

Evaluation Of Penggaron Terminal Services In Semarang City

Widodo

Abstract- The Penggaron Terminal is a type B passenger terminal in Semarang City. This terminal accepts the transfer of several intercity bus routes that were originally from the Terboyo Terminal. This research intends to find out the service at the Penggaron Terminal. The purpose of this study is: (1) to determine the conditions and facilities in the Penggaron Terminal, (2) to analyze the perceptions of service users towards the services of the Penggaron Terminal. Data collection is done by looking for secondary data references and primary data from field observations and questionnaires. The data analysis method was carried out with a descriptive analysis to identify terminal conditions and facilities, and questionnaire analysis using the Importance Performance Analysis (IPA) method. From the analysis results, it is known that the service of Penggaron Terminal is not good enough for passengers because the area is inadequate and some facilities still need to be equipped and the quality of service is needed to improve.

Index Terms- Penggaron Terminal, Terminal Services, Importance Performance Analysis

1. INTRODUCTION

The Penggaron terminal is one of the passenger traffic nodes in the city of Semarang. This terminal is located in the southeastern area of Semarang City which strongly supports external movement from Semarang to Mranggen, Purwodadi, Blora and vice versa. The terminal is an infrastructure for road transport to arrange for the arrival of the departure of public transport bases and to load or unload passengers or goods. By its function as a temporary stop (transit), in the terminal, there will be a movement of passengers or goods from one type of transportation to another type of transportation mode, so that the demand for the efficiency of a trip can be achieved [1]. Based on these demands, a terminal must be able to accommodate, organize and control and serve all activities that occur due to the movement of vehicles, passengers and goods so that all activities in the terminal can run smoothly, orderly, safely and comfortably [2]. Related to the stipulation of the Terboyo Terminal being a type C terminal, the Penggaron Terminal accepts the transfer of several intercity buses that were previously served by the Terboyo Terminal, so that the flow of passengers and vehicles in and out will increase. This study intends to evaluate services at the Penggaron Terminal to determine the conditions and facilities at the Penggaron Terminal and to analyze passenger perception of the Penggaron Terminal service.

1. METHOD

2.2 Data Collection Method

Data collection by looking for secondary data and primary data. Secondary data obtained from several relevant stakeholders, online information and previous research. Whereas primary data were obtained from field observations and questionnaires to passengers. The number of respondents for passengers was 60 people taken at random at the Penggaron Terminal. This research is descriptive with a quantitative approach.

2.1. Data Analysis Method

The data analysis method was carried out in the following stages: (1) Descriptive analysis of the conditions and facilities of the Penggaron Terminal, and (2) Evaluation of the Penggaron Terminal services based on a questionnaire given to passengers. The analysis was conducted using the Importance Performance Analysis (IPA) method to find out the factors that influence the service quality of the Penggaron Terminal by measuring the level of importance and level of satisfaction through several variables contained in the Minister of Transportation Regulation No. 40/2015 concerning Service Standards for Implementing Road Transport Passenger Terminals [3]. In this study IPA analysis using SPSS software. Importance Performance Analysis (IPA) is a method that maps customer perceptions of the level of importance with customer perceptions of service performance to identify services that need to be improved [4]. The IPA combines the measurement of factors of importance and satisfaction level in a two-dimensional graph as shown in Fig. 1 so that it will facilitate the explanation of the data and obtain practical proposals [5].

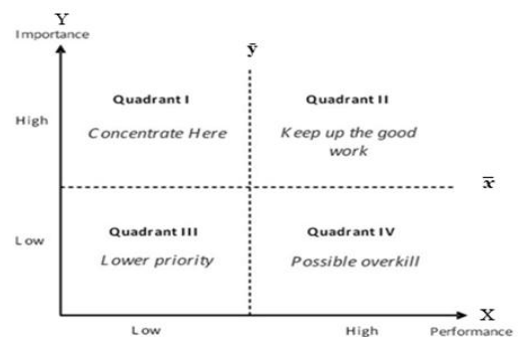


Figure. 1 Importance-Performance Analysis Framework

This concept is actually derived from the SERVQUAL concept, the level of customer interest is measured in relation to what the provider should be doing to produce high quality services [6]. Data processing uses a Likert Scale as an indicator of the scale of measure for the interests according to service user perceptions and the real level of performance of a service. Data in the Likert Scale are given a quantitative score for use in calculations [7]. Rating attributes on the Likert Scale with levels as in Table 1 [8].

