Service quality role on customer's loyalty of Indonesia internet service provider during Covid-19

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Abstract

The present study developed a conceptual research framework for potential predictors of loyalty to intention and loyalty to the action ofinternet service providers. This study examined whether customer loyalty of Indonesia service provider was related to service quality dimensions (namely network quality, customer service, information quality, security, and privacy) by providing empirical evidence of the relationship among there variables. Customer loyaltywas reflected by the indicators of loyalty to intention, loyalty to action, and willingness to recommend to others. This is to fill the research gap generated by the fact that many previous studies have only studied up to the intention phase and/or have jumped to the action phase without looking at the intention phase. A quantitative approach through a questionnaire survey was conducted in primary data collection.Out of 400 internet service provider customers surveyed in this study that collected through internet online survey. The findings and results show: Firstly, network quality directly influences attitudinal loyalty. Secondly, customer service directly influences attitudinal loyalty. Thirdly, information quality directly influences attitudinal loyalty. Fourthly, securityand privacynot only directly influence attitudinal loyalty but also influence behavioral loyalty. Finally, attitudinal loyalty directly influences behavioral loyalty. The contribution to academicians interested in the same research topic was the conceptual model. It contributed to the understanding of the cognition-to action loyalty phase framework, also known as the four-stage loyalty phase framework.

Keywords: Attitudinal loyalty; behavioural loyalty; internet service provider; service quality.

INTRODUCTION

The phenomenon of industrial development in Indonesia has grown rapidly and has led to competition among companies aimed at gaining a bigger market share and profits by penetrating markets to attract new customers and developing the ability to maintain customer loyalty (Damuri et al., 2017). Building customer loyalty becomes the most important tasks for telecom companies operating in a market that is gradually becoming saturated (Hwang & Kim, 2018). Besides, competition leads to customers

becoming more critical in terms of the products and services they use, thereby further encouraging companies to retain their existing customers (Hermawati, 2013).

Practitioners and academicians believe that loyalty becomes the most important task in maintaining the existence of a company. The ability to retain existing users and strengthen loyalty appears to be critical in gaining competitive advantage (Abu-Alhaija et al.,2018;Lopez-Miguens & Vazquez, 2017). In recent years, academic research has supported factors that can increase and maintain loyalty. Oliver (1999) describedthatif a companycansatisfythecustomers needs better than the competitors, then the company will be easy to create customer loyalty. The positive influence of service quality towards consumer loyalty has been demonstrated by several previous studies, which means the high quality of service can lead to the high loyalty (Akroush et al., 2010; Jaiswal et al., 2010; Quach et al., 2016; Seo et al., 2008; Thaichon et al., 2012).

One of the companies in the telecommunications industry that was most needed during the pandemic of COVID-19 is an internet service provider. This is because the government issues work regulations from home and learn from home, where both activities require internet networks that are required from internet service providers or cellular operators. Moreover, the government has appealed that the people do not return to their hometowns in IdulFitri to prevent further outbreaks of COVID-19, hence the usage of online facilities such as video calls will increasing (Ikhsanti, 2020).

As stated by Khoer (2019), there are seven internet service providers in Indonesia, namely First Media, MyRepublic, Biznet Home, MNC Play, Indihome Fiber, CBN, and GIG Indosat. Their services are varied both using the cable and without cable. The providers also usually have several package programoptions that can be tailored to the needs of each customer. Some package programs have also been integrated with cable TV services so that they are more practical and economical. Competition between each provider at the time of this pandemic resulted in a high level of churn rate or the desire to move to another provider that was considered better in terms of service quality(indotelko.com, 2019). Based on these phenomena, the provider needs to concentrate on service quality to decrease the churn rate and increase loyalty.

