

# **Factors Influencing the Management of Penggaron Terminal Facilities Based On Importance Performance Analysis (IPA) Method Results**

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**Abstract.** Penggaron Terminal is a type B terminal located in Pedurungan District which serves majors in the cities of Central Java Province. This study aims to determine the factors that influence the management of facilities at Penggaron Terminal. This research was conducted at the Penggaron terminal for two weeks, Questionnaires were distributed on Mondays and Sundays, in the morning at 07:00-10:00 WIB and in the afternoon at 16:00-18:00 WIB. This research is included in the quantitative research. Data collection uses primary data, namely data obtained from respondents' answers. Secondary data in the form of literature as a support related to research. Based on the data analysis, the results of the factors that influence the management of facilities at Penggaron Terminal are the availability of main and supporting facilities. Meanwhile, facilities that are not yet available at Penggaron Terminal are green open spaces and storage areas for goods.

**Keywords:** service level, user, Penggaron Terminal.

## **1. Introduction**

Penggaron is a village located in Pedurungan District, Semarang City, Central Java Province. Penggaron is included in the eastern part of Semarang City, which is located in the Pedurungan District, with an area of  $\pm 2,072$  ha. In the Penggaron sub-district, there is one terminal that is actively used by the community in the eastern part of Semarang City, namely the Penggaron Terminal.

Penggaron Terminal is a type B terminal in the Pedurungan sub-district area which serves departments such as Mangkang, Karang Ayu, Solo, Wonosobo, Kebumen, Cepu, Purwodadi, and cities or regencies within the province of Central Java.

According to (Indahsari, 2018) the terminal is a means for supervising, regulating, controlling and operating the system of passenger and goods transport flows, besides that the terminal

aims to make the smooth flow of passenger and goods transport. The function of the terminal according to (Patombongi, 2020) is to smooth the flow of passenger or goods transportation which is still very much needed to help people's mobility, improve the economy and increase local tourism.

Terminal type B has the role of serving AKDP public transportation combined with inner-city transportation services and/or rural transportation (Firmansyah, 2021). Some of the performance of type B Terminal services based on the perceptions of AKDP bus users are road safety, fire extinguishers, health posts, health information, health facility information, security complaints, transport arrival and departure schedules, advanced route schedules, bus counters, waiting rooms, bathrooms, smoking areas, service information in strategic places, advanced transportation information, travel disruption information, and disabled facilities (Hilmy et al., 2021).

Facilities at the Penggaron terminal include a waiting room that is quite clean, BRT Trans Semarang Corridor 1 bus stop for the Penggaron Terminal - Mangkang Terminal route, several food stalls, an information room, the office of the Penggaron terminal officer. In addition to the terminal location factor, terminal facility configuration arrangements and terminal lay out arrangements, another factor that is most important and needs attention for the terminal to function properly is that the factor of terminal capacity availability is to accommodate the intensity of vehicles entering the terminal. (Sedaya, 2019).

Based on the results of a survey that I have conducted, it can be seen that there are quite a few users in the gargantuan terminal. This can be seen in the quiet conditions at the entrance to the terminal, then the waiting room and ticket counters which are also quiet. In addition, according to Sedaya, 2019, the condition of the toilets at the Penggaron terminal is less apprehensive and the location of the prayer room is less strategic. From the above problems, a research was carried out by researchers with the title "Analysis of Semarang Penggaron Terminal Facility Services on User Satisfaction Using the Importance Performance Analysis (IPA) Method". The problem formulated is how are the factors that influence the management of facilities at the Penggaron Terminal?

## **2. Methods**

### *2.1. Type of Research*

The research method used in this research is descriptive method, using a quantitative approach to processing the data obtained both from the survey results and secondary data from the relevant research institutions.

### *2.2. Time and Location of Research*

The Penggaron Terminal is located at the eastern end of the city of Semarang bordering the Demak Regency, to be more precise, in Penggaron Kidul, Pedurungan, Semarang. Penggaron Terminal serves city transportation routes, border transportation, Trans Semarang, Trans Central Java and inter-city transportation. The Penggaron terminal area is  $\pm 5.7$  HA or 57,000 M<sup>2</sup>.

This research was conducted at the Penggaron type-B terminal for two weeks, the first week the questionnaires were distributed to respondents on Mondays and Sundays in the morning at 07:00-10:00 WIB and in the afternoon at 16:00-18:00 WIB.

### *2.3. Data Collection Technique*

The data collected are primary data and secondary data as follows:

#### 1) The Primary Data

Primary data is data that comes directly from respondents who are directly related to the problem under study. The primary data needed in this study is data obtained from the respondents' answers to a series of questions posed by the researcher. Respondents who answered the questionnaire were service users both passengers and visitors, bus crew, traders around the terminal, and terminal managers at Penggaron Terminal regarding the level of service quality.

