Total Service Quality Management And It's Impact On Customer Satisfaction And Loyalty Of Online Transportation In Indonesia

Astri Ayu Purwati, Muhammad Luthfi Hamzah

Abstract: By looking at internet-based business opportunities that are very promising, many business people try to combine the internet and transportation. The application of total service quality management in Online transportation is very important considering online transportation provided service to customer with digital based application in accordance with technological development. This study used all online transportation user in Pekanbaru as population and the number of sample was 150 respondents. Data analysis technique used was Structural Equation Modelling (SEM) using Partial Least Square (PLS). The result shows that TSQM has positive partial impact on customer satisfaction and customer loyalty. Another result also shows that customer satisfaction on online transportation has impact on customer loyalty. Which means the implementation of TSQM on online transportation provider must be concerned as an important strategy for management in order to increase customer satisfaction and customer loyalty.

Index Terms: Total Service Quality Management, Satisfaction, Loyalty.

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1. INTRODUCTION

Nowadays, the development of information technology is very fast. As time goes by the development of technology becomes important because it make easier for human to do various activities. One technology that has become a megatrend is the use of the internet. The increasing number of internet user in Indonesia can be used as a business opportunity for innovative industries based on internet. By looking at internet-based business opportunities that are very promising, many business people try to combine the internet and transportation, such as online motorcycle and online taxis. Online transportation appears in the middle of transportation conditions in Indonesia has not well organized. Several large companies competed to form a transportation system based online application, some of them are Gojek, Grab and Uber. Online transportation offers several conveniences, lower costs and more guaranteed comfort and safety [1]. Customer loyalty is considered as an important thing for online transportation providers. In general, the meaning of loyalty is obedience of someone to another person or something (for example organization) which is shown through the attitude and actions [2]. Loyalty is usually formed through the fulfillment of customer satisfaction. In paying attention to its customers some online transportation provides a system of measuring customer satisfaction such as rating services through the application. This rating is used to determine the extent of customer satisfaction with the services provided by online transportation. Therefore, online transportation business company need a strategy to improve the quality of services provided.

Quality is the overall characteristics of the product and services related to its emphasis on meeting certain needs [3]. Component of Quality systems include: (1) customer quality, i.e. whether the quality of service is able to give customers what

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they are want, as measured by the use of services, for example customer satisfaction or customer complaints; (2) professional quality, that is whether service able to meet the needs of customers who are professionally defined, and whether the procedures and professional standards can be trusted to produce the desired product or service; (3) process quality, design, and operation of service processes using resources in a way the most efficient way to meet customer needs. Quality of which this aspiration requires the involvement of all parties in the organization even demanding cultural change. This is called Total Quality Management (TQM). On services, TQM is also known as Total Service Quality Management (TSQM). Total Service Quality Management (TSQM) is a commitment to operationalize customer-focused concepts, formulating service performance standards and maintaining customer enthusiasm at all times and market share [4]. Some research has found that TSQM is a factor that influence customer satisfaction and customer loyalty (Talib, Rahman, & Mn, 2012; Garrido, 2015; Rasheed & Tiruchirappalli, 2019). These studies found that through the appropriate TQM strategy formulation or customer focused strategy, company will be able to recognize the weaknesses and strength in meeting customer needs. Customers will satisfied because their needs are being met and then loyalty will arise.

2 LITERATURE REVIEW

2.1 Total Quality Management

Total Quality Management refers to an emphasis on quality that covers the organization as a whole from suppliers to customers. TQM emphasizes on the commitment by management to have continuous improvement in all aspects of goods and services that are important to customers. Total Quality Management (TQM) is a comprehensive quality management program that is widely used by companies that compete competitively in business in order to achieve competitive advantage and market leadership [8]. The rationale for the importance of TQM is simple that is the best way to compete in global competition is to produce the best quality products / services. Producing the best quality requires continuous improvement efforts on people, processes and the environment. The new paradigm of total quality management is the customer value strategy, continuous improvement and

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organizational systems.

