Customer Loyalty In Indonesian's Telecommunication Industry

Yuli Widianty, Asriana Dwiyanthi, Ni Ketut Prawianti, Lim Sanny

Abstract: The study seekss to determine factors that affect customer satisfaction towards their loyalty in Indonesian telecommunications industry. The research seeks to find out how the influence of financial factors, Technology Factors and Customer Service Factors are on Customer Satisfaction and the influence of financial factors, Technology Factors and Customer Service Factors on Customer Loyalty directly or indirectly. The sources of data used in the article are major data and minor data. The major data were attained from a structured questionnaire. The questionnaire was opened online and the total respondents obtained were 160 respondents and they were valid. The results of this questionnaire indicate that the factors that influence Customer Satisfaction, namely, financial factors, technological factors and customer service factors also affect Customer Loyalty to telecommunications service providers in Indonesia. This study found that Financial Factors, Technology Factors and Customer Service Factors had a prospective influence on Customer Satisfaction, Customer Satisfaction had a determining relationship with Customer Loyalty and it was found that indirectly Financial Factors and Technology Factors through Customer Customer Satisfaction had a determining influence on Customer Loyalty whereas Customer Service Factor did not.

Keywords: Customer Satisfaction, Customer Loyalty, financial factors, technological factors, customer service factors.

I. INTRODUCTION

Based on data from BPS (Indonesian Statistics Body) presented in the Analysis of Indonesian Telecommunications Industry in the Ministry of Telecommunication, contribution of the Information and Communication sector always goes up every year. In 2017, BHP (*Biaya Hak Penggunaan* [Usage Rights Fee]) frequencies reached IDR16.56 trillion, including an additional IDR 4.72 trillion from the 2.1 GHz and 2.3 GHz

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frequency auctions paid in that year. This is due to the current trend of telecommunications technology that has shifted from voice and SMS to data, so that this provides an increase in the benefits of cellular telephones in Indonesia so that the telecommunications market (voice and data) is contested by several cellular operators, namely PT Hutchison 3 Indonesia, XL Axiata, Indosat, Sampoerna Telekomunikasi Indonesia, Telkomsel, Smartfren, and BWA Internux (Bolt) operators [1].

This is supported by the development of telecommunications usage based on the data of Indonesian Telecommunication Statistics of 2017, which is the percentage of population using cellular telephones that continues to increase, until 2017 it reached 59.59%. The increase in cellular application was backed up by the rise in computer possession and internet penetration in home use, which reached 19.11% for computer pssession and 57.33% for home internet penetration. Data of Indonesian Telecommunications Statistics of 2017 from the Indonesian Central Statistics Agency (BPS) showed that the number of cellular mobile subscribers according to host companies such as PT Telkomsel has 196.32 million customers; PT Indosat has 110.19 million customers, PT XL Axiata with 52.5 million customers. The cellular operators are each trying to improve their network, infrastructure services, after-sales services, promotions and conduct tariff warfare with each other to attract new customers, retain their customers and increase the loyalty of their current customers [2]-[3].

Switching and retention are short-term consequences of Customer Satisfaction, while loyalty is a long-term consequence of Customer Satisfaction [4]. Every individual in commercial and institutional relations has two responses, when faced with unsatisfied services such as response to be away, response to complaint and response to loyal [5]-[6].

A common problem faced by cellular telecommunications service providers is achieving customer acquisition targets by retaining existing customers to increase company revenue. Therefore, cellular service companies are supposed to know the factors that cause decreased customers' satisfaction that can make them switch to another operator and develop strategies in dealing with factors that influence Customer Satisfaction to increase Customer Loyalty [7]. Cellular operator companies must utilize consumer locking to increase their profits [8]. In shorts, the financial performance of telecommunications service brands plays an important role in implementing Customer Loyalty strategy, especially in a competitive environment.

Customers are assets that must be maintained properly by telecommunications service providers in Indonesia. Identifying determinants of Customer Satisfaction and the relationship of Customer Satisfaction with Customer Loyalty is very important for profitability, survival and competitiveness of companies with other competitors in the mobile telecommunications industry.

The telecommunications industry in Indonesia currently has a large enough market growth so that foreign companies are invited to take part in enlivening the Indonesian telecommunications market. Research on Customer Loyalty in the field of cellular telecommunications in Indonesia is generally still limited, even though this research is needed for companies to benefit the telecommunications industry in Indonesia by knowing what supporting factors affect Customer Satisfaction in order to increase Customer Loyalty to telecommunications service products of their company.