Quach et al. (2016) stated that service quality plays a role in building the loyalty of the customer towards the provider. The overall service quality assessment in the telecommunications industry comes from the customer's perception of a stable and strong network quality (Lai et al., 2009). It is said that the good service quality provided by the company encourages customer loyalty and profitability for the company.In line withRachmawati and Mohaidin (2019) that foundif companies able to comply with their customers' needs and wants based on their good experience, then loyalty can be achieved. Loyalty consists of loyalty to information, loyalty to a liking, loyalty to intention, or attitudinal loyalty, and loyalty to action or behavioral loyalty (Oliver, 1999; Prasadh, 2018).

As stated by Quach et al. (2016), service quality dimensions are as follows: network quality, customer service, information quality, security, and privacy. Internet users assessed good network quality based on its stability and a strong network. Hence, it can be concluded that the good network quality provided by the internet provider would encourage customer loyalty and company profitability (Lai et al., 2009). Customer service

is an interactive activity to provide what is needed by the customer regarding product or company information, so that if the customer is satisfied with the service provider then the level of loyalty will also increase (Dimyati&Afandi, 2018).

Following Canhotoand Clark (2013), Information quality indicates the accuracy, completeness, presentation, and format of the information provided by the service provider. It can be determined that service providers who provide high-quality information and support facilities can maintain long-term relationships with customers.Thaichon et al. (2014) affirmed that security and privacy are connected with a feeling of customer protection and security during their transactions and usage, then this causes the security system offered by an internet provider will be very important to maintain the security of customer data.

According to Oliver (1999), true loyahlty only can be achieved at the last stage of loyalty which isloyalty to act. Besides, loyalty as a deeply held commitment to reuse, rebuy or patronise a preferred product (goods or service) in the future despite situational influences and marketing efforts having the potential to cause switching behavior, and then the following of this commitment with the performance of actual deeds (Kotler & Keller, 2016; Oliver, 1999). Prior studies defined loyalty as customers' favorable attitude that predisposes them to repeat buying behavior (Rachmawati&Mohaidin, 2018b, 2019).

Several previous studies investigated the relationship between cognitive-affective-conative-action phases in the service industry and they argued that these phases must occur gradually, meanings that no phase should be skipped, specifically in the telecommunications industry (Oliver, 1999; Calvo-Porral& Levy-Mangin, 2015; Kim et al., 2016). Additionally, Chang and Chen (2008, 2009) believed that the cognitive phase became the antecedent ofthe conative and action phase.Onthe contrary, Choi et al. (2010) affirmed that these phases couldoccur simultaneously at the same time, which means the cognitive phase couldinfluence on action phase without passing the affective and conative phases.

In this study, Service quality dimensions were considered in the cognitive phase, meanwhile, attitudinal loyalty was considered in the conative phase and behavioral loyalty was considered in the action phase. The original contribution was the effect of service quality dimensions not only could occur simultaneously on attitudinal loyalty and behavioral loyalty at the same time, but also with passing the mediation effect of affective phase.

This study examined nine hypotheses that measure direct and positive effects among service quality dimensions (namely network quality, customer service, information quality, security, and privacy), attitudinal loyalty, and behavioral loyalty.

METHOD

In this study, Positivism was chosen as the research philosophy, deductive and quantitative study were the research approach, the chosen research strategy was surveying, time horizon was a cross-section, and a questionnaire was used for data collection method. As state by Verma and Sharma (2017), Positivism assumes that reality exists independently of the thing being studied. Practice, this means that the meaning of

phenomena is consistent between subjects. The deductive approach develops the hypotheses upon a pre-existing theory and then formulates the research approach to be tested (Bartlett et al., 2001). The quantitative approach can be most effectively used for situations where there are a large number of respondents available, where the data can be effectively measured using quantitative techniques, and where statistical methods of analysis can be used (Indrawati, 2015). The cross-sectional time horizon is one already established, whereby the data must be collected at a certain point (Joinson et al., 2007). This is used when the investigation is concerned with the study of a particular phenomenon at a specific time.

