyalty. Such results are important to be used and practiced by the industry plays especially those who are new in the market in order to compete with the largest players. Customer today is very complicated and yet knowledgeable and due to that information and know-how is crucial as part of the strategy in winning the completion among industry members.*

Keywords: *Indonesia, Electronic commerce, Customer satisfaction, Customer loyalty.*

I. INTRODUCTION

Study on Indonesia Ecommerce trends on first quarter 2019 indicates a positive trend towards purchase online among the Indonesia populations. The study revealed that 60.5 % of the population preferred to purchase online rather than traditional method (Fitria, 2017). That study was conducted in all major cities in Indonesia covering all type of ages in population. Such results actually provide a useful information to all business organizations towards the change in pattern and trends of local customers. Business organizations need to change their strategy in order to follow through with the changes in customer preferences, pattern and trends (Pradana, 2016). There is no option at the business organization whether to change or not as there are many new operators that can provide their services according to the market needs, wants and demand.

The following table can provide the insight of changes in pattern based on the recent research conducted towards the acceptance of ecommerce among Indonesia population.

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Product Category	Purchase Online	Purchase Offline
Fashion	73.0%	77.5%
Baby & Kids	18.5%	16.6%
Gadget	41.9%	29.3%
Household equipment	21.5%	32.2%
Electronics	16.8%	13.5%
Food and Beverages	16.7%	29.2%
Hobby and collections	16.3%	11.9%
Makeup, body & skin care	32.9%	31.8%
Transportation ticket	13.7%	4.1%
Entertainment ticket	13.0%	10.4%
Hotel booking	10.3%	3.4%

Source: (Azizah, 2018)

The results indicate that for the time being fashion items are the most items purchased on dual method which are online and offline. Beside that products such as gadgets, cosmetic based and tickets are preferred online

Business organizations at the same time need to ensure that they improve their service quality in order to survive in the industry. There are at least 4 major online platforms in Indonesia that provides online trading namely Shopee, takopedia, LAZADA and Bukalapak. There are many more competitors in the market excluding that operated by individual using their small-scale social media platforms. The challenges faced by the service providers is to keep customer and keep them stick to the customer lifecycle. Service provider must think the best way in keeping the customer and get them to be loyal. One of the way as recommended by marketing scholar is by improving the service quality. Service quality have been studied since many years ago towards various industry and geographical areas. Marketers however identified that some of the results or findings conducted in the past is no longer practicable as the customer today derived from a different population. It was said the drastic changes in customer preference is because they are the new generations. The new generations were brought up in a difference way with cellular phone, internet, online games and social media. Their characteristics is totally different hence its justified why most of the same areas of topic need to be revisit for new record purposes.

II. LITERATURE REVIEW

2.1 Customer loyalty

Customer loyalty is the consequences of a prolong customer satisfaction level over the services provided by the service providers. Customer enjoyed a consistent enjoyable experiences with the services and that positive experiences may involve emotional and physical attributed based satisfaction (Abdur Rehman, Osman, Aziz, Koh, & Awais, 2019). Service provider depends on the customer loyalty in order to get their position strong in the market. Loyal customers according to past research is proven to support the service provider despite strong competition or creative advertisements by the competitor to attract customers (M. F. Shamsudin, Shabi, & Salem, 2018). The loyal customer is an asset to the service providers as they generate income and support the sales of the business.

It is also known that customer loyalty helps the service provider to gain high profits. loyal customer has high tendency for repeat purchase (M. F. M. F. Shamsudin, Esa, & Ali, 2019). Besides that, they also help the service providers to communicate and campaign the products or services to their networking. Loyal customer act as a referral to other new customers (Tabrani, Amin, & Nizam, 2018). Loyal customer also makes direct approach to other potential customers by

sharing their experiences, product features and benefits. Loyal customer also willing to produce testimonial that can be used by the service providers to advertise and campaign on their acquisition drives.

Customer loyalty also helps the organization to increase their brand positioning and brand image. Loyal customer helps service provider to strengthen brand image in the market (Limakrisna, Priatna, & Roswina, 2018). Loyal customer never failed to recommend the brand to other people. They like to talk the good things about the product and would happy voluntarily to explain the good thing about the product or service providers. It is therefore, very important for service organization to have a large volume of loyal customer (Siagian & Cahyono, 2014). The benefits of loyal customer are also extended to the staff. Organization that focus towards customer will results to customer satisfaction and customer loyalty (Baharudin Kadir, Shamsudin, Nurul, & Mohd, 2020). Good high profit and high business turnover will also have resulted to employee satisfaction. Employee that are satisfied will contribute and perform better to their customer.