2.2 Service Quality

Service quality measurement which is widely used in management research is the service quality model developed by, Zeithaml and Barry (1990) in a series of their studies of six service sectors; repair of household appliances, credit cards, insurance, long-distance telephone lines, retail banking and brokerage brokers. In their research of the service sectors, this model is also known as the gap analysis model. In this approach it is emphasized that if the performance of an attribute increases more than expected, then satisfaction and service quality will increase, and vice versa [9]. According to the model related to the service quality model, service quality is defined by the superiority of a service. Service quality is built on the comparison of two main factors, namely customer perception of the actual service they receive (expected service). If reality is greater than expected, then service does not meet quality. If reality matches expectations, the service is satisfying.

2.3 Total Service Quality Management

Total Service Quality Management (TSQM) is a strategic concept by involving managers and workers using qualitative and quantitative methods to continuously improve organizational processes to meet and exceed customer needs. Total Service Quality Management (TSQM) is a deviation from Total Quality Management (TQM) in the service industry, which is a concept of how to improve the quality of service in each phase of service delivery involving all personnel in the organization [10]. The five focuses of Total Service Quality Management are:

    a. Focus on Customer: Customer identification is done by defining the needs, desires, expectations of consumers and planning the design of certain services to consumers.

    b. Total involvement: Management must provide opportunities for workers to improve quality and demonstrate quality and leadership throughout the organization, and delegate responsibility and authority to improve work processes for those who carry it out.

    c. Measurement: These measurements include: 1) Measurement of processes and results. 2) Identification of outputs that are tailored to customer requirements. 3) Correcting yourself when work errors occur without waiting for instructions from superiors.

    d. Systematic support: Systematic support by management will realize the achievement of optimal service quality.

    e. Continual Improvement.

Five dimensions of TSQM that are considered to be able to measure the quality of service companies include: 1)Physical Quality, 2)Supporting Physical Quality, 3)Company Quality, 4)Technical Quality, 5)Interactive Quality [11].

2.4 Total Service Quality Management on Customer Satisfaction and Loyalty

Customer satisfaction is a feeling of pleasure or disappointment that arises after comparing between perceptions and performance. Overall customer satisfaction shows attitude toward service providers, or emotional reaction to the difference between what customers expect and what they receive. When customer expectations are met, then they

will always have the desire to use the same service in this case called loyalty. Customer loyalty is deefly held commitment to rebuy repatronize a prefered product or service concictenly in the future, despite situasional influences and marketing efforts having the potential to cause switching behavior. Good service quality will provide customer satisfaction which has an impact on the use of service products continuously. The influence between service quality and customer satisfaction is positive, that is if the quality of service is getting higher, customer satisfaction will be increase. Some research has found that TSQM is a factor that influence customer satisfaction and customer loyalty (Talib, Rahman, & Mn, 2012; Garrido, 2015; Rasheed & Tiruchirappalli, 2019).

H1.   Total Service Quality Management (TSQM) affects Customer Loyalty
H2.   Total Service Quality Management (TSQM) affects Customer Satisfaction
H3. Customer Satisfaction affects Customer Loyalty

2.5 Conceptual Framework

    Based on the research background, theories and hypotheses presented, conceptual framework of this research can be described as follows :

Figure 1. *Research Framework*

3   RESEARCH METHODS

3.1 Data Collection

This study collected data with questionnaires. This is a technique that provides respondents with a set of questions or written statements to answer. Through this technique, responses, opinions, and attitudes of respondents can be known in relation to the effect of conflict, reward, organizational culture and job satisfaction. The selection of respondents' answers was in rating scale technique; while the measurement scale was in the ordinal scale level. Thus, this study used numerical scales of Likert with 1-5 alternative answer choices to measure the attitude of respondents. The Likert scale is a bipolar continuum scale of which on the left is a negative answer and on the right end with a large number showing a positive answer. In short, the Likert scale is designed to allow respondents to rate each research statement. Likert scales are from 1-5 (Cooper and Emory, 1996).

3.2 Population and Sample

The population in this study was all online transportation users in Pekanbaru. The number of samples is calculated using Roscoe Formula. In this study the sample used amounted to 150 people who use online transportation in Pekanbaru and sampling technique used was simple random sampling.

3.3 Hypothesis Test of Path Analysis with PLS-SEM

This study involved three independent variables and two dependent variables. The indicators for each variable were 28 indicators that were constructed into 28 question instruments. Referring to Ghozali's concept (2014), the researcher should analyze actual data with hard modeling and AMOS or Lisrel software if the data meet the assumptions that are required with covariance based SEM. Otherwise, the researcher is still able to analyze data even though the data do not meet the required assumptions ony for finding predictive linear relationships with component based SEM. In addition, Partial Least Square (PLS) was also used in this study to test and measure the direct and indirect effects of variables of conflict, reward, organizational culture, job satisfaction and performance. PLS is considered as a powerful and analytical method that is not based on assumptions (Wold, 1985 in Ghozali 2014).