II. LITERATURE REVIEW

Customer Satisfaction is an empirical examination created by the customers about how high their own expectations about individual characteristics or the overall function of the service obtained from the provider have been fulfilled [9]. Gerpott, Rams, and Schindler [9] explains that Customer Satisfaction in German cellular telecommunications is positively related to Customer Loyalty and these two factors are important factors in the cellular telecommunications industry. Finance factor in connection to cellular telecommunications services have been found to be a major determinant of Customer Satisfaction in many Mobile Telecommunication Markets (MTM) [9], [10]-[12]. In 2017 the Indonesian Cellular Industry experienced the dynamics of the tariff war [13]. In 2017 the revenue of the mobile telecommunications industry in Indonesia reached around 158 trillion IDR while in 2018 the value dropped to 148 trillion IDR or minus 6.4% [14]. Accordingly, the financial aspect is predicted to be one of the determinants of Customer Satisfaction.

H1. Financial factors have a positive infuence on Customer Satisfaction

H2. Financial factors directly affect Customer Loyalty

Lim, Widdows, and Park [11]; Woo and Fock [15] convey that network quality is an important factor in Customer Satisfaction from cellular networks. Woo and Fock [15] point out that signal quality and network coverage positively affects consumer satisfaction and corporate image. In cell phones for voice services, network quality refers to call quality, excellent coverage, voice clarity and the absence of drop calls [9]. All technologies such as video calls, cellphone television and high-speed internet on mobile phones change telecommunications [16]. Hence, the technological aspect is predicted to be one of the determinants of Customer Satisfaction.

H3. Technological factor has a determining influence on Customer Satisfaction

Lee's research [17], which examined important factors that promoted Customer Loyalty to cellular service providers in the United States, shows that corporate image, innovation and product quality are strong antecedents and play a role in building and maintaining Customer Loyalty. Whereas Ishaq's research [18] in the Pakistan telecommunications industry shows that service quality is very important by customers. Therefore, in this paper the authors intend to see the direct influence of service quality which in this case is a technological factor whether it has a direct influence on Customer Loyalty.

H4. Technological factor directly influences Customer Loyalty

Chen and Cheng [10]; Lim, Widdows, and Park [13]; Santouridis and Trivellas [19]; Woo and Fock [15] claimed that many studies in various Mobile Telecommunication Markets have indicated customer service as the main determinant of Customer Satisfaction. Telecommunication companies do not provide tangible products, so service quality is assessed based on the size of the service provider's relationship with the customer. Consequently, the management of telecommunication providers must pay attention to the profession of staff skills and offer fast and efficient services [20]. Previous research in the Turkish telecommunications industry proves that handling customer complaints is an important factor in determining service quality [21]. Parasuraman, Zeithaml, and Berry [22] made a method called SERVQUAL. In SERVQUAL, Customer Satisfaction is a function of expectation and performance of a product or service. In simple terms, the gap of quality is obtained by subtracting the level of performance with the level of expectation of a product or service [23]. Lim, Widdows, and Park [11] found that customer service significantly affected Customer Satisfaction at US MTM. Similarly, the proposition of Kim, Park, and Jeong [7], factors that have a determining influence on Customer Satisfaction are call quality, customer support and value added services for MTM Korea. Santouridis and Trivellas [19] concluded that price, network quality and customer service are the main dimensions of service quality that affect Customer Loyalty, while value-added services do not show an important influence on Customer Loyalty in the Greek mobile phone market; while Chang, Chuang, Chuang, and Lin [24] found out the opposite in Taiwan. Thus, the customer service aspect is predicted to be one of Customer Satisfaction's determinants.

H5. Customer service factor has a determining influence on Customer Satisfaction

Managing perceptions of quality of service means that companies are supposed match expected services and perceived services with each other so that Customer Satisfaction is achieved [25]. Achieving and maintaining the quality of service perceived by customers is considered as an important way to successfully provide overall Customer Satisfaction and customer retention [26]. The main requirement to protect the customer base in the telecommunications sector is to win Customer Loyalty, which is the main need to maintain the life of the brand in the long run [21].

Toyese [27] studied various strategies such as providing excellent services, rapid responses to complaints and promotional activities used by telecommunications organizations to generate Customer Loyalty. Therefore, in the article, the authors intend to reveal the direct influence of customer service factors on Customer Loyalty.

H6. Customer service factor has a straight influence on Customer Loyalty

Loyalty can be interpreted as a commitment that is held firm to repurchase or subscribe to service or a product that is consistently favored in the future, which results in repeated purchases of the same brand, regardless of situational influences and marketing efforts that might lead to switching behavior [28]. Customer Loyalty is increasingly important and is a major concern for many businesses, especially when many companies face challenges in the high cost of customer acquisition [29] and high customer turnover [30]. There are many studies on the Mobile Telecommunication Market (MTM) throughout the world. Gerpott, Rams, and Schindler [9] found out that Customer Satisfaction positively related to Customer Loyalty in German cellular telecommunications. Turel and Serenko [31] revealed that Customer Satisfaction is positively related to Customer Loyalty in cellular telecommunications in Canada. Hence, Customer Satisfaction has a significant relationship with Customer Loyalty.