2.2 Customer satisfaction

Customer satisfaction have been studied since many decades ago but remain relevant until today (Hasim, Shamsudin, Ali, & Shabi, 2018). The generation last 4 decades could be no longer in the customer cycle. Generation change and the same goes to their pattern, preferences and attitude (Ahmed, Tarique, & Arif, 2017; Lau, Cheung, Pires, & Chan, 2019; Nguyen, Nisar, Knox, & Prabhakar, 2018). Today Indonesia is dominated by a young and middle age people. The age representing majority of target market in the population. Service provider must understand how they current population thinks, behave and react to the market on many things (Kant & Jaiswal, 2017; Moghavvemi, Lee, & Lee, 2018; Yilmaz, Ari, & Gürbüz, 2018). Past research (Eberle, Milan, & Dorion, 2016; Forsythe, 2016; Khamis & AbRashid, 2018) stated that the current generations were brought up in a different ways and their decision making or purchase decision could be different from the previous generations (M.F. Shamsudin, Razak, & Salem, 2018b). (Hirata, 2019; Liu et al., 2019; Rita, Oliveira, & Farisa, 2019) stated that customer satisfaction is the feeling of happiness upon purchasing or subscribing the products or services from providers. The overall feeling translated whether customer is satisfied or not based on customer expectations (Chicu, Pàmies, Ryan, & Cross, 2019; Hirata, 2019; W. H. Kim, Cho, & Kim, 2019). Should the expectation be high but the deliverable is low than the result will be the otherwise round where customer will become dissatisfaction (Chicu et al., 2019; Gerdt, Wagner, & Schewe, 2019; W. H. Kim et al., 2019). Providers that managed to understand customer needs and wants by meeting the expectation will produce customer satisfaction (M. F. M. F. Shamsudin, Esa, et al., 2019). It is vital for any business organization especially service based to meet customer expectations in order to achieved customer satisfaction (Davras & Caber, 2019; Gerdt et al., 2019; W. H. Kim et al., 2019).

Customer at 21st century according to (B. Kadir & Shamsudin, 2019) is more knowledgeable and well informed (Broetzmann, Kemp, Rossano, & Marwaha, 1995; Davras & Caber, 2019; Zhang, Zhang, & Zhang, 2019). They have access to information and know exactly what they want from the market (Borishade et al., 2018; Broetzmann et al., 1995). The high competition among the industry players created another gap that lead to advantage to customer (Amin et al., 2017; Amin, Shah, et al., 2019; Owczarczuk, 2010). Customer today have more bargaining power and they are demanded (Mohd Farid Shamsudin & Razali, 2015), complicated (Sallaudin Hassan & Shamsudin, 2019), and difficult to managed (S. Hassan, Shamsudin, & Mustapha, 2019). Acceptance towards online business and purchased started to increase gradually when the market is currently dominated by the new generations (Owczarczuk, 2010; Segarra-Moliner & Moliner-Tena, 2016; Xia & Jin, 2008). Customer today prefer to use online as they have been exposed to digital technology ever since they grow up (M.F. Shamsudin, Ali, Ali, & Shabi, 2019). As such, according to (Herhausen, Kleinlercher, Verhoef, Emrich, & Rudolph,

2019; K. Kim, Jun, & Lee, 2014; Xia & Jin, 2008) service provider need to carefully meeting the customer needs and change their marketing strategy towards market and customer oriented.

