Analysis Of E-Service Quality, Facilities, And Prices on Customer Satisfaction PT. KCI Bandung

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Abstract

The presence of PT. Indonesian Commuter Train (PT KCI) in the Commuter Railway transportation service industry to become the operator of KRL facilities for the mainstay mode of transportation for urban communities for safe, comfortable, and jam-free mobility. However, based on the survey results, it was found that the users of PT. Indonesian Commuter Train (PT KCI) are still not satisfied. Therefore, this research was conducted with the aim of analyzing the factors of the variable e-service quality, facilities, and prices that affect customer satisfaction at PT. Indonesian Commuter Train (PT KCI). The method used in this research is quantitative research with survey research methods. Collecting data by distributing questionnaires to 175 service users of PT. Indonesian Commuter Train (PT KCI). The data collected will be analyzed using the exploratory factor analysis method assisted by the SPSS version 20 program. The results of the data processing show that the dominant factor affecting customer satisfaction is service users of PT. Kereta Commuter Indonesia (PT KCI) from the variables of e-Service Quality, Facilities, and Prices are factors of equipment/furniture, messages conveyed graphically, and payment methods. This factor is from the Facility and Price variables.

Background

PT. KAI Commuter Jabodetabek since September 19, 2017, has changed its name to PT. Kereta Commuter Indonesia is a subsidiary of PT. Kereta API Indonesia (Persero) which manages the Jabodetabek Commuter Train and its surroundings.The presence of PT. KCI in the commuter rail transportation service industry is not a sudden presence, but a long process of thought and preparation.

Starting with the establishment of the Jabotabek Urban Transportation Division by PT KAI (Persero), which is separate from PT. KAI (Persero) Daop 1 Jakarta.After this separation, KRL services in the Greater Jakarta area are under PT. KAI (Persero) Jabotabek Urban Transport Division while long-distance train services operating in the Greater Jakarta area are under PT. KAI Daop 1 Jakarta. PT. Indonesian Commuter Train (KCI) was assigned to be the operator of KRL Facilities for the mainstay mode of transportation in urban communities for safe, comfortable, and jam-free mobility.

Throughout 2020, KCI served 154,592,886 users. As of March 2021, KCI has 1,196 KRL units operating to serve 80 stations in the Greater Jakarta area with a route range of 418.5 km. Currently, the facilities provided by PT KCI are adequate, including ticket payment counters, waiting rooms, toilets, smoking areas, special carriages according to gender, special seats for those with special needs, and information boards.

Currently, to make it easier for consumers to find out train schedules, they can be viewed online through the krl access application, and for payments, they can use e-money. However, from the available facilities, there are still shortcomings/inadequacies such as not yet available such as identity on the train, waiting room facilities are not comfortable, limited or not all stopping stations have smoking rooms, so consumers are free to smoke anywhere, then there is a violation of male consumers men enter the women's only carriage, and there is no room for breastfeeding at some stations.

Based on the data from the consumer complaints survey, it can be seen that KCI users are not satisfied with the facilities provided by PT. KCI. The following are the results of a survey on KCI user satisfaction in table 1.

Table 1
Consumer Satisfaction Survey Result Data using KCI

Year	Very satisfied	Satisfied	Not satisfied
2019	4.5 %	1.6%	93.9%
2020	11.8%	1.1%	87.1%

Source: PT KCI Company Data, 2021

The existence of an electronic ticket system is very helpful for PT KCI in managing its financial reports, all recorded in an application. Likewise, service users, are very facilitated because their use is so simple. After introducing the KRL electronic ticket system in 2013, two years later PT KCI launched the purchase of electronic tickets independently through the Commuter Vending Machine (C-VIM). Through this C-VIM, KRL service users no longer need to buy tickets at the counter, they only need to make transactions on a machine made by the nation's children.

The quality of internet-based services called E-Service Quality is now increasingly being used. Likewise, PT. After introducing the KRL electronic ticket system in 2013, two years later PT KCI launched the purchase of electronic tickets independently through the Commuter Vending Machine (C-VIM). Through this C-VIM, KRL service users no longer need to buy tickets at the counter, they only need to make transactions on a machine made by the nation's children.

