

PRE TRAVELLING SERVICE QUALITY ANALYSIS AT RAIL STATION COMMUTER JAKARTA-BOGOR

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ABSTRACT

Traffic jam in Jakarta and surrounding areas have an impact on higher transportation costs, wasted fuel, pollution and reduce productivity. Train as public transport in the city to be a solution to parse traffic jam in Jakarta, because it can carry more passengers, saving energy and saving land. Pre Travelling Services is a short service but very important, because it is the beginning of the pre travelling train services enjoyed by passenger train. The purpose of this study was to determine and analyze the services performance railway station Jakarta-Bogor based on passenger satisfaction index. The method began with distributed of questionnaires to study of passengers characteristics, determine the level of importance and performance attributes of service quality. The service performance of railway station was calculated by passenger satisfaction index. The study showed that 53% of the passengers were women, 30% of passengers 35-45 years old, traveling by train commuters heading to work place, 34% of the passengers worked as private employees. 64% of respondents use a commuter train by reason of shorter travel times than by bus. passenger satisfaction index was 0.3566 indicates that the performance of the service is "unsatisfied" based on the perception of respondents. service officers, and convenience waiting room was less than satisfactory. Strategic recommendations from the results of this study are: a) improve the quality of service officers at the station, b) Adding a waiting room c) improve convenience and quality of the station infrastructure, d) shorten the waiting time by optimizing the train departure schedule and increased carrying capacity

Key words: Rail way station, passenger satisfaction index, service quality

1. INTRODUCTION

Population growth in Jakarta and surrounding areas continue to increase. Jakarta residents in 2011 reached 8,524,190 people and during the day reach approximately 10 million people. In 2009 the number of vehicles in Jakarta reached 6.5 million private vehicles were 98.6% (6.4 million) and public transport as much as 1.4% (88 477 units) (Dirgantoro, 2012). density of vehicular traffic that is not matched by the growth of road in Jakarta, the growth rate is only 0.01% per year. Economic impact due to traffic jams in Jakarta spend 6-8% of GDP for transportation costs. According to international standards, the transportation costs incurred by a person, ideally, is 4% of GDP (Parikesit, 2011).

Train as public transport in the city to be a solution to parse traffic jam in Jakarta, because it can carry more passengers,

saving energy and saving land. Pre Travelling Services is a short service but very important, because it is the beginning of the pre travelling train services enjoyed by passenger train.. Activity pre traveling began when passengers enter the station area, and then by get information about travel, ticketing, waiting for the departure of the train and boarding to the railway. The purpose of this study was to determine and analyze the services performance railway station Jakarta-Bogor based on passenger satisfaction index. The results of this study can be used by decision-makers to improve the service quality in railway station.

2. THEORETICAL BACKGROUND

2.1. Service Quality

Service Quality (SERVQUAL) is a method of measuring the quality of services based on the comparison between customers' perceptions of the services they receive

(Perceived Service) with the actual services expected (Expected Service) in order to successfully satisfy their customers should seek to eliminate or reduce the gap. If the service received by consumers than expected, the service can be said to be very good quality. If the service consumers receive less than expected, the service is said to be inferior. But if the the service the same as the expectation, then the service is called satisfactory. According to Parasuraman, et al (2004) describes five dimensions of the concept of quality of service (ServQual), namely:

1. **Tangible**
Services can be perceived using sensory vision to assess the quality of service. good Tangible will affect the perception of the customer. At the same time tangible aspect is also one of the sources that affect the customer's expectations. Tangible consists of physical facilities, equipment, personnel, and infrastructure of communication.
2. **Reliability**
Reliability is a dimension that measures the reliability of the company in providing services to its customers. There are two aspects of this dimension, namely:
 - a. The company's ability to deliver as promised
 - b. How well a company is able to provide accurate service.
3. **Responsiveness**
Dimensions of service quality are the most dynamic. Customer expectations for speed of service will almost certainly change with an upward trend over time. Responsive service is strongly influenced by the attitudes of front-line staff. Sincerity in answering customer questions or requests.
4. **Assurance**
Quality dimensions that relate to the company's ability and behavior of front-line staff in inculcating a sense of trust and confidence to customers. There are four aspects of this dimension is the friendliness, competence, credibility, and security.
5. **Empathy**
Dimensions that provide great opportunities to provide service that is 'surprise' something unexpected customers, it is given by the service

providers. Covering the ease of having good communication, personal attention, and understand the needs of the customer.