Primary data is that which is derived from first-hand sources. This can be historical first-hand sourcesor the data derived from the respondents in the questionnaire (Saleh &Bista, 2017).In generating this study, the quantitative method was chosen because this studyaims to investigate the role of service quality on loyalty among Indonesia Internet Service Providers. The unit of analysis in this study was the individual since it focuses on the behavior of users when using an internet service provider. Sampling that was done for the limited generalization towards a specific population of Indonesia internet service providercustomers because the population is dynamic, namely it changes every time.Since this is a quantitative study hence the primary data was collected by distributing questionnaires to the community of internet service provider users. This was the cross-sectional survey-using Internet (namely Google Forms) with 19 questionnaire itemsthat were adapted from Quach et al. (2016).

The indicators to measure network quality were internet connection, internet speed in downloading-uploading data, and internet stability. Customer service indicators were customer service personnel must be knowledgeable, willing to respond to customer inquiries, and reliable. Information quality indicators were the company must provide sufficient information, up-to-date information, and relevant information. The indicators of security and privacy were secure in privacy information, secure in financial information, and secure in a transaction. Attitudinal loyalty indicators were customer intention to be loyal and recommend to others. Behavioral loyalty indicators were customer action to choose a service provider and reuse it for the next time. Additionally, the 5- point Likert scale was chosen as an instrument research scale and interval scale was selected as a measurement scale in this study.

Data collection was taken using non-probability sampling with a snowball sampling technique. This raw data derived from research instruments, such as questionnaires distributed to 400 respondents of internet service providers in Indonesia. Following the terms of quantitative research that the questionnaire items should be tested in construct validity and reliability (Cronbach's Alpha) to check the goodness of data. If the questionnaire items in the pilot study are valid and reliable hence the items can be used for data collection, but in contrary if there is an item and/or several items that not valid and/or not reliable, subsequently the questionnaire items need to be revisedand re-test before generating for data collection (Bartlett et al., 2001).

The next step is processing raw data with Variance-Based Structural Equation Modeling (VB-SEM) orPartial Least Square (PLS-SEM); evaluate convergent validity (outer loading, AVE), discriminant validity (cross-loading, HTMT, Fornell-Larcker

criterion), composite reliability, Cronbach's alpha, path coefficient, p-values, t-value, R^2, and Q^2(Ringle et al., 2013). The rule of thumbs are as follows: outer loading must be higher than 0.7, AVE must be higher than 0.5, Fornell-Larckercomparesthesquarerootofthe AVE valueswiththelatentvariablecorrelations, composite reliability and Cronbach's alpha value between 0.70-0.90, t-value higher than 1.96, p-value lower than 0.05, R^2 indicates 0.75 (substantial); 0.50 (moderate); 0.25 (weak), Q^2 indicates good predictive for Q^2 higher than 0 (Hair et al., 2014; Ringle et al., 2013). The data were analyzed byPLS-SEMfor several reasons, as follows: PLS-SEM does not enforce normal-distributed input data since it is non-parametric,uses a multivariate analysis tool for marketing, and is useful for exploratory testing (namely this study has the intention to explore whether service quality dimensions could influence attitudinal loyalty with passing the mediation effect of affective phase and whether service quality dimensions could affect behavioral loyalty with passing the mediation effect of attitudinal loyalty).

Table 1 delineates that the indicator's loading (outer loadings) in its construct was higher than 0.7. Then, it can be decided that the criterion of discriminant validity was accomplished (Ringle et al., 2013). There were 5 indicators of network quality, 3 indicators of customer service, 3 indicators of information quality, 3 indicators of service and privacy, 3 indicators of attitudinal loyalty, and 2 indicators of behavioral loyalty. Moreover, Cronbach's alpha, Composite Reliability, and AVE value have fulfilled the rule of thumb since Cronbach's alpha and composite reliability werehigher in the range between 0.7-0.9, and AVE washigher than 0.5 (Hair et al., 2014;Ringle et al., 2013).

