How to Restrain Customer Churn in Telecommunication Providers: Study in West Java Indonesia

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ABSTRACT

In today's digital era, telecommunication providers have been getting an opportunity to grow for the last four years. Business market engaged in finance is a very promising market. Although this business has great opportunities, the companies are not paying close attention to their customers. In recent years, customer churn at data communication business in telecommunication industry could not be controlled well. There have been a lot of things done to control customer churn such as special pricing and improvement of service quality. However, it did not reduce the level of customer churn. The purpose of this research is to examine service quality and customer value to control customer churn in data communication business. A total of 196 business customers are the respondents of the survey. Data sample was from both active and non-active business customers of telecommunication industry. Primary data was gathered from questionnaires distributed to the customers and interviews conducted to the marketing department. The results showed that customer value has no effect to control customer churn, but service quality positively and significantly shows an effect in controlling customer churn in data communication business of telecommunication industries. Also, service quality affects customer value positively and significantly.

Keywords: customer value, customer churn, data communication, service quality

1. INTRODUCTION

Technology is excellent in today's business because it has the ability to simplify and solve corporate problems. On the other hand, technology can also be an obstacle in performing a job. Using information technology in a growing era becomes a huge opportunity because many businesses in Indonesia use information technology. This is conducted as an effort to improve the competitive position to be more superior. One of the technologies used is the data communication service. Generally, data communication network collects data from computers to other devices and sends the data to a central server that is a collection of computers (Fitzgerald and Dennis, (2009). One advantage of this data communication is widely used by the banking industry; a lot of customers of a bank can make transaction in every Automated Teller Machine (ATM) anytime and anywhere by using their ATM cards.

Technology can be used by various sectors. Markets or customers of telecommunication industry are business companies or social institutions. The industry segments who use data communication the most are banking, insurance, and multi-finance industries. Therefore, the service principle offered is to offer added value to impress the customers. The product of communication data offered includes Leased Line, a high-speed communication service specialized in connecting one location to others through digital technology. In a fierce business competition and as an effort to create a superior customer value, telecommunication industries keep improving and trying to give their best to their customers. From the information obtained, it is known that the services provided to their customers have been considered excellent. However, what has been conveyed is not sufficient to maintain the level of customer churn. This occurs in telecommunication industry because several costumers have churned and the service network coverage cannot serve the needs of customers.

According to Hejazinia and Kazemi (2014), the telecommunication industry is not an exception where attracting customers is more costly than performing customer retention.

Although there are alternative solutions to use satellite-based infrastructures, the cost offered is higher than the competitors. As stated by Mattison (2005), the biggest consequence of customer lost or customer churn is the loss of revenue. Losing a big number of customers can have a great effect on the company's annual report. When customer churn occurs, most of the companies react by lowering the price. Companies try to convince costumers that they have a competitive price and customers do not need to look for other products with good price. Although telecommunication industry has determined its products, the level of customer churn during four years (2011-2014) does not show improvement. Efforts to keep customer churn is conducted by setting a lower price policy than competitors', but it is not enough tomaintain the customers. In fact, this price policy reduces the profit, the number of network installed increases but the profit declines. From the efforts undertaken, none of them showing the company's effort to increase the service quality, everything is more to the decrease the price. This can cause inappropriate effort undertaken by the company to retain the level of customer churn, so more efforts need to be taken to examine the cause and impact to the company, so the objectives of this study are to find out whether service quality has an impact in controlling customer churn in data communication business and how the customer value itself is.

