Customer Satisfaction Index Telecommunication Industry in Indonesia

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Customer Satisfaction Index Telecommunication Industry in Indonesia

M. Dachyar and Monasisca Noviannei

Abstract—The high level of telecommunication growth in Indonesia has faced many obstacles in running the business performances.This research has investigate factors influenced the increasing of customer satisfaction in the telecommunication companies in Indonesia; Telkomsel, Exelcomindo, and Indosat. The samples were taken from customers which are using the pre-paid cards. The variables used to analyze their effects to customer satisfaction were; image, customer expectation, perceived quality, and perceived value. The result shows customer satisfaction positively are perceived quality with influence of 0.43 and image with influence of 0.35, and customer expectation has indirect influence to customer satisfaction.

Keywords— Customer relationship management, customer satisfaction index, information, structural equation modeling, telecommunication

I. INTRODUCTION

Indonesia is one of the country has high level of telecommunications growth. The cellular phone market in Indonesia has estimated a quite high monthly customer turn over with churn rate by 15%. According to Indonesian Ascosiation telecommunication; Telkomsel subscribers have reached 88 million by June 2010, subscribers 39.1 million for Indosat, and 35 million for XL. Churn rate was led by Indosat with value of 11% in 2009 (Detikinet.com, 2009). In a competitive market, customer satisfaction is seen as a key differentiator and has become a key element of business strategy, particularly in terms of competition among telecom operators in Indonesia.

The Customer Relationship Management (CRM) is a comprehensive approach for creating, maintaining, and developing relationships with customers. There are three important words, namely: approach, comprehensive, and the main goal of CRM. It is used in ways that impact business to business scopes of all so-called comprehensive approach. CRM is to create, maintain, and develop relationships with customers. CRM is in touch with the customer cycle. Its strategy helps the company to obtain and analyze customer data that is the target company and its buying habits. From that information, companies can understand and predict the behavior of customers [1]

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Structural equation modeling (SEM) is one of multivariate techniques which are combining factor analysis and multiple regressions that enable the researcher to simultaneously examine a series of interrelated dependence relationship among the measured variables and latent constructs as well as between several latent constructs [2].

SEM procedures generally contains five stages for gaining the aim which are; model specification, model identification, model estimation , model evaluation, model respecification [3].

Customer Satisfaction Index (CSI) model is a structural model based on the assumption that the satisfaction customers are influenced by several factors, such as perceived quality, perceived value, customer expectations, and company image. These models also predict the results of customer satisfaction. The results of customer satisfaction are consequences factors such as complainment or customer loyalty (Johnson *et al*. 2001).

CSI is a measure of the extent to which business processes can give satisfaction to their customers. These measurements are reflected on performance level of the company itself, which also represents industrial performance and economic sectors in the macro level which are influenced its national economic performance. According to Fornell (Fornell, 1992; Fornell et al., 1996), Customer Satisfaction Index (CSI) has been used as model indicator of national economic measurements. However, CSI also a very useful indicator in measuring business performance in the micro level because it is based on experience from the customer's consumption.

With regard to satisfaction, customer satisfaction measurement, and customers satisfaction within company performances. This comprehensive research has identified and modelled the variables which influence the motivation to customer satisfaction using Structural Equation Modeling (SEM).

II. RESEARCH METHODOLOGY

This study aimed to look factors affected to customer satisfaction in the telecommunications industry. The model applied was a mimicri to a model used by Turkyılmaz Ali and Coskun Ozkan [3]. It was based on dimensions that represent perceived quality of customer in Indonesia and the prevail regulation of the Ministery of Communications and Information which was lately published by year 2007 [4].

Latent variables used in this study were; the company's image, customer expectations, perceived quality, perceived value, and customer loyalty. The number of observed

variables used in this study as many as 49 variables , while the model is run in this study path diagram depicted in Figure 1. This study uses primary data taken using a questionnaire, data collected from 750 respondent.