2) Secondary Data

Secondary data is data obtained from literature studies in the form of books, documents, laws and regulations, journals, scientific papers, supporting data relating to the Penggaron terminal or relating to problems being researched by researchers from various other sources.

*2.4. Data Analysis Technique*

1) The Validation Test

The validation test aims to determine the performance of the questionnaire, not to infer a population characteristic with a sample. The measuring instrument that can be used in the process of testing the validity of a questionnaire is the number resulting from the correlation between the statement score and the overall score of the respondent's statements on the information in the questionnaire.

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2) The Reliability Test

The reliability test was carried out to ensure that the questionnaire created is a reliable measurement tool. If a measuring device is used twice to measure the same thing and the results of the two measurements obtained are relatively consistent, then the measuring device is reliable.

**3. Results and Discussion**

*3.1. The Validation Test*

*Table 1. The Validation Test*

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No.	Declaration	r calculate reality	r count expectations	r table	Definition
1	Waiting room area	0,429	0,428	0,197	Valid
2	Cleanliness in waiting room	0,314	0,396	0,197	Valid
3	The number of seats in the waiting room	0,281	0,244	0,197	Valid
4	Comfort while in the waiting room	0,418	0,336	0,197	Valid
5	Facilities available	0,538	0,486	0,197	Valid
6	Cleanliness in the bathroom	0,487	0,237	0,197	Valid
7	Bathroom amenities (soap, tissue, mirror)	0,723	0,442	0,197	Valid
8	Bathroom area	0,660	0,421	0,197	Valid
9	Comfort in the bathroom	0,637	0,428	0,197	Valid
10	Quantity and placement (damaged/non-functional)	0,580	0,433	0,197	Valid
11	Availability of medicines needed	0,608	0,504	0,197	Valid

No.	Declaration	r calculate reality	r count expectations	r table	Definition
12	Room cleanliness	0,611	0,431	0,197	Valid
13	Health staff available	0,585	0,295	0,197	Valid
14	Other supporting facilities	0,603	0,346	0,197	Valid
15	Room comfort	0,636	0,439	0,197	Valid
16	Retribution fee amount	0,478	0,435	0,197	Valid
17	Procurement of fees	0,608	0,535	0,197	Valid
18	Increase in fees	0,652	0,285	0,197	Valid
19	Retribution is very necessary	0,354	0,346	0,197	Valid
20	Clear information boards are available	0,554	0,236	0,197	Valid
21	Bus departure information	0,587	0,526	0,197	Valid
22	Cleanliness around the room	0,558	0,421	0,197	Valid
23	Room size	0,465	0,446	0,197	Valid
24	There is PO bus information that operates	0,437	0,233	0,197	Valid
25	There is a security guard available	0,266	0,317	0,197	Valid
26	Crime rate in the terminal	0,226	0,377	0,197	Valid
27	CCTV is available as a security support	0,445	0,459	0,197	Valid
28	There is a media complaint Security	0,476	0,424	0,197	Valid
29	Disabled facilities (disabilities)	0,496	0,538	0,197	Valid
30	Nursing room available	0,512	0,426	0,197	Valid

*Source: Researcher 2023*

### 3.2. The Reliability Test

Table 2. Reality Level Reliability Test

Cronbach's Alpha	N of Items	Keterangan
0,896	30	Reliabel

*Source: Researcher 2023*

*Table 3. Expectation Level Reliability Test*

Cronbach's Alpha	N of Items	Keterangan
0,814	30	Reliabel

*Source: Researcher 2023*

Based on the analysis above, the factors that influence the management of facilities at Penggaron Terminal that are already available are road safety facilities (signs, markings, street lighting, fences), evacuation routes, fire extinguishers, health facilities, security facilities (CCTV), media security disturbances, security personnel, ticket sales counters, terminal management office, terminal operational staff, departure and arrival schedules, waiting room, toilets, prayer room, canteen, room lighting, smoking areas, vehicle crew resting areas, drainage, arrival and departure routes, Service information (terminal layout, route numbers, schedules, fares, network maps), battery charging facilities, parking lots for public and private vehicles, facilities for the disabled, and nursing mothers rooms. Meanwhile, facilities that are not yet available at Penggaron Terminal are green open spaces and storage areas for goods.

#### **4. Conclusion**

Based on the results of the research that I did at the Penggaron Terminal, I can draw conclusions on the factors that influence the effectiveness of service at the Penggaron Terminal, Semarang. Internal factors are obtained at the facility with the highest strength score, namely the number of seats in the waiting room, the cleanliness of the First Aid room, the availability of officers health, information on bus departures, cleanliness around the information room, area of information room, CCTV available as a security support, and available breastfeeding mother room. Internal factors obtained the highest Weakness score, namely cleanliness in the bathroom, comfort while in the bathroom, availability of medicines, other supporting facilities, availability of security officers, and the level of crime in the terminal.

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