The needs to achieved customer satisfaction is important as satisfied customer have the tendency to repurchase (Gerpott & Bicak, 2016; Saafein & Shaykhian, 2014). Satisfied customer will come back to the providers and support the business and retain in the lifecycle (Mohd Farid Shamsudin, Ali, Wahid, & Nadzri, 2019). Such situation, lead to advantage to service providers as they will have enjoyed steady market share and growth (Belwal & Amireh, 2018; Gerpott & Bicak, 2016; Iwashita, Shimogawa, & Nishimatsu, 2011). Customer satisfaction also lead to increase in revenue and profit (Chen & Yang, 2015; Iwashita et al., 2011). Competition in the industry with limited market share lead to industry players to put extra effort in customer acquisition (Mahendrawathi, Astuti, & Nastiti, 2015). The acquisition drive is actually more expensive than keeping the current customers (M. F. M. F. Shamsudin, Ishak, Hashim, et al., 2019). Past research (Chen & Yang, 2015; Iwashita et al., 2011; Mahendrawathi et al., 2015) claimed that keeping customer is much cheaper than effort to customer acquisition. Provider may need to spend more cost in advertising, trade events and communication cost in order to create awareness about their products, whereas the current customer is already familiar and willing to support the business by repeat purchase (Belwal & Amireh, 2018; Gerpott & Bicak, 2016; Iwashita et al., 2011). Very frequent that satisfied customer is not only being supportive in terms of purchasing but also helps the business organization in communicating to others (M. F. M. F. Shamsudin, Ali, Nadzri, & Wahid, 2019). Customer satisfaction will lead to customer to share their positive experience to others (Herhausen et al., 2019; K. Kim et al., 2014; Saafein & Shaykhian, 2014). Business organization or service provider will enjoy free promotions from their own customer (Owczarczuk, 2010; Segarra-Moliner & Moliner-Tena, 2016; Xia & Jin, 2008). The act of satisfied customer will bring benefit to service provider. They will not easily switch although invited by competitors through advertisements, promotions or discounts (M. F. M. F. Shamsudin, Ali, Wahid, & Saidun, 2019). Customer satisfaction will lead to customer to stay away from the competitor market driven (Keramati et al., 2014; M.-K. K. Kim, Park, & Jeong, 2004; B. Yang & Ng, 2010).

Service provider effort in keeping satisfied customer must be on continuous basis as there is no guarantee that customer will remain loyal in the customer lifecycle (Hahm, Chu, & Yoon, 1997; Mwakatumbula, Moshi, & Mitomo, 2019; Y. Yang, Xu, Yang, & Chen, 2018). (Razak & Shamsudin, 2019) urges that service provider to hide the satisfied customer so that they will not go to any competitors. Customer in online shopping basically have no legal contract to be obedient to the service provider (Amin, Al-Obeidat, et al., 2019; Ghazzawi & Alharbi, 2019; Klein & Jakopin, 2014; Lommerud & Sørgard, 2003). They can actually move to competitors without much switching cost (Ghazzawi & Alharbi, 2019; D. J. Lee & Ahn, 2007; Mahendrawathi et al., 2015). The fact that they stay loyal is because they are satisfied with the service grant by the service providers (M. F. Shamsudin, Shabi, et al., 2018). Customer satisfaction will later turn into customer loyalty (Basha, Mason, Shamsudin, Hussain, & Salem, 2015). Loyalty is the highest level of customer group where they will support the service provider without much considerations towards competitors (Chicu et al., 2019; Hirata, 2019; Liu et al., 2019; Rita et al., 2019). (Mohd Farid Shamsudin & Razali, 2015) urges that service providers to spend more on keeping the customer as it will be a treasure (A. Parasuraman, Zeithaml, & Berry, 1994) to the service providers or business organization (A. Parasuraman, Berry, & Zeithaml, 1993).

As mentioned by (M. F. Shamsudin, Shabi, et al., 2018), that there is not much obstacle for customer to switch in terms of online shopping as there are various online platform offered attractive services for customer to choose (Davras & Caber, 2019; Gerdt et al., 2019; Zhang et al., 2019). The decision making is depends on the customer as there is minimum switching cost incurred in order to change the online shopping service provider (W. H. Kim et al., 2019). Service provider need to put

more effort to maintains the customer and at the same time delighted the customers using the customer relationship management approach (Dabrowski, Brzozowska-Woś, Gołąb-Andrzejak, & Firgolska, 2019; Hamzah, Othman, & Hassan, 2016; C. M. J. Lee, Che-Ha, & Syed Alwi, 2020; Li Sa, Choon-Yin, Chai, & Aik Joo, 2019). Today, customer can have gone in a split second as they have choice (M. F. Shamsudin, Nurana, Aesya, & Nabi, 2018). Moreover, the competitor is never stop trying to capture attention by giving more and more promises to attract new customers (Adams, Bodas Freitas, & Fontana, 2019; Gligor, Gligor, & Maloni, 2019; Miao & Wang, 2016; Rapp, Beitelspacher, Schillewaert, & Baker, 2012). Service provider must always monitor the competitor movement in order to keep track on any new thing introduced by the competitor in the market (M. F. Shamsudin, Razak, & Salem, 2018a). The same things also recommended by (C. M. J. Lee et al., 2020), for the service provider to observed and sense in order to become market driven organizations.