4   RESULT

4.1 Respondent Characteristics

In this study, the respondents were analyzed referring to age, gender, education, marital status, and monthly salary with the following details:

Table 1. Analysis of Demography

Demography/ Characteristics	Category	Frequency	Percentage
Age Group	<25 age	76	51%
	25-35 age	43	29%
	>35 age	31	21%
Gender	Male	104	69%
	Female	46	31%
Education	High School	34	23%
	Diploma	56	37%
	Under graduate	60	40%
Monthly Salary	< Rp.2.500.000	23	15%
	Rp 2.500.000 - Rp. 5.000.000	67	45%
	> Rp. 5.000.000	60	40%

The dominant customer of online transportation observed from the table above were at productive age <25 year, i.e. 51%. The number of customer were dominated by female (69%); the rest were males (31%). In relation to education, the customers are university graduates (40%). In addition, the customer with monthly salary around Rp. 2.500.000 to Rp. 5.000.000 were dominated in using online transportation.

4.2 Validity Test

Validity is used to test whether the statement on questionnaire is able to reveal an evidence being observed. In this study, the variables are TSQM, Customer Satisfaction and Customer Loyalty with the total 25 questions. Their correlations were greater than 0.30 meaning the item statements on each variable was valid for further testing.

4.3 Validity Test

Reliability test is to measure the consistency of respondents' answers. If the answers given are consistent, then the

research instrument (questionnaire) is considered reliable. The following is the table of reliability test:

Table 2. Reliability Test

Variables	Cronbach's Alpha	Notes
TSQM	0.798	Reliable
Customer Satisfaction	0.783	Reliable
Customer Loyalty	0.832	Reliable

The reliability test results of all variables showed a reliability value > 0.06. Thus, the overall variables in this research instrument are reliable.

4.4 Hypothesis Test on Path Analysis with PLS-SEM

The criteria to use SEM PLS is based on the outer models, namely convergent validity, discriminant validity, and composite reliability.

4.5 Convergent Validity

Convergent Validity is the measurement model with reflexive indicators based on the correlation between item score and component score with PLS software. The individual reflexive measurement is considered high if it correlates more than 0.70 against the variables. However, the scale measurement of loading values from 0.5 to 0.6 is considered sufficient (Chin, 1988 in Ghozali, 2014), so this study used a loading factor limit of 0.5. Moreover, this study found that the value of outer model as well as the correlation between variables met the convergent validity since all variable indicators had a loading factor value above 0.50.

4.6 Discriminant Validity

The model is considered good discriminant validity if each loading indicator value of a latent variable has a loading value greater than the loading value in correlation with other latent variables. In addition, the test results of discriminant validity of this study can be seen in the following table:

Table 3. Discriminant Validity

Variables	Average Variance Extracted (AVE)
TSQM	0.515
Customer Satisfaction	0.688
Customer Loyalty	0.547

In this study, the results of three variables were identified having AVE values above 0.50 which means all variable in this study had good discriminant validity.

4.7 Composite Validity

Validity and reliability criteria can be seen from the reliability value of a variable and the value of Average Variance Extracted (AVE) of each variable. Variables are said to have high reliability if the composite reliability value is above 0.70 and AVE is above 0.50. The composite reliability values are presented below:

Table 4. Composite Reliability

Variables	Composite Reliability
TSQM	0.900
Customer Satisfaction	0.814
Customer Loyalty	0.912

The table demonstrated all variables meeting composite reliability since the values were above the recommended number, i.e. more than 0.7. Therefore, the convergent, discriminat validity, and composite reliability were valid and reliable indicators.

4.8 Inner Model Evaluation (Structural Model Testing)
In this study, testing inner model or structural model was conducted to see the relationship between variables, significance values, and R-square of the research model. The structural model was evaluated using R-Square, for the dependent variable t test and the significance of structural path parameter coefficients. Evaluating the inner model with PLS-SEM was started by looking at the value of R-Square.