This is done so that it is easier for users because its use is so simple. In addition, E-Service Quality is also useful in helping to get the level of satisfaction in the service sector in purchasing and delivering products or services.

The existence of E-Service Quality services as well as supporting facilities and more competitive costs will help create satisfaction for PT KCI users so that when there is the satisfaction it will foster a sense of loyalty to users with the services provided by PT. KCI. However, from the data above, it

can be seen That the KCI user is not satisfied. Therefore, this research was conducted to find out the factors that affect user satisfaction of PT. KCI.

Literature review

E-Service Quality

E-service quality is defined as a tool or instrument to get a measure of the level of customer satisfaction from an internet-based service consisting of spending, and delivery of products or services (Parasuraman et al., 2005). The measurement is done by comparing the expected service expectations with the services received by the customer. The service of quality service or product, of course, will have an impact on satisfaction for its users, and the continuous satisfaction received by customers will create a loyal attitude to the company (Griffin, 2014).

E-service quality has been increasingly recognized as an important channel, through which customer needs can be automatically provided through the internet throughout the consumer life cycle (Dolatabadi, 2012). E-service quality is defined as the extent to which a website facilitates shopping, purchasing, and receiving in an efficient and effective manner. (Malhotra, A., 2012)

E-Service Quality or also known as E-ServQual is a new version of Service Quality (ServQual). E-ServQual was developed to evaluate a service provided on the Internet network. E-Service Quality is defined as an extension of the ability of a site to facilitate shopping, purchasing, and distribution activities effectively and efficiently (Chase, Jacobs, & Aquilano, 2006).

Dimensions in E-Service Quality itself are:

Based on Ho and Lee (2007), there are 5 dimensions of measuring e-service quality, namely: Information Quality, Security, Website Functionality, Customer Relationship, and Responsiveness and Fulfillment.

1. Information Quality Information available on the website is a major component of perceived service quality.

2. Security (security) relates to how a website proves to be trustworthy for its customers. Online services that are done well and smoothly can build trust and confidence in customers. This is important, because of the lack of interpersonal contact with customers when buying online, customers, especially need to pay attention to transaction security. Security also refers to customer privacy. This is important in an online transaction because customers may be concerned that their personal and transactional information may be accessed or used over the Internet by third parties. Security has been considered as an important dimension in terms of service quality and satisfaction. Lack of security guarantees can be a major barrier for customers to shop online.

3. Website Functionality consists of three aspects. Navigation relates to how easy it is for users to find information on a website. This is considered as the main thing in building service quality. Without interaction with customers, online customers need to find information on the product/service they are looking for. If customers are often confused during the search process, they will stop. The Design and presentation of a website involve navigational mechanisms that can affect the relevance and efficiency of search results. This shows that navigation plays a dominant role in providing satisfactory services. The second aspect, website access, refers to a user's ability to access resources (including travel-related information and service features) on the website and it relates to ease of Connection and download speed. It is very likely that online users will stop and click on other sites because it takes them too long to access the website or download information. So, support for website access is one of the important components related to service performance. The third part of this dimension describes transactional functions that allow customers to feel that the website is simple and user-friendly to complete a transaction. Several components, including easy ordering, easy payment, and easy cancellation, indicate the extent to which customers believe that using the website will involve little or no effort. Support for website access is one of the important components related to service performance. The third part of this dimension describes transactional Functions that allow customers to feel that the website is simple and user-friendly to complete a transaction. Several components, including easy ordering, easy payment, and easy cancellation, indicate the extent to which customers believe that using the website will involve little or no effort. Support for website access is one of the important components related to service performance. The Third part of this dimension describes

transactional functions that allow customers to feel that the website is simple and user-friendly to complete a transaction. Several components, including easy ordering, easy payment, and easy cancellation, indicate the extent to which customers believe that using the website will involve little or no effort.