Table 1
Convergent Validity

Constructs	Items	Outer Loadings	Cronbach's Alpha	Composite Reliability	AVE
NQ	The internet is always well connected at all times.	0.763			
	The internet download speed is in line with my expectations.	0.825			
	The Internet upload speed is in line with my expectations.	0.843	0.829	0.883	0.634
	Internet speed remains stable during peak hours.	0.827			
	Internet speed remains stable outside rush hour.	0.779			
CS	Customer service personnel is knowledgeable about the products.	0.859			
	Customer service personnel is willing to respond to my questions.	0.889	0.817	0.856	0.814
	The technical problems I	0.785			

Constructs	Items	Outer Loadings	Cronbach's Alpha	Composite Reliability	AVE
	experienced were resolved quickly.				
IQ	The company providessufficient information.	0.898	0.873	0.817	0.802
	The companyprovidesupdated information.	0.875			
	The company providesinformation that suits customer needs.	0.879			
SP	I feel that my personal information is protected.	0.893	0.826	0.859	0.862
	I feel that my financial information is protected.	0.921			
	I feel that transactions carried out are secure.	0.914			
AL	I consider myself to be a loyal customer.	0.923	0.869	0.827	0.819
	I would like to inform the positive things about this Internet Service Provider (ISP) to the others.	0.943			
	I would like to recommend this ISP to the others.	0.922			
BL	I would consider this ISP as my first choice to buy services.	0.943	0.865	0.837	0.881
	I would do more business with this ISP in the next few years.	0.946			

Source: data processed

Table 2 showsFornel-Larcker in the criteria of validsince the AVE root score of each construct was higher than the correlation score of each construct (Ringle et al., 2013). AVE root score of each construct, as follows: network quality (NQ) was 0.790, customer service (CS) was 0.850, information quality (IQ) was 0.897, security and privacy were (SP) 0.833, attitudinal loyalty (AL) was 0.805, behavioral loyalty was 0.839 (BL).

Table 2
Fornel-Larcker

	Attitudinal Loyalty	Behavioral Loyalty	Customer Service	Information Quality	Network Quality	Security & Privacy
Attitudinal Loyalty	0.805					

	Attitudinal Loyalty	Behavioral Loyalty	Customer Service	Information Quality	Network Quality	Security & Privacy
Behavioral Loyalty	0.803	0.839				
Customer Service	0.618	0.540	0.850			
Information Quality	0.554	0.528	0.493	0.897		
Network Quality	0.649	0.593	0.644	0.483	0.790	
Security & Privacy	0.551	0.559	0.602	0.426	0.548	0.833

Source: data processed

RESULTS AND DISCUSSION

Result

Table 3
Summary of Research Hypotheses

	Path-Coefficient (ß)	t-value	p-value	Decision
H_{1a}: Network quality affects positively on attitudinal loyalty	0.318	5.762	0.000	Supported
H_{1b}: Network quality affects positively on behavioural loyalty	0.071	1.538	0.151	Not Supported
H_{2a}: Customer service affects positively on attitudinal loyalty	0.211	3.243	0.001	Supported
H_{2b}: Customer service affects positively on behavioural loyalty	-0.144	0,659	0.336	Not Supported
H_{3a}: Information quality affects positively on attitudinal loyalty	0.214	4.476	0.000	Supported
H_{3b}: Information quality affects positively on behavioural loyalty	0.091	1.568	0.114	Not Supported
H_{4a}: Security and privacy affect positively on attitudinal loyalty	0.157	2.944	0.003	Supported
H_{4b}: Security and privacy affect positively on behavioural loyalty	0.148	3.362	0.001	Supported
H_5: Attitudinal loyalty affects positively on behavioural loyalty	0.639	12.581	0.000	Supported