2. LITERATURE REVIEW

Service quality

Dubey and Srivastava (2016) stated that if service providers would not put their endeavor in differentiating them from the competitor, the customers are prone to switch to other competitors at almost zero cost.
Gupta and Saxena (2015) indicated that service quality is an achievement in customer service and reflects each service encountered.
According to Etgar and Fuchs (2009), SERVQUAL is one of the most common models used to measure service quality as stated by Parasuraman et.al (1991). SERVQUAL is a model that identifies the perception of service quality as follows: a). Tangibility that involves the appearance of physical facilities, including equipment, personnel, and communication materials, b). Reliability that involves the ability to deliver the promised services reliably and accurately, c). Responsiveness that involves a good intention to assist customers and provide

a quick response, d). Assurance that involves knowledge and courtesy of employees and the ability to convey trust and faith, including competence, courtesy, credibility and security, e). Empathy that involves caring, individual attention to customers, including communication and understanding the customers.

Hejazinia and Kazemi (2014) indicated that service quality is the most significant factor followed by customer satisfaction, competitors with superior technology, the cost of change and advertising respectively.

In a study conducted on telecommunication industry by Pina et al. (2013), it is stated that the importance of service quality has developed in the telecommunication sector. Besides, competition encourages telecommunication operators to be more efficient and smarter in offering better quality.
Hejazenia and Kezemi (2014) conducted a study regarding the prioritizing factors influencing customer churn in Iranian telecommunication companies using cross-sectional study. Based on the questionnaire distributed to 415 customers of telecommunication companies, it is indicated that service quality was the most significant factor in affecting customer churn.
In another study conducted by Malik (2012), it is known that there was a significant relationship between service quality and customer satisfaction. By adding the intermediate variable of customer value, it is known that there was an increasing relationship between service quality and customer satisfaction.

Customer Value

Khan, Abdul Kadir and Hoe (2013) stated that customer value is considered as a critical prerequisite for long term company survival and success. The concept of value has become one of the most overused and misused concepts in social sciences in general and in the management literature in particular.
The result of Nasution and Mavondo (2008) research indicated that manager's perception of customer value is different from customers' experience.
Consumer behavior experts, Zeithaml, Bitner&Gremler (2013), defined value in four ways. First, the value is low price. Some customers associate value with low price. Second, the value is whatever I want in a product or service. Some customers emphasize the benefit that they receive from the service or product as the most important component of value. Third, the value is the quality I get for the price I pay. Other customers see values a comparison between the money they spend and the quality obtained. Fourth, the value is what I get for what I give. Some other customers consider all benefits they receive based on what they spend (money, time, effort).
This is similar to what is stated by Duchessi (2002) that customers make a purchasing decision based on perceived value, how far their needs and wants can be fulfilled by product quality, service quality, and or price.
To obtain a superior value, customers should receive positive benefits. Experts and researchers measure a variety of customer value as follows:

(1) Product, Service, People, Image, Monetary, Time, Energy, Psychological (Kotler& Keller: 2012)
(2) Differentiating product/service, Price (Craven & Pearcy:2013)
(3) Service, Product Quality, Image, Price (Johnson &Weinsten: 2004)
(4) Emotional value, social value, functional value, perceived sacrifice (Eskafi: 2013)
(5) Product related, Service related, Relation related (Hakola:2013)

(6) Benefit, quality, worth, utility, price, costs, sacrifice (Choo et. al:2012)

In a study conducted by Hou and Tang (2010) on customer churn identifying a model based on dual customer value gap on the effect of customer value to the tendency of customer churn, it is known that if the Perceived Value is bigger than Customer Churn, customers will not go away anytime soon. However, if the Perceived Value is smaller than Customer Value, they will go away anytime soon.

Customer satisfaction is affected by customer value as described in a study of Khan (2013). He stated that customer satisfaction depends on customer value. A high customer value would result in a high customer satisfaction. A similar notion was stated by Naseeret. al (2012) stating that customer value was more relevant on customer satisfaction, and significantly and positively affected customer satisfaction.
According to Rita (2015), customer perceived value applied to banks which actively use e-banking only has a small effect on loyalty. This is due to a very rare contact (face to face) between costumers and bank employees.