2.2. Customer/Passanger Satisfaction index

Measurement of customer satisfaction index (Customer Satisfaction Index) is necessary because the results of the measurements can be used as a reference for determining the targets in the coming years. Without customer satisfaction index is not possible to determine the top management of the target in an increase in customer satisfaction. In addition it is also necessary because the index of customer satisfaction measurement process is continuous. Step to calculate customer satisfaction index is

- a) **Determine of Weighting Factors (WF)**
That is the percentage of the average score of importance of each attribute (%) of the total value of average importance score
- b) **Determine of *Weighted Score* (WS)**
The average satisfaction score of each attribute is multiplied by the weighting Factors (WF) of each attribute.
- c) **Determine of *Weighted Median Total* (WMT)**
That is a total of Weighted Score (WS) overall.
- d) **Customer Satisfaction Index**
That is the calculation of the Weighted Median Total (WMT) divided by the maximum scale multiplied by 100%. Overall level of satisfaction of the respondents can be seen from the criteria of customer satisfaction with the following criteria:

0,81 – 1,00	Very satisfied
0,66 – 0,80	Satisfied
0,51 – 0,65	Fairly
0,35 – 0,50	unsatisfied
0,00 – 0,34	extremly unsatisfied

3. RESEARCH METHOD

The steps of research as follows:

1. Determine of research object

The survey was conducted in commuter train station commuter route Jakarta-Bogor

2. Determine of sample

The survey began from an interviewed with the director of operations PT. KAI, the shareholders PT. KCJ and some of the station head, and then distributed questionnaires to 100 passengers randomly.

3. Designing of questionnaires

a) Questionnaires characteristics of passenger

Demographic characteristics of respondents / passenger based on the results of the study were divided into 4 groups, namely gender, age, occupation and level of income per month

Characteristics of respondents based on customer knowledge aspects were divided into 4 groups:

- Characteristics of general respondents
- The travel destination,
- Reasons to use Commuter Rail Line Jakarta-Bogor
- Frequency of use Commuter Rail Line Jakarta-Bogor

b) Questionnaires passenger importance and satisfaction

Questionnaires importance and satisfaction of passengers was intended to get an overview the perceptions and expectations of passengers for services that includes 5 dimensions Service Quality are: tangible, Reliability, Responsiveness, Assurance and Empathy.

Table 1. Attribute of Service Quality

No	ATTRIBUTE
TANGIBLE	
1	Ability serving officers
2	The number of seats in the waiting room
3	Availability of information facilities
4	Convenience facilities in waiting room/area
RELIABILITY	
5	Cleanliness of the railway station
6	Tidiness of uniform officers train station
7	Accuracy rail itineraries
RESPONSIVENESS	
8	Ease and clarity of the information to get the departure time
9	Transaction is served quickly and precisely
10	Officers are willing to help customers
11	Officers showed no impression busy in welcoming passengers

Table 1. Attribute of Service Quality (cont.)

No	ATTRIBUTE
ASSURANCE	
12	Security at the station
13	Safety assurance
EMPATHY	
14	hospitality workers
15	Officers always say thank you at the end of the service
16	Ease of reaching at station
17	Comfort in the waiting room
18	Officers regardless of passengers social status
19	24 hour customer service availability