(Hamzah et al., 2016) suggested that in order to keep customer remains in the customer lifecycle, service providers must always upgrade their service to be more friendly. Service providers must keep in mind that competitor will never rest to take over position and earn market share (M. F. Shamsudin, Razak, et al., 2018a). Service providers for example must relooked at their interface so that customer enjoyed visiting their website or portal for purchase intention (Li Sa et al., 2019). A friendly and clear communication website for example will benefits the customer in choosing and browsing (M. F. Shamsudin, Shabi, et al., 2018). Such experience will add more points towards customer being satisfied (Razak & Shamsudin, 2019). Service provider should think the best way to provide a fun session when customer visit their platform (Razak & Shamsudin, 2019). Good photo with clear communication and description will enable customer to enjoyed positive experience while browsing through all the catalogue and advertisements (Segarra-Moliner & Moliner-Tena, 2016). Service providers should have focused more on how to give the best customer experience so that they will not think of switching or churn to other service providers (M. F. M. F. Shamsudin, Esa, et al., 2019). The same thinks actually think by the competitors where they are also planning to do the same in order to capture the customer attention and awareness (Forsythe, 2016; Moghavvemi et al., 2018; Yilmaz et al., 2018).

Another important thing that service provider must fulfill is providing a good customer services (Yilmaz et al., 2018). Customer services or support is important as they will act as a middleman between service provider and the customer (Yilmaz et al., 2018). Customer may need to asked questions, raised issues or express dissatisfaction and customer service should take the opportunity to explain and solve the customer problems so that customer is not feel being cheated or left out upon purchase (Sallaudin Hassan & Shamsudin, 2019) After sales services is very important as it may provide a sense of security to the customer when they know they have a good customer service to refer to should they faced difficulty (Gligor et al., 2019). Post sales is important according to (Dabrowski et al., 2019) as the customer satisfaction is measured upon comparison between the customer expectation before and after purchase (M. Shamsudin et al., 2015). The comparison between two expectations can be translated into the result whether customer is satisfied or not.

2.3 E-Service Quality

E-service quality is actually the extension of a traditional service quality but related to online and digital services. Today, customer is very much concerns about the value that they received from the service providers. Fierce competition among industry players create a large opportunity for customer to be selective. Customer today have more options and bargaining power. Customer may demand the best services that meet their needs and demand. At the same time, industry players or service provider need to be more focused in providing the best quality services to customer because they cannot afford to pay for the losses of single customer. The on line services for example did not have much switching barrier that may locked customer to their sole services. As a result, service failure or dissatisfaction is a real disaster that may lead customer to churn.

Service quality is a tool that used by service provider to assess their level of service to customer. The feedback or outcome of service quality will be used as an indicator to rectify problems, gap and loopholes towards service improvement. Service quality in digital services is also known as E-S-QUAL (A. Parasuraman et al., 1993). E-S-QUAL was introduced by (Berry & Parasuraman, 1993; A. Parasuraman, Berry, & Zeithaml, 1991; A. Parasuraman, Zeithaml, & Berry, 1985) consist of four important dimensions related to service quality. The four important dimension are efficiency, fulfillment, reliability and privacy (A. A. Parasuraman, Zeithaml, & Berry, 1991). Those four dimensions are related how the service quality related to online services to be measured.

E-S-QUAL is to be used to measure the service quality related to the website or any digital platform offered by the service providers to customer (A, VA, & A., 2005). The services could be on commerce related or any digital based interactions as part of communication between customer and service providers. The E-S-QUAL also related to the promise made by the service providers in managing the information and safety of transactions or data privacy for the purpose of business only. Customer information should be kept secret within the transactions and for the purposes of transactions and references only (A et al., 2005).

Efficiency as refined by (A et al., 2005) is related to the convenient and ease of using the site. It is related to how friendly is the site in guiding the customer to browse through or use the site as for the purpose of accessing information, communication and transactions. The efficiency is also related to the speed of the page in processing of customer request. The efficiency is important dimensions as it provides convenience to customer and to avoid customer from getting tired and move to other site. Fulfillment on the other side is about the promise given by the providers in terms of service delivery and process related to the services related to customer. Fulfillment process is actually covering the complete cycle from the moment customer access to the site until exit. Service providers must make sure that the whole process is towards positive customer experience.