Customer Churn

Kurtz (2012) defined customer churn as a turnaround in customer-based companies. Customer churn or turnover is very expensive. In telecommunication industry, wireless service in the United States and Europe replaces about a third of their customers each year.

According to Mattison (2005), there are many people who have different opinions on churn, but all of them agree on something; churn is bad.

Mattison (2005) also stated that the biggest impact or consequence of churn is a revenue loss. Losing a big number of customers can make a huge dent in the company's balance sheet.

In a study conducted by Ahn, Han and Lee (2006) on customer churn analysis, it is stated that there were four factors influencing customer churn on Korean mobile telecommunication service industry particularly in South Korea. From the testing of the dimension of customer satisfaction, it was found that the level of call dropping significantly influenced churn, but the level of call drop was not influential, and the number of complaints was positively associated with the possibility of churn. This confirms that mobile service providers traditionally emphasize the importance of service quality. The dimension of switching cost is in a form of customer loyalty in which loyalty point has a negative and significant effect on the possibility of churn.On the contrary, the higher membership and the more special benefits are, the more likely to churn.
In a study conducted by Oghojaforet. al (2012), it can be concluded that to keep successfully competing on value and price, telecommunication service providers need to increase their performance in each factor as a strategy to reduce the level of churn. In a study conducted by Ahn, Han and Lee (2006), it is shown that quality of connection dimension of customer satisfaction acts as the mobilizer of customer churn. In a study conducted by Hejazinia and Kazemi (2014), it is known that customer satisfaction significantly influenced customer switching or churn.

Based on the phenomenon of the previous study results, the following hypotheses are proposed:

H1: Service Quality significantly affects customer churn in data communication business in telecommunication industries in West Java

H2:   Service quality significantly affects customer value in data communication business in telecommunication industries in West Java

H3: Customer value significantly controls customer churn in data communication business in telecommunication industries in West Java.

3. METHODOLOGY

The study was conducted simultaneously to several individuals or units by conducting the survey. Population in this study is all customers who unsubscribed (customer churn) in telecommunication industries in West Java area as many as 196 respondents. Sampling technique used is proportionate random sampling.
Data analysis method used in the testing hypothesis is path analysis method. This technique is used to test the possibility of a causal relationship between three or more variables.

4. FINDINGS

Based on the data processing result, path coefficients of each independent variable and variable of customer churn are as follows:

Table 1. Path Coefficient

Variable Relationship		Notation	Path Coefficient	T_{count}	R^2
Structural Equation 1					
Service Quality (X)	Customer Churn (Z)	$\rho\ zx$	0.678	5.668	0.426
Customer Value (Y)	Customer Churn (Z)	$\rho\ zy$	- 0.331	4.258	
Structural Equation 2					
Service Quality (X)	Customer Value (Y)	$\rho\ yx$	0.830	16.992	0.690
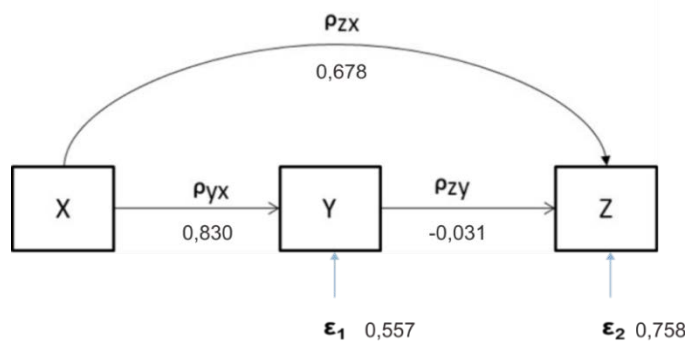
Structural equation 1: $Z = \rho\ _{zx}X + \rho\ _{zy}Y + \varepsilon_2 = 0{,}678X - 0{,}331Y + 0{,}758\varepsilon_2$

Structural equation 2: $Y = \rho_{yx}X + \varepsilon_1 = 0{,}830X + 0{,}557\varepsilon_1$

In structural equation 1, service quality and customer value simultaneously show an effect of 0.426 or 42.6% in controlling customer churn in the business, while the remainder of 57.4% is influenced by other factors outside this study.