• Widodo, Diponegoro University, Semarang, Indonesia. E-mail: kakd02@gmail.com

TABLE 1
IMPORTANCE AND PERFORMANCE SCALE

Importance Level	Performance Level	Score
Very Necessary	Very Satisfactory	5
Necessary	Satisfy	4
Ordinary	Ordinary	3
Not too important	Less Satisfactory	2
Not important	Not Satisfactory	1

Facility	Kinds of facilities	Availability
Others facilities	Fire extinguishers	Available
	Toilet	Available
	Public vehicle parking facilities	Available
	Terminal cleaning and maintenance facilities	Available
	Trading facilities (stalls)	Available
	Media service complaints	Available

1. RESULTS AND DISCUSSION

3.1 Analysis of Terminal Condition and Facility

As a type B terminal, the Penggaron Terminal with an area of 18,588 m² (1.86 ha) does not meet the requirements for the type B passenger terminal area on Java, which is a minimum of 3 ha [2]. Facility analysis by comparing the conditions in the field and the standards in the Minister of Transportation of Republic Indonesia Regulation No. 132/2015 concerning the Implementation of the Road Transport Passenger Terminal [9]. Based on observations, several facilities in the Penggaron Terminal have not been met according to the type B terminal standards. Facilities at the Penggaron Terminal can be seen as shown in Table 2.

TABLE 2
FACILITIES AT THE PENGGARON TERMINAL

Facility	Kinds of facilities	Availability
Main facilities	Vehicle departure lane	Available
	Vehicle arrival lane	Available
	The passenger waiting room, delivery & pick up	Available
	Vehicle parking space	Available
	Environmental management facilities	Available
	Road equipment	Available
	Facilities for using technology (sound system)	N/A
	Information media	Available
	Driver handling	Available
	Customer service from vehicle operators	N/A
	Safety surveillance facilities	Available
	Passenger arrival lane	N/A
	Departure waiting room	Available
	Ticket purchase room	N/A
	Ticket buying room to be together	N/A
	Online ticket purchase outlet	N/A
	Information center	Available
	The signboard in the terminal	Available
	Bulletin board	Available
	Baggage service	N/A
	Custody room	N/A
	Emergency gathering place	N/A
	The evacuation route for disasters	N/A
Supporting Facilities	Facilities for disabled and pregnant women	N/A
	Security facilities (CCTV)	Available
	Security service facilities	Available
	Vehicle crew resting facilities	Available
	Ramp check facilities	Available
	Vehicle deposition facilities	Available
	Workshop facilities for bus operations	N/A
	Health facility	N/A
	Worship facilities	Available
	Passenger transit place (hall)	Available

3.1. Analysis of Terminal Services

Evaluation of terminal services will be carried out using the Importance Performance Analysis (IPA) method based on the attributes contained in the Minister of Transportation of Republic Indonesia Regulation No. 40/2015 [3], concerning Service Standards for the Implementation of Road Transport Passenger Terminals e.i. from the aspects of safety, security, regularity, convenience, affordability and equality, which include variables as in Table 3. The results of the validity and reliability test of the questionnaire instrument are already eligible for use. Respondents' answers to the questionnaire questions were analyzed by the IPA method using SPSS software. The analysis results are grouped in the Cartesian quadrant as shown in the Fig. 2.

TABLE 3
TERMINAL SERVICE ATTRIBUTES

Aspect	Variable	Attributes
Safety	X1	Availability of pedestrian lane.
	X2	Road safety facilities are available (signs, markers, street lighting, fences).
	X3	Availability of evacuation route.
	X4	Availability of fire extinguisher.
	X5	Available posts, facilities and health workers.
	X6	Available posts, facilities and public health vehicle health inspectors.
	X7	Availability of minor vehicle repair facilities.
	X8	Availability of safety facility information, evacuation route instructions and gathering points are easily visible.
	X9	Information on health facilities is easily visible.
	X10	Available information on minor motor vehicle inspection and repair facilities that are easily seen clearly.
Security	X11	Security posts and surveillance cameras are available.
	X12	Available media for complaints of security disturbances in the form of stickers containing telephone numbers and / or SMS complaints posted in a strategic and easily visible place.
Regularity/ Reliability	X13	There are security officers in uniform and are easily seen.
	X14	Availability of arrival and departure schedules of vehicles and general motor vehicle rates and the realization of the schedule in writing.
	X15	Availability of public transportation schedules in advanced routes and public vehicles not in advanced routes along with the realization of the schedule in writing.
	X16	Available terminal management offices, control rooms and terminal Management Information Systems.
	X17	Terminal operations officers are available to manage terminal operations.
Convenience	X18	The availability of a waiting room that is clean, cool and odorless.
	X19	Toilet availability.
	X20	Availability of places of worship.
	X21	Green open spaces available.
	X22	Availability of restaurant.
	X23	Facilities and janitors are available.
	X24	Vehicle crew resting area is available.
	X25	Availability of smoking area.
	X26	Rainwater drainage channel available.
	X27	Room lighting is available.
Ease / Affordability	X28	The location of the vehicle departure lane is fixed, regular and separate from the passenger descent.
	X29	The vehicle arrival lane is fixed, regular and separated from the passenger descent.
	X30	Available service information (schedules, rates and routes).
	X31	Advanced transport information available.
	X32	Information on bus trip disruption is available.
	X33	Availability of luggage storage
	X34	Battery charging facilities available (Mobile, etc.).
	X35	Availability of places for up / down passengers
	X36	Public parking spaces and private vehicles are available.
Equality	X37	There are facilities for people with disabilities.
	X38	Availability of nursing room for mothers.