(A et al., 2005) also highlighted the important of system availability of the site. It is more towards the readiness and availability of the site at the time stipulates or at the time used by customer. The site should be ready to serve anytime. System availability is critical for the service providers since digital businesses is unlimited to time zone and geographical areas. As such it must be assured ready for operation every time customer intend to use. Service providers must ensure minimum service failure and a strong problem escalation on any issues related to the system. Beside that Parasuraman et al., (2005) also highlighted the important of data privacy in dealing with the digital service providers. The privacy clause and promised should be made clear in order to instill customer trust. Privacy issues have become a big issue recently and customer is no more tolerate with their details for the purpose of digital transactions.

III.   METHODOLOGY

This research is about the role of e-service quality towards customer loyalty with customer satisfaction as the control variable. The role of customer satisfaction in this research was as a mediator between e-service quality and customer loyalty. The data from this quantitative study was collected from 275 questionnaire distributed among the online customer that have experienced using the online purchase. Self-administered questionnaire was adopted data using purposive sampling. Items used in this questionnaire were adopted from various past studies. 3 subject matter in marketing were approached fro face validation of the questionnaire before the pilot test was conducted. There are some changes made on the questionnaire but mostly related to the grammar, spelling and few structure of sentences. Overall the questions used are easy to understand by the target respondent. Overall there are 5 items used for e-service quality and customer satisfaction. Customer loyalty was

measured using only 4 items. 7Likert-point were used to all items which 1 = strongly disagree and 7 representing strongly agree. The hypothesis was measured using structural equation model.

IV.   FINDINGS

Table 1 below is the summary of respondents' profile. There are 145 respondents (65.91%) took the survey. It was found that male respondent is more cooperative in answering the survey as compared to female. This research also found that male response faster than female in terms of answering all the questionnaire. Majority of respondent are working with government offices. There are also 5.45% below 20 years old and 6.36% above 50 years old. 97% of respondent experienced at least more than 4 times using the online transactions. Only less than 3% were new in the online services. Respondent rate is only 80% out of 275 questionnaires distributed.

Table 1: Respondents' details

Descriptions	Frequency	Percentage
Gender		
Male	145	65.91%
Female	75	34.09%
	220	100.00%
Employer		
Government	85	38.64%
Private	70	31.82%
Self-employed	65	29.55%
	220	100.00%
Age		
<20 years	12	5.45%
20 - 29 years	44	20.00%
30 - 39 years	85	38.64%
40 - 49 years	65	29.55%
50 and above	14	6.36%
	220	100.00%
Frequent used		
1 - 3 times	5	2.27%
4 - 6 times	113	51.36%
7 - 10 times	70	31.82%
More than 10 times	32	14.55%
	220	100.00%
Education level		
Secondary school	44	20.00%
Bachelor degree	96	43.64%
Master degree	76	34.55%
Doctorate	4	1.82%

220	100.00%

Table 2 below is the results related to overall reliability of the constructs and factors loading. The results also indicate that the chi-square is 124.21 and df is 48 at p-value=0.0000. Results for RMSEA is 0.076 while GFI is 0.9. Readings for AGFI is 0.79 and SRMR is 0.028. It also recorded that the result for CFI is 0.82 and finally IFI is 0.91. Composite reliability for e-service quality, customer satisfaction and customer loyalty are 0.97, 0.93 and 0.91. The AVE for each is 0.91, 0.94 and 0.93. The overall results are good and fits

Table 2: Overall reliability of the constructs and factors loadings of indications

Items	Factor loading	t-value	MSV	ASV	AVE	CR
e-Service quality			0.74	0.55	0.91	0.97
ESQ 1	0.91	24.5				
ESQ 2	0.95	28.24				
ESQ 3	0.93	28.49				
ESQ 4	0.89	17.54				
ESQ 5	0.77	18.69				
Customer satisfaction			0.73	0.64	0.94	0.93
CS1	0.99	21.9				
CS2	0.91	21.21				
CS3	0.92	21.93				
CS4	0.89	19.31				
CS5	0.83	19.94				
Customer loyalty			0.59	0.55	0.93	0.91
CLO1	0.94	21.29				
CLO2	0.91	20.04				
CLO3	0.72	14.04				
CLO4	0.73	14.67				

Notes: Chi-square=124.21, df=48, p-value=0.0000, RMSEA=0.076, GFI=0.91, AGFI=0.79, SRMR=0.028, CFI=0.82, IFI = 0.91

In this study, the discriminant validity was also assessed. According to Hair et al. (2010), the square root of the AVE value for each structure should be larger than the shared relationship coefficients to establish the discriminant validity of the factors in the model.

