How Does Customer Satisfaction Matter in Telecommunication Industry?

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Abstract

As the demand of internet service provider is increasing because of the pandemic, individuals are getting more interested in the quality of internet service provider. It is important for the company to put more attention to its quality and value. Thus, this research aims to examine the effect of service quality, perceived value to customer loyalty. The results proves that service quality and perceived value are important in shaping customer loyalty. In addition, this research proved that customer satisfaction is the underlying mechanism. This research also shed a light on which part of service quality and perceived value that is needed to be focused on. Lastly, implications for internet service providers are discussed.

Keywords:

Service Quality, Perceived Value, Customer Satisfaction, Customer Loyalty

1. Introduction

In this pandemic era, people are staying home all the time and order foods and other things online. Thus, internet and its service provider become essentials. The world is moving toward digital world in an instant, regardless of their readiness. There is many previous research that studied how things turns into digital, such as in society (Hilbert 2022), arts (Yu 2022), health (Purnat 2022), servicescapes (Larasati et al. 2022), digital competence (Montaudon-Tomas et al. 2022; Saltos-Rivas 2022), digital literacy (Siregar 2022; Li and Yu 2022), digital educational games (Kaimara et al. 2022), digital employee experience (Sudrajat et al. 2021), digital business (Bharadwaj et al. 2013), and digital supply chain (Garcia-Reyes 2020). Not all countries, however, are ready with the digital world. Some countries may be more ready and equipped than others. Those countries that are less prepared may rushed things and thus this research intends to investigate it further through its service quality, perceived loyalty, customer satisfaction and customer loyalty.

Indonesia is one of the countries that has not have steady internet before pandemic strikes. During pandemic situation, internet consumption increases significantly as much as 70.3% (Kusnandar and Bayu 2021). This creates an opportunity for internet service provider to offer more internet package or even create new subsidiaries. In this situation where demand is spiking, service provider might prioritize quantity over quality. However, consumers are getting more sensitive to the quality difference and might be less loyal. Thus, this research aims to examine whether or not that is the case in telecommunication service industry. This research proposes that customer satisfaction is the underlying mechanism. The structure of this manuscript is as follows. This manuscript will first introduce all constructs that will be used in the research together with the hypotheses. Then, this manuscript will describe all items that are needed to be measured. Finally, the results and implications will be explained.

2. Literature Review and Hypotheses

2.1 Service Quality

Service quality is perceived to be the most significant factor in evaluating the service's performance. Service quality dimensions are reliability, responsiveness, assurance, empathy and tangible (Parasuraman et al. 1988). Service quality framework has been tested and used to measure service quality in various sector, such as fast-food restaurant (Singh et al. 2021), street food (Gopi and Samat 2020), coffee shop (Juliana et al. 2021), e-commerce (Zehir and Narcikara 2016; Kumaran et al. 2020), hotel (Gunawan et al. 2019), healthcare (Kitapci et al. 2014). Reliability measures whether the service is able to perform the promised service dependably and accurately (Parasuraman et al. 1988). Responsiveness is whether the salesperson willing to help customer and provide prompt service (Parasuraman et al. 1988). Assurance is the knowledge and courtesy of employees and their ability to inspire trust and confidence (Parasuraman et al. 1988). Empathy is whether the salesperson give individualized attention to its customers (Parasuraman et al. 1988).

Previous research has proved that service quality has positive effect on satisfaction (Gopi and Samat 2020; Juliana et al. 2021; Gunawan et al. 2019; Kitapci et al. 2014) and perceived value (Zehir and Narcikara 2016). In this research, we argue that for internet service provider service quality is as important and have positive effect on customers' loyalty. This is especially important in emerging countries, where the customers need more help in getting internet service. When service quality is good, customer will keep on using the service. Please refer to Figure 1. Formally, H1: Service quality significantly affects customers' loyalty in internet service provider

2.2 Perceived Value

Early research has defined perceived value as customers' global assessment on product or service quality in a specific consumption setting (Zeithaml 1988). Other research defined perceived value as the difference between what consumers received and what they give (Zehir and Narcikara 2016; Kotler and Armostrong 2016). Perceived value has been discussed in many areas, such as consumer products (Tsiotsou 2006), green products (Chen and Chang 2013), public transportation (Lai and Chen 2011), and automobile (Yee and San 2011). When consumers perceive the value of the product or service that they received as good, they will be loyal. Previous research proved that perceived value has positive effect on customers' loyalty (Zehir and Narcikara 2016).