H7. Customer Satisfaction has a significant relationship to Customer Loyalty.

III. RESEARCH METHODS

In the article, a quantitative approach is applied to answer hypotheses that can be measured by numbers. This quantitative approach seeks to determine the effect of financial factors, technological factors and customer service factors on Customer Satisfaction and to find out the relationship of Customer Satisfaction with Customer Loyalty and also to find out whether the financial factors, technological factors and customer service factors have a direct influence on Customer Loyalty by using Path Analysis.

The study was conducted using a survey method for all users of cellular telecommunications network services in Indonesia. The sampling method is non probability sampling - Judgment/ purposive sampling. The data gathering technique in the study is questionnaire. First, the questionnaire was adapted from previous studies that had been specifically designed for this study, then the distribution of questionnaires in the article was carried out online and for three weeks the questionnaire was distributed, the number of respondents obtained was 160 respondents with the results of 160 respondents valid for processing.

The questionnaire contained 35 questions which were divided into 2 (two) parts. The first part concerns the respondent's profile with a total of 7 questions. The second part is related to factors that affect Customer Satisfaction, namely financial factors, technological factors, customer service factors (customer service factors), 5 questions each, and questions about Customer Satisfaction as many as 3 questions and questions related to Customer Loyalty (Customer Loyalty) as many as 10 questions. Twenty-eight of thirty-five questions are closed questions.

Questions related to financial factors, technological factors, customer service factors, Customer Satisfaction and Customer Loyalty use a scale of 1-5 where scale 1 is the lowest scale that states Strongly Disagree (*STS*), while scale 5 is the highest scale that states Highly Agree (*SS*).

IV. DATA ANALYSIS AND DISCUSSIONS

The demographic profile of 160 respondents can be seen from the Table-I. The questionnaire results data obtained were then tested using SPSS and the results were obtained that each item of the questionnaire was valid and reliable. The classical assumption test shows that multicollinearity does not occur between variables, data is normally distributed and symptoms of heteroscedasticity do not occur.

Table-I: Demographic Profiles of Respondents

S eq.	Variable		Freque ncy	Percent age
1	Gender	Male	88	55%
		Female	72	45%
		Total	160	100%
2	Age	16-25 years old	29	18%
		26-35 years old	75	47%
		26-45 years old	44	28%
		46-55 years old	9	6%
		>55 years old	3	2%
		Total	160	100%
3	Type of work	Student	16	10%
		Entrepreneur	19	12%
		Private employees	89	56%
		Government employees	26	16%
		Other	10	6%
		Total	160	100%
4	Telecommunication Operator	TELKOMSEL	102	64%
		XL AXIATA	31	19%
		INDOSAT	20	13%
		Other	7	4%
		Total	160	100%
5	Duration of use of service providers	<1 year	7	4%
		1-5 years	47	29%
		6-10 years	49	31%
		>10 years	57	36%
		Total	160	100%
6	Month Income	<IDR 5.000.000	44	28%

		IDR 5.000.000 – IDR 15.000.000	69	43%
		IDR 15.000.000 – IDR 25.000.000	22	14%
		>IDR 25.000.000	25	16%
		Total	160	100%
7	Fees for using telecommunications operator services per month	<IDR 100.000	14	9%
		IDR 100.000 – IDR 250.000	93	58%
		IDR 250.000 – IDR 500.000	34	21%
		IDR 500.000 – IDR 1.000.000	23	8%
		>IDR 1.000.000	7	4%
		Total	160	100%

Analysis of the influence of Financial Factors through Customer Satisfaction on Customer Loyalty, it recognizes the straight influence given by Financial Factors on Customer Loyalty of 0.198. While the straight influence of Financial Factors through Customer Satisfaction on Y is 0.096 (0.155 × 0.617). Then the total influence given by Financial Factors on Customer Satisfaction is 0.294 (0.198 + 0.096). Based on the results of these calculations, it is known that the value of the straight influence is greater than the value of the straight influence, so it could be concluded that the Financial Factor has a straight influence on Customer Loyalty. This is in line with research conducted by Chen and Cheng [10]; Gerpott, Rams, and Schindler [9]; Lim, Widdows, and Park [11]; Shin and Kim [12] where financial aspects related to cellular telecommunications services have been found to be the main determinant of Customer Satisfaction in many Mobile Telecommunication Markets (MTM). Correspondingly, H1 is accepted. In addition, it could be seen that there is a determining effect between financial factors on Customer Loyalty directly, so it can be concluded that Customer Loyalty is directly affected by financial factors without having to make customers satisfied with the cellular operator they use. This makes H2 acceptable.