4.   customer relations, A virtual community development on a website can be considered as an online social organization to provide users and customers with the opportunity to share opinions and Exchange information among their communities. Armstrong and Hagel argue that virtual communities can unite information and people into a relationship. The service features provided by the website provide an opportunity for users (users) to interact with other users. This two-way communication makes it easier for users to find information, make buying decisions, and provide feedback or input to the website. These relationships can be developed through interactions with online communities that allow users to participate, learn, and interact online.

5.   Responsiveness and fulfillment are measured based on the timeliness of a website responding to customers in an online environment, such as how to answer questions from customers quickly and efficiently or how customer needs and complaints can be responded to via email politely. These problems are conceptually a component of the responsiveness dimension. The fulfillment Dimension refers to the success of the website in delivering its products or services and its ability to correct errors that occur during the transaction process. Web sites that seek to minimize dissatisfaction with the service provided will achieve a higher level of quality evaluation provided by their customers.

Facility

According to Tjiptono (2017) facilities are physical resources that must exist before a service can be offered to consumers. Facilities can also be anything that makes it easier for consumers to obtain satisfaction. Facilities are completeness facilities inside and outside the building that support the fulfillment of building functions in the form of building infrastructure and facilities. (Law Number 28 of 2002 concerning Buildings). Facilities are everything that is intentionally provided by service providers to be used and enjoyed by consumers with the aim of providing the maximum level of satisfaction. Facilities are everything that is physical equipment provided by the service seller to support consumer convenience (Kotler, 2014). According to Tjiptono, there are 6 Facility Indicators, namely:

1.   Spatial planning/consideration: Aspects such as proportion, texture, color, and others are considered, combined, and developed to provoke intellectual and emotional responses from the user or the viewer.

2.   Space planning: This element includes interior and architectural planning, such as the placement of furniture and fixtures in the room, circling flow design, and others. For example, the placement of the waiting room needs to be considered in addition to its capacity, it is also necessary to pay attention to the placement of additional furniture or equipment.

3.   Equipment/furniture. Equipment/furniture serves as a means of providing comfort, as a display, or as a supporting infrastructure for the use of customers' goods. What is meant by equipment in this study is the availability of electricity, tables or chairs, internet hot spot areas, paintings or readings, writing utensils, and others.

4.   Lighting and color: The lighting in question is the color of the room's coloring and lighting settings according to the nature of the activities carried out in the room and the desired atmosphere. Color can be used to increase efficiency, create a relaxed impression, and reduce accident rates. The color used for the interior of the service facility needs to be related to the emotional effect of the chosen color.

5.   Messages delivered graphically. Important and interrelated aspects in this element are visual appearance, placement, selection of physical form, selection of color, lighting, and selection of the shape of the appearance of symbols or signs used for certain purposes. Such as photos, color images, posters, warning signs, or information boards (placed at locations/places for consumers).

6.   Supporting elements. The existence of the main facilities will not be complete without other supporting facilities, such as places of worship, toilets, parking lots, places to eat and drink, listen to music or watch television, wide internet areas that always pay attention to the level of security.

Price

Meanwhile, according to Hasan (2013:521), "the concept of price for consumers is all forms of monetary costs sacrificed by consumers to obtain, possess, utilize a number of combinations of goods and services from a product". According to Kotler and Gary (2016), "price is defined as the amount of money charged for a product or service, and the amount of value that consumers exchange for the benefits of having or using a product or service".

According to Tjiptono (2017), "price is a part of the marketing mix element that provides income and income for the company, from the other three elements (product, distribution, and promotion), therefore costs arise (expenditures)". According to Mayadora, 2018 prices or fees affect the decision to continue using the services or services provided. According to Kotler and Gary (2016), prices can be measured by several dimensions, namely:

a.   Price Affordability. Price affordability is the actual price of a product written on a product that must be paid by the customer. What this means is that customers tend to look at the final price and decide they will receive the best value expected.
b.   Discounts / Discounts. Discount Price is a discount given by the seller to the buyer as a reward for certain activities of buying that are pleasant for the seller.
c.   Payment Method. Payment Method is a procedure and payment mechanism for a product or service in accordance with existing provisions. Ease of doing.
According to Lupiyoadi (2013) "Price is the benefit of the service that comes with the service for the various costs (victims) of consuming the service. These costs can be in the form of time to sacrifice service, physical activity (energy spent on services).
The price has several indicators such as: "Affordability of prices, suitability of prices with product quality, the competitiveness of prices and compatibility of prices with benefits" (Kotler and Armstrong, 2013:278).