Thus, this research proposes:

H2: Perceived value significantly affect customers' loyalty in internet service provider

2.3 Customer Satisfaction

Customer satisfaction has been recognized as an important goal of all business activities (Anderson et al. 1994). Customer will feel satisfied when the service that they received is equal or exceeded their expectation (Kotler and Armstrong 2016). Previous research proved that customer satisfaction is positively related to purchase intention (Tsiotsou 2006) and customer loyalty (Gopi and Samat 2020). At the same time, service quality (Henny and Januarko 2018) and perceived value (Fornell et al. 1996; Tsiotsou 2006) also proved to have positive effect on customer satisfaction. This research proposes that the reason customers are loyal is because they are satisfied with the service. (Figure 1) Formally:

H3: Customer satisfaction mediate the relationship between service quality and customer loyalty in internet service provider

H4: Customer satisfaction mediate the relationship between perceived value and customer loyalty in internet service provider

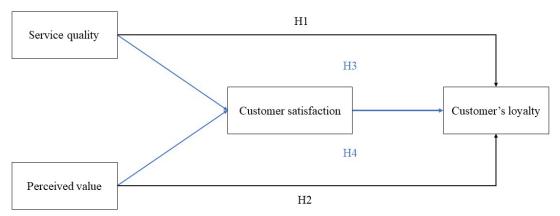


Figure 1. Research Framework

3. Method

One-hundred online participants were given an online questionnaire about the internet service provider of one of telecommunication industries in Indonesia. First, they were given five indicators of service quality, such as reliability, responsiveness, assurance, empathy and tangible (Tjiptono and Chandra 2017). Secondly, perceived value was measured using four indicators, such as emotional value, social value, performance value and value of money (Tjiptono and Chandra 2017). Thirdly, customer satisfaction was measured using three indicators, such as fulfillment, pleasure and ambivalence. Lastly, customer loyalty was measured using four indicators, such as repeat purchases, purchases across, refers other, and immunity to other (Gunawan et al. 2019). All scales were measured using five-point Likert scale from 1 = strongly disagree to 5 = strongly agree.

4. Results

4.1 Data Quality Testing

For reliability testing, the results showed that the Cronbach Alpha for all variable were > .7, which proves that all items were reliable.

4.2 Hypotheses Testing

To test the hypotheses, t-test analysis was run (Table 1). The results showed a significant positive effect of service quality to customer loyalty (t = 5.341, p = .000), with reliability as the strongest indicator. Thus, H1 is supported. Perceived value significantly affects customer loyalty (t = 4.309, p = .000), with performance value as the strongest indicator. Thus, H2 is supported. For mediation analyses, Baron and Kenny method was used (Baron and Kenny 1986). To test H3, the results showed that there was a significant and positive effect of service quality to customer satisfaction ($\beta = .736$, p = .000) and there was also a significant and positive effect of customer satisfaction to customer loyalty ($\beta = .738$, p = .000). Sobel test confirmed that the mediating effect of customer satisfaction was significant and positive effect of perceived value to customer satisfaction ($\beta = .804$, p = .000) and there was a significant and positive effect of customer satisfaction to customer loyalty ($\beta = .738$, p = .000). Sobel test confirmed that the mediating effect of customer satisfaction to customer loyalty ($\beta = .738$, p = .000). Sobel test confirmed that the mediating effect of customer satisfaction was significant (z = 8.362, z = .000). Thus, H4 is supported.

Table 1. Summary of Results

_		Customer satisfaction	Customer loyalty
Service quality			5.341***
Perceived value			4.309***
Mediation:			
•	Service quality	.736***	.738***
•	Perceived value	.804***	.738***

5. Discussion

This research successfully proved that customer satisfaction is the underlying mechanism in telecommunication industry, especially for internet service provider. Service quality and perceived value has significant and positive effect on customer loyalty, both directly and indirectly through customer satisfaction. This is consistent with previous research (Zehir and Narcikara 2016). This showed that customer satisfaction is the key in having customer loyalty. Similarly, previous research confirmed that customer satisfaction is the underlying mechanism between service quality and customer loyalty (Gopi and Samat 2020). This research adds to previous research in service quality (Kitapci et al. 2014; Zehir and Narcikara 2016; Gopi and Samat 2020), perceived value (Tsiotsou 2006; Chen and Chang 2013; Zehir and Narcikara 2016), customer satisfaction (Chen and Chang 2013; Kitapci et al. 2014; Gopi and Samat 2020) and customer loyalty (Zehir and Narcikara 2016; Gopi and Samat 2020) by examining it in telecommunication service industry.