Analysis of the influence of Technology Factors through Customer Satisfaction on Customer Loyalty, it is recognized that the straight influence given by Technological Factors on Customer Loyalty is 0.150. Meanwhile, the straight influence of Technology Factors through Customer Satisfaction on Customer Loyalty is 0.328. Then the total influence given by Technological Factors on Customer Satisfaction is 0.478. Based on the results of these calculations, it is known that the value of the direct influence is smaller than the value of the straight influence, so it can be concluded that indirectly the Technology Factor through Customer Satisfaction has a important influence on Customer Loyalty. Based on this, H3 and H4 are accepted. The results of this study correspond with the research conducted by Woo and Fock [15] where signal quality and network coverage positively affect consumer satisfaction and corporate image. Ishaq [18] indicates that service quality is very important by customers in research in the Pakistani telecommunications industry.

Analysis of the influence of Customer Service Factors through Customer Satisfaction on Customer Loyalty Faithfulness, it is noted that the straight influence given by Customer Service Factors on Customer Loyalty is -0.008. While the straight influence of Customer Service Factors through Customer Satisfaction on Customer Loyalty is 0.201. Then the total influence given by the Customer Service Factor to Customer Satisfaction is 0.193. Based on the results of these calculations, it is known that the value of the direct influence is smaller than the value of the straight influence, so it can be summed up that the Customer Service Factor through Customer Satisfaction has an important influence on Customer Loyalty. The path analysis results show that there is a significant straight influence between customer service factors on Customer Satisfaction, so that H5 is accepted and H6 is rejected. This indicates that the Customer service factor does not directly affect Customer Loyalty, but the customer must be satisfied first of the services provided by the telecommunications provider and after that, it gains Customer Loyalty. This is consistent with Oliver's research [4] which states that retention and switching are short-term consequences of Customer Satisfaction, whereas loyalty is a long-term consequence of Customer Satisfaction. The results of this study support the research of Lim, Widdows, and Park [11] who highlight that customer service significantly influences Customer Satisfaction at US MTM and Kim, Park, and Jeong [7] at MTM Korea.

Analysis of the influence of Customer Satisfaction on Customer Loyalty, it is noted that the straight influence given Customer Satisfaction on Customer Loyalty is 0.617. The results of Customer Satisfaction analysis have a significant relationship to Customer Loyalty shows that there is directly a important inluence between Customer Satisfaction on Customer Loyalty, so that H7 is accepted. In the Path coefficient, the coefficient of determination = R2 = 0.762 = 76.2%, where 76.2% the value of the variable Customer Satisfaction can be explained by variables Financial Factors, Technology Factors and Customer Service Factors, while the remaining 23.8% is explained by other variables outside this study. This study supports the research of Gerpott, Rams, and Schindler [9] on German cellular telecommunications and research Turel and Serenko [31] on cellular telecommunications in Canada.

Fig. 1. Results of Path Analysis

V. CONCLUSIONS AND IMPLICATIONS

With reference to the results of research previously conducted, Financial Factors have a straight influence on Customer Loyalty, even in this path analysis; it is well known that Financial Factors also have a direct influence on Customer Loyalty in the telecommunications industry in Indonesia. Whereas Technology Factors and Customer Service Factors have a positive influence on Customer Satisfaction but based on the Complete Path coefficient of Straight influences and indirect influences, it shows that Technology Factors through Customer Satisfaction have a determining effect on Customer Loyalty and Customer Service Factors through Customer Satisfaction has a determining effect on Customer Loyalty. Customer Satisfaction has a significant relationship to Customer Loyalty, where 76.2% of the value of the Customer Satisfaction variable could be elaborated by Financial Factors, Technology Factors and Customer Service Factors, while the remaining 23.8% is explained by other variables outside this study. This corresponds with the previous research by Mannan, Mohiuddin, Chowdhury, and Sarker [32] which points out that Financial Factors, Technology Factors and Customer Service Factors have a positive relationship to Customer Satisfaction in Telecommunications mobile in Bangladesh.

In the article, it is also found that the Customer Service Factor has no straight influence on Customer Loyalty, while the Financial Factors and Technology Factors have a direct influence on Customer Loyalty. This implies that the Customer service factor does not directly affect Customer Loyalty, but the customer must be satisfied first of the services provided by the telecommunications provider and after that, it gains Customer Loyalty.

This research indicates that Customer Satisfaction is positively related to Customer Loyalty in the telecommunications industry in Indonesia. This supports the previous research, in which Gerpott, Rams, and Schindler [9] found thst Customer Satisfaction positively related to Customer Loyalty in German cellular telecommunications. Turel and Serenko [31] find out that Customer Satisfaction is positively related to Customer Loyalty in cellular telecommunications in Canada.

Further research on Customer Loyalty in the telecommunications industry could consider and explore other factors that influence Customer Loyalty apart from Customer Satisfaction.

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