Source: data processed

Table 3 describes the summary of research hypotheses indirect effect model which were indicated by t-value for one-tailed were higher than 1.65, moreover, the p-value must be lower than 0.005 for significance level 5% or confidence level 95% (Ringle et al., 2013). It has been described that this study contains nine hypotheses based on the

theoretical framework and the results show 6 hypotheses out of 9 hypotheses were supported, among others are: H_{1a}, H_{2a}, H_{3a}, H_{4a}, H_{4b}, and H_5. The supported hypotheses, as follows: network quality affects positivelyon attitudinal loyalty (ß: 0.318; t-value: 5.762; p-value<0.05), customer services affects positivelyon attitudinal loyalty (ß: 0.211; t-value: 3.243; p-value<0.05), information quality affects positivelyon attitudinal loyalty (ß: 0.214; t-value: 4.476; p-value<0.05), security and privacy affect positivelyon attitudinal loyalty (ß: 0.157; t-value: 2.944; p-value<0.05), security and privacy affect positivelyon behavioral loyalty (ß: 0.148; t-value: 3.362; p-value<0.05), attitudinal loyalty affects positivelyon behavioral loyalty (ß: 0.639; t-value: 12.581; p-value<0.05).

Table 4
The Value of R^2 and Q^2

Construct	R^2	Q^2
Attitudinal Loyalty	0.523	0.325
Behavioural Loyalty	0.658	0.467

Source: data processed

Table 4 indicates the value of R^2 and Q^2 with the rule of thumbs for $Q^2$is the model will be good prediction if the value is higher than 0.00 and in this study, the value of Q^2 was good. The value of R^2 for attitudinal loyalty was 0.523 in the criterion of moderate and the value of R^2 for behavioral loyalty was 0.658 in the criterion of moderate (Ringle et al., 2013).

Discussion

In this study, it has been found that network quality has a direct effect on attitudinal loyalty. But on the contrary, there was no direct effect towards on behavioral loyalty.Good network quality must-have network stability, fast download, and upload speeds as indicators that affect customer loyalty. Good network quality provided by internet service providers will affect customer needs for positive things such as the intention to repeat purchases or attitudinal loyalty (Quach et al., 2016). In the condition customer commits to repeat purchase, it will boost customers to do repeat purchase or loyalty to action (Oliver, 1999). Hence, it can be said that there would be the mediation effect of attitudinal loyalty on the relationship between network quality and behavioral loyalty.

Based on the findings in this study, regarding the network quality hence the company needs to concern about internet connection, internet stability during peak hours, internet downloading, and uploading speed.In line with SantouridisandRivellas (2010), it was known that attitudinal loyalty also affected by customer service. Nevertheless, there was no direct effect of customer service towards behavioral loyalty, meanings that customer service would affect attitudinal loyalty then attitudinal played a role as mediator between customer service and behavioral loyalty (Oliver, 1999; Rachmawati&Mohaidin, 2018a, 2018b; Quach et al., 2016). In this case, the provider company must have a customer service that can serve its customers in answering and

providing solutions to problems experienced by customers. As can be seen from the findings of this study regardingcustomer service, then the company need to serve knowledgeable, responsive, and reliable customer service personnel.

According to Thaichon et al. (2014), information quality was one of the most important that can influence loyalty. As can be seen in Table 4, information quality affected attitudinal loyalty but did not affect behavioral loyalty directly. This is because the quality of information which is complete, appropriate, and up-to-date that provided by the company to its customers can createattitudinal loyalty. Hence, attitudinal loyalty would become a mediator between information quality and behavioral loyalty.According to the findings in this study, the company has to provide sufficient, up-to-date, and relevant information to the customer.

FollowingQuach et al. (2016), Security and privacy not only directly affect attitudinal loyalty but also directly affect behavioral loyalty. It can be concluded that customer security and privacy are important in achieving customer loyalty towards a company, so security in protecting customer personal information, financial information, and security in transactions is important in achieving loyal customer attitude and behavior. It was found that the company has to make customers feel that their information of personal is covered by their provider, their information of financial is covered by their provider, the transaction with the internet service provider is secured.