Partially, it can be defined that the first cause of customer churn is service quality. The relationship between service quality and customer churn with path coefficient value of 0.678. A higher positive relationship means a better service quality to control customer churn.

Service quality positively affects customer churn of 0.678^2 or of 45.96. The relationship between customer value and customer churn is -0.0331 (negative relationship). This means that a good or bad implementation of the customer value will not cause customer churn. So, there are other factors that cause customer churn.

In the structural equation 2, the relationship between service quality and customer value is 0.830. This positive relationship value shows a unidirectional relationship. It means, the higher the service quality is, the better the customer value becomes. Service quality positively affects customer value of 0.830^2 or of 68.89%.

A. Simultaneous Testing

Simultaneous testing was performed by using SPSS with the following result:

Table 3

Anova Structural Equation 1

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	626.416	2	313.208	47.944	.000[b]
	Residual	842.732	129	6.533		
	Total	1469.148	131			

a. Dependent Variable: Customer Churn

b. Predictors: (Constant), Customer Value, Service Quality

Simultaneously, the effect of service quality and customer value on customer churn is 0.426, while the remainder of 0.574 is influenced by factors outside service quality and customer value. By referring to F value of 47.944 at 0.000 sig, it is known that this model is significant.

B. Partial Testing

a. service quality affects customer churn in data communication business

Table 4

Testing Result of Service Quality on Customer Churn

Path Coefficient	p-value	A	Ho	Ha
0,678	0,000	0,05	rejected	accepted

Based on the testing result, it can be seen that p-value is 0.000 at α=0.05. It is proven that Service quality positively and significantly affects customer churn in data communication business.

  b. Service quality affects customer value in data communication business

Table 5

Testing Result of Service Quality on Customer Value

Path Coefficient	p-value	A	Ho	Ha
0,830	0,000	0,05	rejected	accepted

Based on this finding, it is proven that service quality positively affects customer value in data communication business.

5. DISCUSSION

Service quality positively affects customer churn in data communication business. In other words, there is a positive and significant effect of service quality on customer churn in data communication business. This is due to the fact that all customers are really satisfied if they can feel tangibility, reliability, responsiveness, empathy, and assurance aspects. All of these aspects are able to control customer churn. Since the company made a huge investment in data communication, implementing service quality can be optimally perceived by customers so the customer churn could be controlled.
In addition, a well-implemented service quality could increase customer value because customers deeply considered the benefit per cost. For companies that have invested a huge cost for data communication, it is clear that they can perceive a high value when service quality is implemented optimally. This benefit is better than the sacrifices that have incurred.

Besides, customer value had an insignificant effect on customer churn in data communication business. This means that a good or bad implementation of the customer value will not cause customer churn. There could be other factors that may affect the customer value, for example, corporate regulation.

Service quality can control customer churn in the telecommunication provider business. Furthermore, it is very important to build chemistry with customers as an effort to create interdependence so that they are not easy to churn. In this case, the customer value is not deemed necessary because the cause of customer churn could be other factors such as company regulation.

6. CONCLUSION

Based on the previous discussion, the followings are the conclusions and suggestions regarding the ways to control customer churn in data communication business:
1. Service quality has an important role in controlling customer churn. It can minimize the unsubscription of customers to competitors by strengthening human resources individually in delivering service quality. This is because, in service companies, the involvement of human resources or people has an important role in the delivery process to customers. It

can be used as a competitive advantage source and to differentiate the company from competitors.

2. The people who create a close relationship with customers by building chemistry will result in interdependence between both parties.

3. This study has limitations and drawbacks so the further research with the similar model can use relational quality to prove the ability in strengthening the relationship between service providers and business customers so as to inhibit customer churn.

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