The results showed that the relationship between service quality and customer loyalty was proven to be significant with reliability as the strongest indicator. Consumers think that the most important part of service quality is when they could rely on one service provider. They know that they could use the service in optimum capacity at any time and whatever problems that may arise in using the service, they trust that it will be solved. This is proved to be important in internet service provider. This research suggests that internet service provider focuses on being reliable and trustworthy. Some practical suggestions are they should establish a good internet connection and train their employees so they could deliver good quality service consistently.

From the relationship between perceived value and customer loyalty, performance value was the strongest indicator. This showed that consumers in internet service provider focuses more on the performance objectively, instead on emotional, social and monetary. This is consistent with reliability as the strongest factor in service quality. This research suggests that internet service provider to focus on their internet and their service. In this research, consumers may care less about the value of the money, so the company may charge the service a little bit above the average. Consumers will still use the service as long as the service is performed good, dependable and consistent.

6. Conclusion

This research proved service quality in internet service provider has positive and significant effect on customer loyalty, both directly and indirectly through customer satisfaction. Similarly, perceived value in internet service provider has positive and significant effect on customer loyalty, both directly and indirectly through customer satisfaction. Customer satisfaction has an important role in shaping customer loyalty. Internet service provider should improve their service to become dependable and consistent.

References

Anderson, E. W., Fornell, C., and Lehmann, D. R., Customer Satisfaction, Market Share, and Profitability: Findings from Sweden, *Journal of Marketing*, vol. 58, no. 3, 53–66, 1994.

Baron, R. M., Kenny, D. A., The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations, *Journal of Personality and Social Psychology*, vol. 51, no. 6, 1173–1182, 1986.

- Bharadwaj, A., El Saqy, O. A., Pavlov, P. A., and Venkatraman, N., Digital Business Strategy: Toward A Next Generations of Insights, *Management Information Systems Research Center*, vol. 37, no. 2, 471–482, 2013.
- Chen, Y.-S. and Chang, C.-H., Towards green trust: The influences of green perceived quality, green perceived risk, and green satisfaction, *Management Decision*, vol. 51, no. 1, 63–82, 2013.
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., and Bryant, B. E., The American Customer Satisfaction Index: Nature, Purpose, and Findings, *Journal of Marketing*, vol. 60, no. 4, 7–18. 1996.
- Garcia-Reyes, H., Aviles-Gonzalez, J., Aviles-Sacoto, S. V., A Model to Become a Supply Chain 4.0 Based on A Digital Maturity Perspective, *Procedia Computer Science* 200, 1058–1067, 2020.
- Gopi, B. and Samat, N., The influence of food trucks' service quality on customer satisfaction and its impact toward customer loyalty, *British Food Journal*, 2020.
- Gunawan, E., Sebastian, G. O., and Harianto, A., Analisa Pengaruh Kualitas Layanan Terhadap Kepuasan Pelanggan Menginap di Empat Virtual Hotel Operator di Surabaya, *Journal of Indonesian Tourism, Hospitality and Recreation*, vol. 2, no. 2, 145-153, 2019.
- Gunawan, E., Sebastian, G. O., Harianto, A., Analisa Pengaruh Kualitas Layanan terhadap Pelanggan Menginap di Empat Virtual Hotel Operator di Surabaya, *Journal of Indonesian Tourism, Hospitality and Recreation*, vol. 2, no. 2, 145–153. 2019.
- Henny, R. and Januarko, The effect of hospital service quality on patient loyalty and patient satisfaction (Hospital case in Indonesia), *International Journal of Business and Management Invention*, vol. 7, no. 6, 49–55, 2018.
- Hilbert, M., Digital Technology and Social Change: The Digital Transformation of Society from A Historical Perspective, *Dialogues in Clinical Neuroscience*, vol. 22, no. 2, 189–194. 2022. DOI: 10.31887/DCNS.2020.22.2/mhilbert
- Juliana, B. S., Austine, C. V., Budiono, E. D., and Klarissa, K., Antecedents on Customer Satisfaction Tukuk Coffee Shop: A Perspective Expectation-Confirmation Theory and Kano's Model, *International Journal of Social, Policy and Law*, vol. 2, no. 3, 1–11. 2021.
- Kaimara, P., Fokides, E., Oikonomou, A., and Deliyannis, I., Pre-Service Teachers' Views About the Use of Digital Educational Games for Collaborative Learning, *Education and Information Technologies*, 2022. https://doi.org/10.1007/s10639-021-10820-9
- Kitapci, O., Akdogan, C., Dortyol, I. T., The Impact of Service Quality Dimensions on Patient Satisfaction, Repurchase Intentions and Word-of-Mouth Communication in the Public Healthcare Industry, *Procedia Social and Behavioral Science*, vol. 148. 161–169. 2014.
- Kotler, P. and Armstrong, G. A., Principles of marketing. 16th edn. Pearson, Harlow, 2016.
- Kumaran, D., Samat, N., Yin, E. T. L., and Gopi, B., Do Website Quality Attributes Influence Customer Satisfaction towards Online Food Ordering System? *International Journal of Communication, Management and Humanities*, vol. 1, no. 2, 29–35. 2020.
- Kusnandar, V. B. and Bayu, D. J., Pendapatan Indihome Tumbuh 24.2% Pada Semester! -2021, 2021. Retrieved 12 2021, from databoks.katadata.co.id: https://databoks.katadata.co.id/datapublish/2021/09/21/pendapatan-indihome-tumbuh-242-pada-semester-i-2021
- Lai, W.-T., Chen, C.-F., Behavioral Intentions of Public Transit Passengers The Roles of Service Quality, Perceived Value, Satisfaction and Involvement, *Transport Policy*, vol. 18, no. 2, 318–325, 2011. https://doi.org/10.1016/j.tranpol.2010.09.003
- Larasati A., Sudrajat, D., Patriazka, A., Caesar, L. A. Y., and Sudjatmoko, A., Does E-Servicescape and Perceived Value Matter for Generation Z in Online Apps? *Marketing and Smart Technologies*, 227–236, 2022.
- Li, M. and Yu, Z., Teachers' Satisfaction, Role, and Digital Literacy During COVID-19 Pandemic, *Sustainability*, vol. 14, no. 1121, 1–19, 2022 https://doi.org/10.3390/su14031121
- Montaudon-Tomas, C. M., Pinto-Lopez, I. N., and Amsler, A., The Handbook of Research on Future of Work and Education: Implications for Curriculum Delivery and Work Design, 400–421, 2022. DOI: 10.4018/978-1-7998-8275-6.ch024
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L., SERVQUAL: a multi-item scale for measuring consumer perceptions of service quality, *Journal of Retailing*, vol. 64, 12-40. 1988.
- Purnat, T. D., The Evolution of Evidence and Public Health Practice in Digital Era, *QScience Proceedings*, vol. 12, 2022. https://doi.org/10.5339/qproc.2022.ehil2021.12