As stated by Rachmawati and Mohaidin (2018a, 2018b, 2019), attitudinal loyalty and behavioral loyaltyis the most important in maintaining the existence of a company. Maintaining existing users and reinforcing loyalty appears to be very vitalto gain competitive advantage (Abu-Alhaija et al.,2018; Chang & Chen, 2008, 2009). Following the findings in this study, the company must consider from the customers, among others are their consideration to be a loyal patron of the provider, recommends to others about their provider, commitment to re-use, or re-buy the provider in the future.

CONCLUSION

According to the findings, the relationship between service quality (network quality, customer service, information quality, security, and privacy) and attitudinal loyalty is shown that network quality was the greatest one, then information quality, customer service, security, and privacy. Besides, the relationship between service quality (network quality, customer service, information quality, security, and privacy) and behavioral loyalty is shown only security and privacy that has direct effect. Furthermore, it has been found that there was a direct effect of attitudinal loyalty towards behavioral loyalty.

Following the findings, out of this study showed a detailed investigation of the factors contributing to the loyalty of the Indonesia Internet Service Provider. The findings confirmed that service quality (network quality, customer service, information quality, security, and privacy) affectspositively on attitudinal loyalty. This means that customers who have good experiences in service qualitydirectly have the intention to be loyal to their internet service provider (Wilson &Keni, 2018). In the time customers have the intention to be loyal, they will turn to act faithfully if they feel confident with the service

quality of their internet service provider.In this study, security and privacy as service qualitydimensions affectboth attitudinal loyalty and behavioral loyalty, which implies that when customers have a good service qualityconcerningsecurity and privacy, they will act to be loyal.

The limitation in this study was this study only focuses on Indonesia internet service providers in the recent time, no comparative study was made between internet service providers because the objective of this study was to expand a conceptual model that was able to prove the existence of the role of service quality on customer loyalty by selecting a quantitative study approach, Some dimensions of service quality were found to have an insignificant influence on theseareas, which should be further investigated. Further study can be moderated by age, gender, internet usage rate, length of time, and corporate image in using the provider as a comparative study among internet service providers (Rachmawati&Mohaidin, 2019; Zakiy, 2019).

REFERENCES

Abu-Alhaija, A.S., Yusof, R.N.R, Hashim, H., &Jaharuddin, N.S. (2018). Determinants of customer loyalty: A review and future directions. *Australian Journal of Basic and Applied Science. 12*(7). 106-111. https://doi.org/10.22587/ajbas.2018.12.7.17.

Akroush, M. N., Abu-Elsamen, A. A., Al-Shibly, S. M., &Al-Khaweldeh, F. M.(2010). Conceptualisation and development of customer service skills scale: An investigation on Jordanian customers. *International Journal of Mobile Communications*, *8*(6), 625-653. https://doi.org/10.1504/IJMC.2010.035481.

Bartlett, J.E., Kotrlik, J.W., & Higgins, C.C.(2001). Organizational research: Determining approach sample size in survey research. *Information technology, Learning and performance journal*, *19*(1), 43-50.

Calvo-Porral, C., & Levy-Mangin, J.P. (2015). Switching behavior and customer satisfaction in mobile services: Analyzing virtual and traditional operators. *Computer-Human Behavior,49*(April), 532–540. http://dx.doi.org/10.1016/j.chb.2015.03.057.

Canhoto, A.I., & Clark, M. (2013). Customer service 140 characters at a time: The users' perspective. *Journal of Marketing Management*, *29*(5), 522-524. http://dx.doi.org/10.1080/0267257X.2013.777355.

Chang, H.H., & Chen, S.W. (2008). The impact of customer interface quality, satisfaction and switching costs on e-loyalty: Internet experience as a moderator. *Computers in Human Behavior, 24*(June), 2927-2944. https://doi.org/10.1016/j.chb.2008.04.014.

Chang, H.H., & Chen, S.W. (2009). Consumer perception of interface quality, security, and loyalty in electronic commerce. *Information & Management*, *46*(August), 411-417. https://doi.org/10.1016/j.im.2009.08.002.