Customer Satisfaction

According to Kotler (2014), customer satisfaction is a feeling of pleasure or disappointment that arises after comparing the performance (outcome) of the product thought to the expected performance (or result). Tjiptono (2014: 353), states that "Consumer satisfaction is a condition that arises from feelings to evaluate a product or service experience". The indicators for forming consumer satisfaction. According to Tjiptono (2014) indicators forming consumer satisfaction consist of:

a.   Re-Purchase: buyback, where the customer will return to the company to look for goods or services.
b.   Creating Word of Mouth: In this case, the customer will say good things about the company to others.
c.   Creating Brand Image: Customers will pay less attention to competing brands and product advertisements.
d.   Making purchasing decisions in the same company: Buying other products from the same company.

Research Methods

This research is quantitative research with a survey research method where this method is used to obtain data that occurred in the past or present, about beliefs, opinions, behavioral characteristics, variable relationships and to test several hypotheses about sociological and psychological variables from samples taken from a certain population.

Sources of data in this study consisted of primary data obtained through an interview process by all employees using a questionnaire. Secondary data were obtained from documents, books relevant to the research, and the internet. The method of data collection in this study was conducted by means of interviews and observations.

The population in this study was KCI passengers at Juanda Station. The number of samples from this study is 175 people who have used KCI The sampling technique uses the simple random sampling method so that members of the population have the same opportunity (Sugiyono 2012).

This study uses an exploratory factor analysis method assisted by the SPSS version 20 program.

Results and Discussion

Results

Validity and Reliability

Testing the instrument in terms of validity will be assessed by looking at the criteria proposed by Sugiyono (2005), the instrument is considered valid if the correlation value (r) > 0.3. Meanwhile, reliability testing is considered to meet the criteria if Cronbach's Alpha is greater than 0.6, according to Maholtra (1993).
From the results of data processing, the correlation value of all dependent variables is greater than 0.3. Thus, it Can be seen that the question items for the E-service Quality, Facilities, Price, and Customer Satisfaction variables are valid, for further testing. It was found that the Cronbach's Alpha value was 0.978, thus it could be seen that the question items for the independent variables were reliable for further testing.

Factor Analysis Test

KMO And Bartlett's Test

Table 2.

KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.959
Bartlett's Test of Sphericity	Approx. Chi-Square	3700.546
	df	153
	Sig.	.000

Source: Research results (SPSS Output), 2021

The output of KMO and Bartlett's Test can be used as the feasibility of a variable, whether it can be further processed using this factor analysis or not. In accordance with the requirements of the KMO MSA (Kaiser-Mayer-Olkin Measure of Sampling) if the KMO MSA value is greater than 0.5 then the factor analysis The technique can be continued. Based on the output table above, the KMO value is 0.959 > 0.5 and the Bartlett's Test of Sphericity (sig.) value is 0.000 0.05, where if the KMO value is greater than 0.5, the factor analysis can be continued.

Anti-Image Correlation

Anti-Image Matrix Used to find out and determine which variables are suitable for use in factor analysis. According to the table above, it is known that those who have the letter code (a) must meet the requirements, namely having a value of > 0.50. Based on the table above, the results are: X1.1 = 0.965, X1.2 = 0.943, X1.3 = 0.963, X1.4 = 0.955, X1.5 = 0.974, X2.1 = 0.947, X2.2 = 0.956, X2.3 = 0.948, X2.4 = 0.975, X2.5 = 0.964, X2.6 = 0.956, X3.1 = 0.964, X3. 2 = 0.979, X3.3 = 0.962, Y1 = 0.972, Y2 = 0.956, Y3 = 0.930, Y4 = 0.962 thus the value can be said to be significant because the MSA value is >0.5.

