Analysis of Transportation Services Using Service Quality Method

by Agus Riyanto

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Abstract. Transportation business people try to meet customer needs by providing the best quality service and maximum facilities so that customers feel satisfied with the services that have been provided, but the quality of services that have been provided is not solely in accordance with customer expectations and perceptions. The purpose of this research is to find out how good the level of service quality has been, it is necessary to measure the service quality between customer expectations and perceptions of the service quality. The research method used is to compare customer expectations and perceptions using the service quality gap method. 5. The research instrument is a questionnaire consisting of 25 statement variables and classifies into 5 dimensions of service quality according to Parasuraman's, namely the dimensions of tangibles, reliability, responsiveness, assurance and empathy. The overall level of customer expectations got an average score of 3.06 and the level of perception perceived by customers as a whole got an average score of 2.90. The statement with the highest gap (gap 5) and included in quadrant A (the main priority for improvement) on the Cartesian diagram is in the quality of service regarding buses facilitated by safety support (first aid kits, fire extinguishers and emergency exits), buses facilitated by entertainment support (karaoke and LCD TV) and buses are facilitated to support comfort (reclining chairs, air conditioning, blankets and pillows). The impact this research about the quality of service is not appropriate or does not meet the expectations of customers, therefore it is necessary to improve the quality of related services so that the quality of service provided is maximal and can meet customer expectations.

1. Introduction

In the current era of globalization, the service industry is growing rapidly as seen from the increasing needs in society. There are many businesses in the service sector, one of which is tourism bus transportation services. Transportation business actors compete with each other trying to meet these needs by providing the best quality service and maximum facilities for customers to feel satisfied with the services that have been provided [1]. Service quality is an important element and has a strong relationship with customers found that banks modify, develop and create effective strategies to determine the various parameters that affect the quality of service in order to increase the number of their clients based on the competitive situation in the market by relating the different dimensions with customer satisfaction [2]. affecting the quality of service. Customer satisfaction was related to quality of service. At this point, there is an important need to lead research in the areas of business, economics, and management. Some studies have clarified the connection between customer satisfaction and quality of service with the dimensions of quality of service [3]. This indicates that more studies are needed in this area.

Based on the results of interviews, the company always provides the best quality service to its customers but does not know how satisfied or not the quality of services that have been provided is measured. To determine the quality of service, it is necessary to know the expectations and perceptions of customers in order to describe how well the quality of service has been carried out. The method used to analyze service quality is the Service Quality (Servqual) model. This method has become a standard for assessing service quality with the aim of describing how well the quality of service has been provided to customers from customer perceptions and expectations [4].

In the first SERVQUAL model, there were Likert-type items to measure the perceived level of service and the level of quality of service expected. In the course of further development of the SERVQUAL model , the original 10 dimensions were reduced to five. Define service quality as "a multidimensional concept that is evaluated and perceived by consumers, according to a set of essential parts grouped into five categories, namely: tangibility, reliability, responsiveness, security and empathy "[5]. The SERVQUAL model is an appropriate evaluation tool to measure the perception of service quality [6]. The level of gap (Gap 5) is the difference in value between perception and expectation of each attribute.

2. Method

Specifically, this study analyses five dimensions of service quality (tangibles, responsiveness, empathy, assurance and reliability) that have an impact on customer satisfaction to identify the potential of each factor affecting the transportation company. These dimensions consist of the five dimensions of the SERVQUAL model.

2.1. Reliability

Parasuraman et al. [4], Parasuraman et al. [7] and Parasuraman et al. [8] found that reliability means that organizations perform a service correctly the first time. The studies by Lam [9] reliability as the first of the dimensions of the quality of service model.

2.2. Tangibles

Parasuraman et al. [4], Parasuraman et al. [7] and Parasuraman et al. [8] identify tangible assets as physical facilities (equipment, personnel, and communication materials).

2.3. Responsiveness

Parasuraman et al. [8] emphasized that the responsiveness of willing employees consists of telling customers exactly when to do something, giving them their undivided attention, promoting services, and responding according to their requests.

2.4. Assurance

Assurance is defined as the courtesy and knowledge of the employees and their ability to impart trust and confidence to customers, that trust indicates the attitudes and behavior of employees, and the ability of employees to provide friendly, confidential, polite and competent service [8].