Choi, S.-H., Lu, T., & Cai, L.A. (2010). *Dimensions of tourist loyalty-contextual considerations* [Lecture PowerPoint Slides]. Retrieved February 21, 2020, from http://www.slideshare.net/choi79/2010-istte-choi-lu-cai.

Damuri, Y.R., Aswicahyono, H., Christian, D., & Fauri, A. (2017). Kondisi persaingan usaha di Indonesia 1997-2012: Analisis konsentrasi industri dan iklim regulasi. *Economics Working Paper*, *3*(September), 1-24.

Dimyati, M., &Afandi, M.F. (2018). Model empiris membangun kesetiaan pelanggan berbasis kualitas pelayanan dengan mediasi kualitas hubungan pada industri ritel berbasis jejaring *minimarket. Jurnal Manajemen dan Pemasaran Jasa, 11*(2), 311-328. https://dx.doi.org/10.25105/jmpj.v11i2.3048.

Hair Jr, J.F., Sarstedt, M., Hopkins, L., &Kuppelwieser, V.G. (2014). Partial least square structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, *26*(2), 106-121. https://doi.org/10.1108/EBR-10-2013-0128.

Henseler, J., Ringle, C.M., &Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling. *Journal of The Academy of Marketing Research*, *43*(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8.

Hermawati, Y.N. (2013). Pengaruh biaya pemasaran, tarif telepon, dan tarif sms terhadap pendapatan (Studi pada produk kartu pra bayar PT. TELKOMSEL).*Universitas Pendidikan Indonesia.*http://www.repository.upi.edu/perpustakaan.upi.edu.

Hwang, S.Y., & Kim, S. (2018). Does MIM experience affect satisfaction with and loyalty toward O2O services? *Computers in Human Behavior*, *82*(January), 70-80. https://doi.org/10.1016/i.ijinfomgt.2019.102046.

Ikhsanti, D. (2020). Pilihan provider internet rumah terbaik untuk silaturahmi on line (Update 2020). https://www.aturduit.com/articles/provider-internet-rumah-terbaik/.

Indotelko.com. (2019). Indihome miliki komitmen tinggi layani masyarakat di pelosok Timur Indonesia. https://www.indotelko.com/read/1572923028/indihome-timur-indonesia.

Indrawati. (2015). *Metode penelitian manajemen dan bisnis: Konvergensi teknologi komunikasi & indormasi* (1st ed.): RefikaAditama. ISBN: 9786027948549.

Jaiswal, A. K., Niraj, R., & Venugopal, P. (2010). Context-general and context-specific determinants of online satisfaction. *Journal of Interactive Marketing*, *24*(3), 222-238. https://doi.org/10.1016/j.intmar.2010.04.003.

Joinson, A.N., Woodley, A., &Reips, U.D. (2007). Personalization, authentication, and self-disclosure in self-administered internet surveys. *Computers in Human Behavior*, *23*(1), 275-285. https://doi.org/10.1016/j.chb.2004.10.012.

Khoer, M. (2019). Provider internet rumahterbaik dan cara berlanggganannya. https://www.cekaja.com/info/provider-internet-rumah-terbaik-dan-cara-berlangganannya-cek-yuk/

Kim, M.K., Siew, F.W., Younghoon, C., & Park, J. (2016). Determinants of customer loyalty in the Korean smartphone market: Moderating effects of usage characteristics, *Telematics and Informatics*, *33*(February), 936-949.http://dx.doi.org/10.1016/j.tele.2016.02.006.

Kotler, P., & Keller, K.L.(2016). *Marketing Management* (15th ed.). Englewood Cliffs: Pearson Education Limited.

Lai, F., Griffin, M., &Babin, B. J. (2009). How quality, value, image, and satisfaction create loyalty at a Chinese telecom. *Journal of Business Research*, *62*(10), 980-986. https://doi.org/10.1016/j.jbusres.2008.10.015.