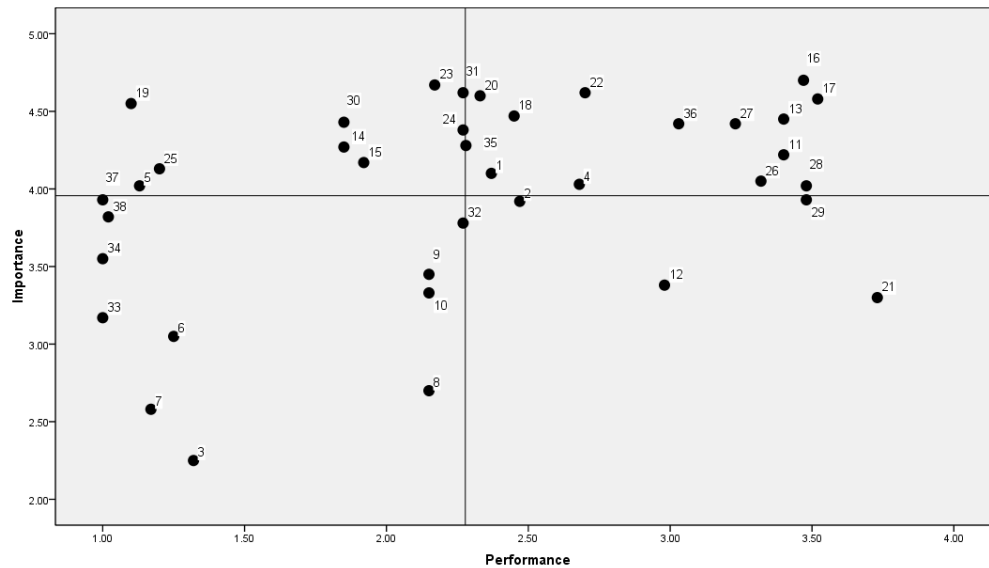


Figure. 2 The Results of the IPA Analysis in the Cartesian Quadrant

The service level of the Penggaron Terminal according to several service variables/attributes based on Fig. 2 is grouped as follows. a. Quadrant I (Concentrate here) Service attributes included in this quadrant are available post, facilities and health workers (X5), availability of vehicle arrival and departure schedules and the amount of public motorbike tariffs and written schedule realization (X14), availability of public vehicle schedules in advanced routes and public transportation not in the continuation route along with the realization of the schedule in writing (X15), availability of Toilets (X19), availability of facilities and cleaning officers (X23), vehicle crew resting place (X24), smoking area (X25), service information available (X30), available transport information (X31) and availability of Passenger boarding / alighting points (X35). b. Quadrant II (keep up the good work) Service attributes included in this quadrant are the availability of pedestrian lane (X1), fire extinguisher available (X4), security post and surveillance camera (X11), there are uniformed and easily visible security officers (X13), terminal management office, control room and terminal management information system (X16), available terminal operational officer who manages terminal operations (X17), availability of a clean, cool and odorless waiting room (X18), availability of places of worship (X20), restaurants (X22), available rainwater drainage channels (X26), available room lighting (X27), fixed, regular and separate vehicle departure lanes (X28) and public and private vehicle parking lots (X36). c. Quadrant III (lower priority) Service attributes included in this quadrant are available evacuation lane (X3), available posts, facilities and public vehicle health checkpoints (X6), light vehicle repair facilities available (X7), safety facility information available, evacuation route instructions and gathering points which is easily seen clearly (X8), available health facility information that is easily seen clearly (X9), available information on minor motor vehicle inspection and repair facilities that are easily seen clearly (X10), available information on bus trip interruptions (X32), availability of luggage storage (X33), Battery charging facilities (Mobile, etc.) (X34), Availability of disabled facilities (X37) and Mothers' room (X38). d. Quadrant IV Service attributes included in this quadrant are Road safety

facilities (signs, markers, road lighting, fences) available (X2), Security disturbances complaints media in the form of stickers containing telephone numbers and/or SMS complaints are posted in strategic places and easily seen (X12), There is a green open space (X21) and a fixed, regular and separate vehicle arrival lane with the passenger drop lane (X29).

2. CONCLUSION

Penggaron Terminal Services need to be improved, especially with the transfer of several intercity buses originating from the Terboyo Terminal. Several main facilities have not yet been fulfilled by the Penggaron Terminal, e.i. the passenger arrival lane, ticket purchase service space, luggage storage services, emergency gathering places, and disaster evacuation routes. Supporting facilities that have not been fulfilled include disabled facilities and pregnant women, workshop facilities and health facilities. Service attributes that need to be considered and improved are those in quadrant I because their importance for passengers is very high but their performance is still low. These attributes are available post, facilities and health workers, availability of arrival and departure schedules of vehicles and the amount of public motor vehicle tariffs along with the realization of the schedule in writing, availability of public vehicle schedules in advanced routes and public vehicles not in advanced routes along with the realization of the schedule in writing, Availability of Toilets, Available Facilities and Cleaning Services, Available Crew Rest Area, Available Smoking Area, Available Service Information, Available Transport Information and Available Up/Down Passenger Area.

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