2.5. Empathy

Customers need to feel that they are made priority by the organization providing services. Empathy means caring, paying personal attention, and providing services to customers. The core of empathy is conveying the feeling that the customer is unique and special [10].

The design of the questionnaire was carried out with a field survey to conduct interviews with travel agents as (sources) where every customer complaint or need was always conveyed to the travel agent during the trip. After discussing gradually starting by giving the initial questionnaire until a statement variable is obtained that is in accordance with the planning of the things to be measured, then it will be attached to a list of questionnaires that will be distributed to customers of transportation company. statement variable as many as 25 items with the measurement using a Likert scale. The variables reliability is point 1 – 5, variables tangibles is point 6 – 11, variables responsiveness is point 12 – 18, variables assurance is point 19 – 22, and variables empathy is point 23 – 25. The following is a statement of the results of the questionnaire design which can be seen in table 1. as follows:

Table 1. Variables Questionnaire

No.	Variables
1	The company has a new bus fleet (X1)
2	The company has skilled drivers to drive buses safely and comfortably (X2)
3	The company has a reliable assistent drivers in serving customer needs (X3)
4	The company has employees who are able to serve correctly when ordering buses (X4)
5	The company has reliable driver and assistant when problems occur (X5)
6	The appearance of the Bus fleet is in good and clean condition (X6)
7	The appearance of the Bus Driver and assistant is uniform and neat (X7)
8	The buses are facilitated with comfort support (reclining chairs, air conditioning, blankets and pillows) (X8)
9	The bus is facilitated with safety support (first aid kit, fire extinguisher and emergency exit) (X9)
10	The bus is facilitated to support karaoke entertainment and LCD TV (X10)
11	The distance between the seats is quite wide (X11)
12	The employees respond quickly to customer needs (X12)
13	Assistant driver is responsive when asked for help (X13)
14	Assistant driver serves quickly and precisely (X14)
15	Assistant driver is able to provide clear information about facilities and services (X15)
16	Assistant driver is able to provide the right route information when traveling (X16)
17	Sopir dan Kernet Bus DMH merespon dengan sigap keluhan pelanggan (X17)
18	Kernet Bus DMH siaga ketika dibutuhkan (X18)
19	Fleet and bus facilities according to what has been ordered (X19)
20	The bus driver and assistant provide a sense of security and comfort (X20)
21	Customers feel safe and comfortable during the trip (X21)
22	Accident insurance coverage for customers (X22)
23	The bus driver and assistant provide friendly and polite service (X23)
24	The bus driver and assistant can communicate well with customers (X24)
25	The assistant driver understands what customers need (X25)

In determining the number of samples for distributing statement questionnaires to customers, when the statement questionnaire was distributed in January - February 2020, the statement questionnaire was distributed using a google form which was distributed directly to 52 customers.

3. Results and Discussion

3.1. Customer Expectations And Perceptions
The following is an assessment of customer expectations and perceptions felt by customers on the quality of service provided by the company. Data from the questionnaire results in the form of ordinal data that is changed or manipulated into interval data and then look for the total answers from each respondent based on the statement variables that have been given. The level of expectations and perceptions felt value by customers can be seen in table 2. as follows:

Table 2. Expectations and Perceptions Value (Customers)

Variables	Expectations	Perceptions
X1	3.44	3.44
X2	2.77	3.44
X3	3.00	2.32
X4	2.54	2.69
X5	3.44	3.44
X6	3.44	3.44
X7	2.77	3.44
X8	3.44	2.54
X9	3.44	2.48
X10	3.44	2.54
X11	3.44	3.44
X12	3.44	3.44
X13	3.44	3.44
X14	2.69	2.18
X15	2.61	2.23
X16	2.88	2.77
X17	2.88	2.48
X18	2.61	3.44
X19	3.00	2.69
X20	2.77	2.32
X21	2.77	2.54
X22	3.44	3.44
X23	2.69	2.54
X24	2.77	2.42
X25	3.44	3.44
Avarage	**3.06**	**2.90**

3.2. Gap Level (Gap 5)

The value of the gap is obtained from the perceived average minus the average customer expectations of each statement variable. The next step is to determine the ranking by sorting the results of the gap level based on the largest to the smallest value. To find out which statement has the largest gap value and which statement has the smallest gap value. The calculation of the gap value ranking (gap 5) using Microsoft Excel 2013 software. Calculation of the ranking value of the gap level can be seen in table 3. as follows:

Table 3. Gap Value Rangking (Gap 5)

No.	Variables	Gap Value Ranking
1	X9	-0.96
2	X10	-0.89
3	X8	-0.89
4	X3	-0.68
5	X14	-0.50
6	X20	-0.46
7	X17	-0.40
8	X15	-0.38
9	X24	-0.35
10	X19	-0.32
11	X21	-0.23
12	X23	-0.14
13	X16	-0.10
14	X11	0.00
15	X1	0.00
16	X6	0.00
17	X12	0.00
18	X13	0.00
19	X22	0.00
20	X25	0.00
21	X5	0.00
22	X4	0.14
23	X7	0.66
24	X2	0.66
25	X18	0.83

There are 13 statement variables that are negative (-) including 3, 9, 8, 10,14, 15, 16, 17, 16, 19, 20, 21, 23 and 24 which means that the quality of service provided by the transportation company is still not in accordance with what customers expect because the value of customer expectations or expectations has a greater difference than the perceived quality of service by customers. The gap with the highest ranking is in statement 1 which shows the highest gap and customers feel the quality of service is not appropriate or does not meet expectations, the lowest gap is in statement 18 which shows the quality of service provided is in accordance with or meets customer expectations. The results of this study are also in accordance [11] where customer satisfaction is influenced by factors are tangibles, reliability, responsiveness, assurance and empathy.

4. Conclusion

The level of gap (gap 5), there are 13 statements with a negative (-) gap, including variables 9, 8, 10, 3, 14, 20, 17, 15, 24, 19, 21, 23 and 16. The level of the gap on the 11, 1, 6, 12, 13, 22, 25 and 5 variables got a positive average value (+) that is equal to 0.0, which indicates that there is no gap in the service because the customer has felt appropriate or met expectations for quality. services that have been provided. The level of disparity in the statements of variables 4, 7, 2 and 18 gets a positive value (> 0), which indicates that there is a positive gap in the service. Customers feel that the quality of service provided by the company is appropriate or meets customer expectations. The level of disparity based on the highest ranking is in statement 9 with a value of -0.96. The lowest ranking is in the 18th statement with an average value of 0.83.

References
[1]   S. P. Dery. 2019. The Influence of Qualitu of Service, Facilities and Locations of Customer Satisfaction. Jurnal.unmuh jember. vol. 11. no. 1. pp. 1–14.
[2]   Mualla, N.D. 2011. Assessing the impact of sales culture on the quality of bank services in Jordan. Jordan Journal of Business Administration 2011, 153, 1–31.
[3]   Agbor, J.M. 2011. The Relationship between Customer Satisfaction and Service Quality: A Study of Three Service Sectors in Umeå; Umeå University, Faculty of Social Sciences: Umeå, Sweden.
[4]   Parasuraman, A.; Zeithaml, V.A.; Berry, L.L. 1985. A conceptual model of service quality and its implications for future research. J. Mark. Edition 49. P 41–50.
[5]   Mauri, A.G.; Minazzi, R.; Muccio, S. 2013. A review of literature on the gaps model on service quality: A 3-decades period: 1985–2013. Int. Bus. Res. 6, 134–144.
[6]. Siddiqi, K.O. 2011. Interrelations between service quality attributes, customer satisfaction and customer loyalty in the retail banking sector in Bangladesh. Int. J. Bus. Manag. 6, 12–36.
[7]   Parasuraman, A.; Zeithaml, V.A.; Berry, L.L. 1988. Servqual: A multiple-item scale for measuring consumer perc.J. Retail. 64, 12.
[8]   Parasuraman, A.; Zeithaml, V.A.; Berry, L.L.1994. Reassessment of expectations as a comparison standard on measuring service quality: Implications for further research. J. Mark. 58, 111–124
[9]   Lam, T.K. 2002. Making sense of SERVQUAL's dimensions to the Chinese customers in Macau. J. Market Focused Manag. 5, 43–58.
[10] Lone, F.A.; Rehman, A.U. 2017. Customer satisfaction in full-fledged Islamic banks and Islamic banking windows: A comparative study. J. Internet Banking Commer. 22, 1–20.
[11] P Miklos, H Hossam, N Janos, P Jozsef. 2019. The Service quality dimensions that affect customer satisfaction in the Jordanian banking sector. Journal Sustainability. Vol 11.

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