- Saltos-Rivas, R., Novoa-Hernández, P., and Rodríguez, R. S., SAGE Open, January-March, 1–14, 2022. DOI: 10.1177/21582440211068492
- Singh, G., Slack, N. J., Sharma, S., Aiyub, A. S., and Ferraris, A., Antecedents and Consequences of Fast-Food Restaurant Customers' Perception of Price Fairness, *British Food Journal*, 2021.
- Siregar, T. R. S., The Effect of Digital Literacy in the Establishment of Student Engagement, *Advances in Economics, Business and Management Research*, vol. 204, 250–253, 2022.
- Sudrajat, D., Larasati, A., Farmania, A., Caesar, L. A. Y., Moeke, D., Does Digital Employee Experience Matters for Employee Service Orientation, Ambidexterity, and Agility? *The 2021 12th International Conference on E-Business, Management and Economics*, 672–677, 2021.
- Tjiptono, F. and Chandra, G., Pemasaran Strategik, 3rd ed, Yogyakarta: Andi, 2017.
- Tsiotsou, R., The Role Of Perceived Product Quality And Overall Satisfaction On Purchase Intentions, *International Journal of Consumer Studies*, vol. 30, no. 2, 207-217, 2006.
- Yee, C. J. and San, N. C., Consumers' Perceived Quality, Perceived Value and Perceived Risk Towards Purchase Decision on Automobile, American Journal of Economics and Business Administration, vol. 3, no. 1, 47–57, 2011.
- Yu, Y., Influence and Application of Digital Image Processing Technology on Oil Painting Creation in the Era of Big Data. In: Hung, J.C., Chang, JW., Pei, Y., Wu, WC. (eds) Innovative Computing: Lecture Notes in Electrical Engineering, vol. 791. Springer, Singapore. 2022. https://doi.org/10.1007/978-981-16-4258-6 166
- Zehir, C., Narcıkara, E., E-Service Quality and E-Recovery Service Quality: Effects on Value Perceptions and Loyalty Intentions *Social and Behavioral Sciences*, vol. 229, 427–443. 2016.
- Zeithaml, V. A., Consumer Perceptions of Price, Quality and Value: A means-end model and synthesis of evidence, *Journal of Marketing*, vol. 52, 2-22. 1988.

Biography

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