4. RESULT AND DISCUSSION

4.1. Characteristic of Passanger

Based on the questionnaire, it is known that most of the passengers Commuter Rail Line Jakarta-Bogor is a woman that is 53 percent while the male passengers 47 percent. Most of the Commuter Line passenger train from Jakarta to Bogor aged 35-45 years with a percentage of 30 percent. The second order of 18-25 years old with a percentage of 27 percent, the percentage aged 25-35 years 24 percent of premises, aged 45-55 years with percentages of 14 percent and the smallest were age > 55 years at 5 percent. Most passengers Commuter Rail Line Jakarta-Bogor is one who worked as private employees, ie 34 percent. Passengers with public servants work ranks second at 27 percent, the student/students 24 percent, Housewife 10 percent and ranks last 5 percent of the entrepreneurs

Based on the average income per month, the majority (50%) Commuter Line passenger train from Jakarta to Bogor has an average monthly income of Rp.2.500.000,- - Rp.5.000.000,- passengers with an average monthly income of Rp.1.500.000-Rp.2.500.000 have a percentage of 40 percent. While the passengers were to own an average monthly income of > 500,000 is 10 percent. 64% of respondents use a commuter train by reason of shorter travel times than by bus.

4.2. Performance Service System

Pre travelling service system performance Commuter Train Line Jakarta-Bogor based on the respondent's perception of the

importance of service and satisfaction received by the respondent. Table 2 shows the Customer Satisfaction Index was 0.3566 where it was at interval 0,35 to 0,50 . It's means customers' unsatisfied ".

Table 2. Passanger Satisfaction index

Attribute number	Importance average	Importance Weighting	Satisfaction Average	Weighted Score
1	3,60	0,0427	2,32	0,0991
2	3,63	0,0431	2,20	0,0947
3	4,70	0,0557	2,37	0,1321
4	4,22	0,0501	2,15	0,1076
5	4,50	0,0534	2,40	0,1281
6	4,40	0,0522	2,50	0,1305
7	5,60	0,0664	2,00	0,1328
8	4,70	0,0557	2,20	0,1226
9	4,50	0,0534	2,35	0,1254
10	4,80	0,0569	2,33	0,1327
11	3,50	0,0415	2,23	0,0926
12	4,52	0,0536	3,00	0,1608
13	4,80	0,0569	2,10	0,1196
14	4,52	0,0536	2,55	0,1367
15	4,38	0,0520	2,42	0,1257
16	4,36	0,0517	2,57	0,1329
17	4,69	0,0556	2,54	0,1413
18	4,20	0,0498	2,30	0,1146
19	4,69	0,0556	2,50	0,1391
Total	84,31	0,0664		2,3689
Customer Satisfaction Index				0,3566

Based on the current data on the number of passengers and the results of forecasting the Commuter Line train station Jakarta-Bogor average number of passengers for 2012 Bogor station is 267 480 people / week. Approximately 38 211 people / day. In one day PT.KAI Commuter Jabodetabek effectively operate 15 hours and are expected waiting time of passengers Bogor station requires 15 min, so within a certain time there will be in excess of the capacity of the station is 850 people. These results indicate a considerable gap between the number of passengers, the available capacity. Excess passenger capacity Bogor station would provide less impact on passenger comfort facilities and services provided by PT.KAI or PT. KCJ. Therefore, to optimize transport capacity KCJ, increased facilities and service systems in Bogor station. The results suggest to pay attention to and improvement on the factors in the assessment of each attribute that still do not provide sufficient support for customer satisfaction, or to other factors that have a high importance rate but the performance was still unsatisfactory. Here is the proposed improvement:

- a) improve the quality of service officers at the station,
- b) Adding a waiting room
- c) improve convenience and quality of the station infrastructure,
- d) shorten the waiting time by optimizing the train departure schedule and increased carrying capacity

5. CONCLUSION

1. The study showed that 53% of the passengers were women,
2. 30% of passengers 35-45 years old
3. travelling by train commuters heading to work place,
4. 34% of the passengers worked as private employees.
5. 64% of respondents use a commuter train by reason of shorter travel times than by bus.
6. Passenger satisfaction index was 0.3566 indicates that the performance of the service is "unsatisfied"
7. Based on the perception of respondents. service officers, and convenience waiting room was less than satisfactory.

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