Table 3 confirmed the discriminant validity. These results also demonstrated that all measures were reliable (Bagozzi and Yi, 1988). Means, standard deviations and correlations of latent variables are presented in Table 3. The results in Table 3 indicate that all correlations are significant.

Table 3: Means, standard deviations and correlations of study constructs

	Mean	SD	e-Service quality	Customer satisfaction	Customer loyalty
e-Service quality	4.12	0.75	(0.92)		
Customer satisfaction	4.21	0.78	0.85	(0.93)	
Customer loyalty	4.23	0.74	0.63	0.79	(0.84)

Notes: All correlations are significant at the 0.01 level (two-tailed test). SD: Standard Deviation. The numbers in the cells of diagonal line are squared root of AVE

Table 4: Path estimates of structural models

Hypothesis		Standardized path coefficients	t-values	Result
H1	e-Service quality -> Customer satisfaction	0.27	5.21	Supported
H2	e-Service quality -> Customer loyalty	0.25	4.72	Supported
H3	Customer satisfaction -> Customer loyalty	0.51	6.12	Supported

In the present study, the hypotheses were tested using structural equation modelling. Therefore, the fit indices values of the appropriate model, the values for path estimates are shown in Table 4. e-Service quality influences Customer satisfaction positively ($\beta = 0.27$ p < 0.001), supporting H1.

Further, e-Service quality influences customer loyalty positively ($\beta = 0.25$ p < 0.001), thereby supporting H2. Customer satisfaction influences Customer loyalty positively ($\beta = 0.51$ p <0.001), H3 is supporting. Table 5 below is the path estimates of structural models. According to partial mediation model, e-service quality predicted customer satisfaction ($\beta = 0.27$ p < 0.001) and customer satisfaction predicted customer loyalty ($\beta = 0.51$ p<0.01). This results show that although the indirect effect of e-service quality on customer loyalty through mediation of customer satisfaction was 0.37 ($\beta = 0.27$ X $0.51 = 0.14$ p < 0.001), the direct effect of e-service quality on customer loyalty was 0.25 (p < 0.01). The direct effect is stronger than the indirect effect.

Table 5: Path estimates of structural models

	Standardized path coefficients value

	Full mediation model		Partial mediation model	
	β	t-value	β	t-value
e-Service quality -> Customer loyalty			0.25	4.72
e-Service quality-> Customer satisfaction	0.29	6.13	0.27	5.21
Customer satisfaction -> Customer loyalty	0.74	19.23	0.51	6.12

V.   DISCUSSION AND CONCLUSION

The research is about the measurement between the e-service quality towards customer loyalty with the customer satisfaction as the control variable. The results show that both e-service quality and customer satisfaction have a positive relationship towards customer loyalty. The roles of both predictors and customer satisfaction as mediators is very important in the current situation where the industry is facing hard competition among the industry players. Online services are getting positive response and based on research is at the growth rate in Indonesia. Customer have started to participated after witnessing the flexibility, convenient and easy approach for the transactions. Customer who previously only wait and see have started to apply using the online. This research indicates to the industry the important of e-service quality especially for competition purposes in earning the market share and business growth. Small players in online may need to practice to study on the areas related to e-service quality in order to compete with the big and experienced online services provider. The result is undoubtedly similar to past research related to service quality and customer satisfaction.

The role of customer satisfaction have been well established in the literature (Min & Min, 2011; Nguyen et al., 2018; Ramanathan, Di, & Ramanathan, 2016; Shahzadi, Malik, Ahmad, & Shabbir, 2018) and it is considered as a revisit to the areas because of the different geographical areas of study as well as culture (M. Shamsudin et al., 2015). Service providers need to ensure that they realign their marketing and corporate strategy towards customer driven. Understanding the customer needs and wants is important over a long term specially to sustain in the industry. Service providers should consider to gain support from satisfied customer so that it will helps the business to grow and survive.

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