A. Result of Structural Equation Modeling

For running SEM model, we have used LISREL software. If run model succeed, LISREL would produce its path diagram. When the running model succeed, the result must be evaluated appropriate with the procedures in model evaluation stage. From that table 2 shows the sum of analysis for evaluating output to GOF sizes. From that table, it can be seen that the model has good fitness.
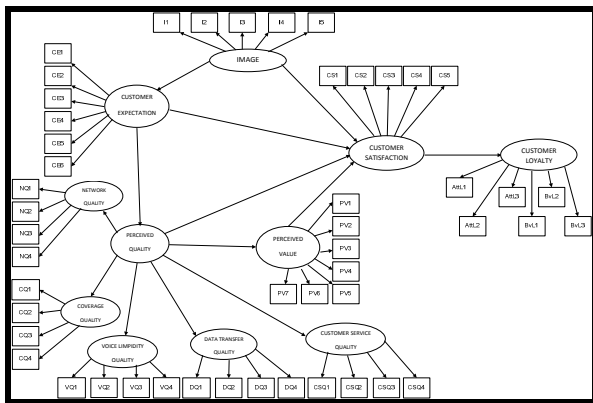

Fig 1. Hypothesis model of customer satisfaction in Telecommunication Industry

B. Analysis of Initial Structural Model

This evaluation includes an examination of the significance of the estimated coefficients. If the t-value $\geq$ 1.96 (absolute value), a variable is significant influenced to the latent. The standardized factor loading $\geq$ 0.7 indicates the observed variables have a strong influence to latent variable. According to Zhaohua Deng, Yaobin Lu, Kwok Kee Wei, Jinlong Zhang (2010); China telecommunication has shown the variables associated to perceived value do not affected to the price of satisfaction variables [5]. This occurred because price war among providers is commonly happened so that customers felt that the rate they get is cheap. But cheap fares are not solely to ensure they are satisfied with the provider they use.

The greatest value of *Customer Satisfaction Index* (CSI = 70.89) was obtained by Telkomsel. CSI second ranked (CSI = 68.69) by XL. CSI third ranked (CSI = 66.83) by Indosat. Telkomsel has achieved the highest CSI value among others because overall the variable perceived quality and image variables influence customer satisfaction.

CSI value for XL; in the model of customer satisfaction, these two factors that affect customer satisfaction in a model of customer satisfaction, perceived quality and image, have no significant influence on satisfaction variables.

CSI value for Indosat; these two factors that affect customer satisfaction in a model of customer satisfaction, perceived quality and image, only the perceived quality variables that have a significant effect on satisfaction .

TABLE 1.
EVALUATION OF ESTIMATED COEFFICIENT, T-VALUE, and SIGNIFICANCY

No	Path	Std Loading Factor	T-value	Conclusion	Decision
1	Image → C_Expect	0,88	15,25	Significant	Accept Hypothesis
2	Image → C_Satisf	0,35	3,31	Significant	Accept Hypothesis
3	C_Expect → Per_Quality	0,93	13,37	Significant	Accept Hypothesis
4	C_Expect → C_Satisf	0,04	0,18	Not Significant	Reject Hypothesis
5	Per_Quality → Per_Value	0,83	13,93	Significant	Accept Hypothesis
6	Per_Quality → C_Satisf	0,43	2,69	Significant	Accept Hypothesis
7	Per_Value → C_Satisf	0,13	1,92	Not Significant	Reject Hypothesis
8	C_Satisf → C_Loyalty	0,76	11,89	Significant	Accept Hypothesis

According to Fornell, best value for CSI in telecommunications industry was 75.4 (scale 0-100) [6]. From the results obtained, no one from the three operators has reached that value. Failure of achieving the value can not be judged as bad because the value was based on American Customer Satisfaction Index (ACSI) model, considering some points such as cultural adjustment in Indonesia which can influence to customers behaviors.

III.CONCLUSION

The factors that proved significant in influencing customer satisfaction are the company's image and perceived quality, with great influence is positive.

There are three important services factors that influence the level of customer satisfaction in mobile telecommunications services operators such as: (1) Corporate image of the cellular provider which always focus on customers and has a social contribution to society, (2) Cellular provider that can meet the expectations of customers in terms of providing service that suits their customer needs and offer the reliability of the technology in line which matched with customers expectations, and (3) The customer felt the quality of the network (Perceived Quality) offered by providers are always connected to customers needs.

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