Lopez-Miguens, M.J., & Vazquez, E.G. (2017). An integral model of e-loyalty from the

consumer's perspective. *Computers in Human Behavior, 72*(February), 397-411. https://doi.org/10.1016/j.chb.2017.02.003.

Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, *63*(4), 33–44. https://doi.org/10.2307/1252099.

Prasadh, R.R. (2018). Examining the roles of perceived quality and customer satisfaction as predictors of customer loyalty in the Indian e-banking context. *Journal of Management Research, 18*(3), 176-187.

Quach, T. N., Thaichon, P., & Jebarajakirthy, C. (2016). Internet service providers' service quality and its effect on customer loyalty of different usage patterns. *Journal of Retailing and Consumer Services*, *29*(January), 104-113. https://doi.org/10.1016/j.jretconser.2015.11.012.

Rachmawati, I., &Mohaidin, Z. (2018a). Understanding the mediating roles of satisfaction and switching barriers on user experience and loyalty chain in Indonesia GSM Operators. *Advances in Economics, Business and Management Research, ICEBEF 2018 Conference*, *65*, 482-491.

Rachmawati, I., &Mohaidin, Z. (2018b). Understanding user experience, satisfaction, and loyalty of telecommunication service providers in Indonesia. *The European Proceedings of Social & Behavioural Science, ICBSI 2018 Conference,* 360-372. https://doi.org/10.15405/epsbs.2019.08.36.

Rachmawati, I., &Mohaidin, Z. (2019). The roles of switching barriers and corporate image between user experience and loyalty in Indonesia mobile network operators. *International Journal of Science and Management Studies, 2*(1), 48-57.

Ringle, C.M., Sarstedt, M., Schlittgen, R. and Taylor, C.R. (2013), PLS path modeling and evolutionary segmentation. *Journal of Business Research*, *66* (9), 1318-1324. https://doi.org/10.1016/j.busres.2012.02.031.

Saleh, A., &Bista, K. (2017). Examining factors impacting online surveys response rates in educational research: perceptions of graduate students. *Journal of Multidisciplinary Education*, *13*(29), 63-74.

Santouridis, I., &Trivellas, P. (2010). Investigating the impact of service quality and customer satisfaction on customer loyalty in mobile telephony in Greece. *TQM Journal, 22*(3), 330-343. https://doi.org/10.1108.17542731011035550.

Seo, D., Ranganathan, C., &Babad, Y. (2008). Two-level customer retention in the US mobile telecommunications service market. *Telecommunication Policy*, *32*(3-4), 182-196. https://doi.org/10.1016/j.telpol.2007.09.004.

Thaichon, P., Lobo, A., & Mitsis, A. (2012). Investigating the antecedentsto loyalty of internet service providers in Thailand: Developing a conceptual model. *Retailing and Relationship Marketing, ANZMAC 2012 Conference,* 1-7.

Thaichon, P., Lobo, A., Prentice, C., & Quach, T. N. (2014). The development of service quality dimensions for internet service. *Journal of Retailing and Consumer Services, 21*(6)*,* 1047-1058. https://doi.org/10.1016/j.jretconser.2014.06.006.

Verma, G., & Sharma, K. (2017). The Role of quantitative techniques in business and management. *Journal of Humanities Insights, 1*(1), 24-26. https://doi.org/10.22034/JHI.2017.59559.

Wilson, N., & Keni (2018). Pengaruh *website design quality* dan kualitas jasa terhadap *repurchase intention*: Variabel *trust* sebagai variabel mediasi. *Jurnal Manajemen dan Pemasaran Jasa,11*(2), 291-310. https://dx.doi.org/10.25105/jmpj.v11i2.3006.

Zakiy, M. (2019). Citra perusahaan sebagai variabel pemoderasi pengaruh layanan terhadap kepuasan pasien dan niat beralih. *Jurnal Manajemen dan Pemasaran Jasa,12*(1), 51-64. https://dx.doi.org/10.25105/jmpj.v12i1.3149.