Table 5. Results of R Square

Variables	R Square	R Square Adjusted
Customer Satisfaction	0.565	0.554
Customer Loyalty	0.692	0.669

Moreover, R-Square for the Satisfaction variable (Y1) was 0.565. Thus, the impact of TSQM on job satisfaction was 65.5%; while the remaining 34.5% was influenced by other factors. Then, the R-Square value for Loyalty variable (Y2) was 0.692, so 69.2% of the performance variable was influenced with TSQM and Satisfaction. Otherwise, the rest was caused by other factors.

4.9 Results of Path Analysis
The bootstrapping method is a procedure for recurring new samples as many as new data. For the simultaneous test, the t-statistic test was used to test the significance effect of the overall exogenous variables (Xi) on the endogenous variable Y. This test was done by comparing the T values generated from the T-statistic calculation with T-Table. In addition, the null hypothesis will be accepted if the T-Statistic value is smaller than the T-table (<T-table T-Statistic). Conversely, the null hypothesis will be rejected if the value of T-Statistic is greater than T-table (T-Statistic> T-table). Based on the significance level of 0.05 compared to the observation number of 150, this study found that the T-table value was 1.998972 (fulfilled 1,999). In table 8 below, the results of the T-Values and P-Values are presented and compared with the T-Table value.

Tabel 5. Result of Path Analysis

Relation	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
TSQM > Loyalty	0.250	0.263	0.145	2.232	0.034
TSQM > Satisfaction	0.515	0.558	0.103	4.991	0.000
Satisfaction > Loyalty	0.367	0.390	0.141	2.597	0.010

Hypothesis 1 proposed that TSQM had positive impact on customer Loyalty. The test result on parameter coefficient between TSQM and Loyalty indicated a positive relationship with a coefficient of 0.250 with a T-statistic value of 2.232 > T-Table value 1.999 and significant with a value of P values 0.034 < α 0.05. Thus, the first hypothesis was accepted. Hypothesis 2 suggested that TSQM had positive impact on customer satisfaction. The test result on parameter coefficient between TSQM and satisfaction indicated a positive relationship with a coefficient of 0.515 with a T-statistic value of 4.991> T-Table value 1.999 and significant with a value of P values 0.000 < α 0.05. Thus, the second hypothesis was accepted. Hypothesis 3 promoted that satisfaction had positive impact on customer loyalty. The test result on parameter coefficient between satisfaction and loyalty indicated a positive relationship with a coefficient of 0.367 with a T-statistic value of 2.597 > T-Table value 1.999 and significant with a value of P values 0.010 < α 0.05. Thus, the third hypothesis was accepted. Total Service Quality Management (TSQM) shows positive impact on customer Loyalty, which means when the implementation of TSQM by online transportation company is good then the customer will be loyal. In this study, TSQM was measured by Physical Quality, Supporting Physical Quality, Company Quality, Technical Quality, Interactive Quality which has been applied in online transportation in Indonesia get customer response in average 4.12 or good with the highest response was for Technical quality of online Transportation customer in very good decision. Besides that, TSQM is also has positive impact on customer satisfaction. According to Chiguvi & Management (2016) TSQM substantially increase customer satisfaction across diverse industrial and cultural settings. Also Rasheed & Tiruchirappalli (2019) also assert that a company's quality improvement is the primary factor that leads to customer satisfaction. Management improvement in the company must be done totally, continuously, and oriented to quality. Customers who are satisfied with the products / services will return to use the services / products offered. Even though online transportation offers many conveniences in terms of the services delivered but in the provision of these services, interaction between service providers and consumers is also needed. TSQM plays an important role to improve the services provided by online transportation providers because services provided by the company, greatly affect consumer satisfaction and customer loyalty.

5   CONCLUSION AND SUGGESTION
TSQM is based on customer's perception on the outcome of the service and their evaluation of the process by which the service has been performed. In this study, TSQM practices in the online transportation company measured by Physical Quality, Company Quality, Technical Quality, Interactive Quality influenced the customer satisfaction and customer loyalty. Where all hypothesis suggested are accepted. The online transportation companies can benefit from the fact of knowing how customers perception from knowing the way of how to measure service quality. The company need to improve the quality of online service provided by increasing the quality of physical product/services, supporting physical product/services, company, technical and technical. Online transportation provider should paying attention to technical problems that always occurred in online system such as trouble in application on network..

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