Communal Value

The commonality value is a value that describes how much a variable contributes to forming a

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new factor that is formed. Based on the results obtained, it can be seen that the commonalities value for a variable is more than 0.5 and even close to 1. This indicates that all variables contribute greatly to building the new factors that will be formed.

Total Variance Explained

Table. 3

Total Variance Explained						
	Initial Eigenvalues			Extraction Sums of Squared Loading		
Component	Total	% Of Variance	Cumulative %	Total	% Of Variance	*Cumulative* %
1	13,247	73,596	73,596	13,247	73,596	73,596
2	.769	4.272	77.868			
3	.490	2,724	80.592			
4	.443	2,461	83.053			
5	.370	2.054	85,107			
6	.357	1984	87,091			
7	.337	1,872	88,963			
8	.296	1,646	90,609			
9	.272	1.513	92.122			
10	.253	1,405	93,527			
11	.212	1.179	94,706			
12	.190	1.058	95,764			
13	.172	.957	96,721			
14	.146	.813	97,533			
15	.143	.792	98.325			
16	.122	.676	99.002			
17	.106	.588	99,589			
18	.074	.411	100,000			

Extraction Method: Principal Component Analysis.

Source: Research results (SPSS Output), 2021

Table 3 Total Variance Explained shows the value of each variable being analyzed. In this study, there were 18 variables, meaning that there were 18 components analyzed. There are two kinds of analysis to explain a variance, namely Initial Eigenvalues showing the formed factors. If all the factors are added up, it shows the number of variables (13.247 + 0.769 + 0.490 + 0.443 + 0.370 + 0.357 + 0.337 + 0.296 + 0.272 + 0.253 + 0.212 + 0.190 + 0.172 + 0.146 + 0.143 + 0.122 + 0.106 + 0.074 = 18). While the Extraction Sums of Squared Loading section show the number of variations or the number of factors formed, in the output results above there is one (1) variety of factors, namely 13,247

Discussion

Thus, eighteen variables have been reduced to 1 (one) component called factor 1 consisting of variables X1.1, X1.2, X1.3, X1.4, X1.5 (Information Quality, Security), Website Functionality, Customer Relationship, Responsiveness, and Fulfillment), Variables X2.1, X2.2, X2.3, X2.4, X2.5, X2.6 (spatial Planning, space planning, equipment/furniture, lighting and color, message – message conveyed graphically, supporting elements) Variables X3.1, X3.2, X3.3 (Affordability of Prices, Discounts / Discounts, Payment Methods), and Variables Y1, Y2, Y3, Y4 (Re-Purchase, Creating Word of Mouth, Creating Brand Image, Creating purchasing decisions in the same company).

Conclusion

Based on the results of data processing, it was found that the factors of the E-service Quality,

Facilities, and Price variables affect customer satisfaction of service users of PT. KCI is Information Quality, Security, Website Functionality, Customer Relationship, Responsiveness and Fulfillment, Spatial Planning, Spatial Planning, Equipment/furniture, Lighting and Color, Graphical Messages, Supporting Elements, Price Affordability, Discounts / Discounts, Payment Methods. The most dominant factors influencing customer satisfaction are equipment/furniture, messages delivered graphically, and payment methods.

Component Matrix

Table 4.

Component Matrix

	Component 1
x1.1	.829
x1.2	.849
x1.3	.828
x1.4	.856
x1.5	.848
x2.1	.865
x2.2	.876
x2.3	.891
x2.4	.885
x2.5	.859
x2.6	.856
x3.1	.837
x3.2	.748
x3.3	.884
Y1	.906
Y2	.848
Y3	.869
Y4	.894

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Source: Research results (SPSS Output), 2021

Component Matrix. This shows the correlation value or the relationship between each variable and the factors that will be formed. According to the table above, there is only 1 factor formed, thus the correlation of the component to the factor is only 1.

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