

Analysis of Passenger Satisfaction Levels at Gambir Station

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Abstract:- Gambir Station is one of Indonesia's largest stations with complete service facilities. With this facility, it is hoped that it can meet passenger expectations. In addition, regarding accessibility, integration from and to Gambir Station is still considered insufficient in supporting passenger satisfaction at Gambir Station. This study was conducted to determine the level of passenger satisfaction at Gambir station and the service indicators that received the top priority to be improved while also knowing the accessibility of existing integrations. This study used the servqual method to determine the gap between expectations and passenger perceptions and used Importance Performance analysis (IPA) to find out the indicators that need to be improved and the Customer Satisfaction Index (CSI) to determine the level of passenger satisfaction. In addition, the descriptive analysis explains the accessibility conditions of integration at Gambir Station. From the results of analysts, the conclusion can be concluded, among others, first the level of passenger satisfaction at Gambir Station, according to the calculation results, is excellent, with a value of 82.73%. Second, the quality of service services is low because they have not met customers' expectations. It can be seen based on the average servqual score of these five dimensions of -0.1299. Furthermore, finally, the accessibility of mode integration at Gambir Station can be said to be complete but still needs to be improved in terms of accessibility of people to DAMRI buses, taxis, trans-Jakarta bus stops and access to online motorcycle taxis. Of PT. Kereta Api Indonesia (Persero) on all five dimensions of the servqual can be said to be.

Keywords:- Integration Access, IPA-CSI, Passenger Satisfaction, Servqual.

I. INTRODUCTION

Transportation today plays a vital role in encouraging economic growth in a country. Therefore, the country's prosperity can be measured by its transportation system and governance (Leliana, Arinda; Widyastuti 2018). Transportation means transporting people or goods using vehicles or machines operated by human resources to facilitate the mobility of specific people or destinations in daily activities (Tjiptono, Fandy; Chandra, 2005).

Along with the increase and development of an increasingly advanced era, the transportation system as a means of transporting has experienced a relatively rapid technological development. The overall development after

the reform was rolled out and the need for mass transportation, cheap and sustainable transportation to the environment. People often use trains as their primary means of transportation when travelling long and short distances. Trains offer many things, such as convenient travel times and low prices with adjustments in quality and service (Fatimah 2019).

As a train operator, including passenger train stations, PT. PT. Kereta Api Indonesia (Persero) provides rail transportation services. The company's primary function is to provide rail transportation access to connect areas built by railway lines. Various industries, including the transportation sector and transportation services, have felt the impact and strategies for overcoming and preventing the Covid-19 pandemic that has hit the whole world, including Indonesia; various sectors are feeling the impact of outbreak mitigation and prevention policies, including the transportation and transportation service sector (Miro 2005).

Several policies were set to prohibit the spread of the virus while still supporting the mobility of users who use trains for daily activities. In line with current conditions, rail transportation companies in Indonesia must be able to carry out their daily activities while still being guided by Government Regulations on health protocols and maintaining service quality and making arrangements for the provision of supporting facilities to maintain passenger satisfaction in the era of the Covid-19 pandemic (Goetsch, David L; Davis 1994; Irawan 2004). The quality of service that the community uses train services can be interpreted as the concern of the manager or management for the passengers themselves. The quality of service is dynamic and normal to change according to passenger demand (Yamit 2007). However, in this case, the company or management always pays attention to the service attributes that the company will level to improve the quality of service to passengers. It will impact passengers, so they can feel the excellent service from the management and be happier with what they get (Adisasmita 2011).

Research conducted by Arinda Leliana, and Hera Widyastuti in 2018, shows that overall, passengers are satisfied with the performance provided by the Madiun station management. However, some attributes are still lacking in performance, namely facilities for people with disabilities, the height of the platform and floor of the train, the lack of information in visual form, and the availability of less spacious parking spaces. In addition, other research by Ricko Syahputra in 2020 showed that the level of service

quality at Tugu Yogyakarta Station and Lempuyangan Station based on the difference (gap) of the Servqual Score was included in the satisfied category. It is obtained from the difference between the expected value and the respondent's perception of a positive value. In addition to the servqual score value, some attributes are a priority to be improved at Lempuyangan station, namely providing services regardless of the status or position of employees and employees paying particular attention to consumers. As for Tugu Yogyakarta Station, the attributes that need to be improved are employees paying particular attention to consumers and responding quickly from employees. Some notes from this previous research that we will examine further include the services and conditions of the facilities at Gambir Station.

Gambir Station is one of several major stations located in the city of Jakarta, right in the heart of the city, adjacent to the National Monument (Monas) and directly connected to the access road to the Monas area. This station is included in the control area of Operation Area 1 Jakarta, PT KAI (Persero). Previously, the station's name was Weltevreden Station, later renamed Batavia Koningsplein Station after repairs were made in the 1930s. During the 1950s, the station's name was again different from Gambir Station, and after that, a significant redesign was made to transform it into an elevated line station during the 1990s. The station serves commercial class rail transport and is a tiny part of the mixed class connecting cities on the island of Java.

Related to its location in the centre of Jakarta, this station is expected to have good accessibility starting from

integration between modes and for access for people with disabilities so that it is easy to reach by public and private transportation. As a large class station, Gambir Station is appropriate to provide full service and adequate facilities to increase user satisfaction.

This study aims to determine the level of passenger satisfaction, identify and know the value of service attributes based on passenger expectations, and know the accessibility aspects and mode integration facilities at Gambir Station.

II. METHOD

The study location was conducted at Gambir Station with a research period of 3 months in the period from December 2021 to February 2022. The population in this study was the average daily number of train passengers at Gambir Station from December 2021 to February 2022, 8,544 passengers. The determination of respondents in this study was carried out using the Convenience Sampling method by distributing questionnaires online. In anticipation, researchers determined a sample in this study of 100 respondents—data collection techniques through observation, interviews, questionnaires, survey methods, and documentation. Data processing techniques are carried out qualitatively and quantitatively. Data analysis techniques are carried out through the IPA (Importance Performance Analysis) method, the CSI (Customer Satisfaction Index) method, the Servqual method, descriptive analysis, and data validation through triangulation.

III. DISCUSSION AND RESULT

A. Servqual Method Result

No	Dimensions	Perception Value	Expectations Value	Servqual Value
1	Tangible	3.412	3,31	-0.102
2	Reliability	3.496	3.388	-0.108
3	Responsiveness	3.482	4.336	-0.146
4	Assurance	3.4425	3,315	-0.1275
5	Empathy	3.356	3,19	-0.166

Table 1:- Calculation of Servqual Value For Each Dimension

Actual Servqual Score (ASS) is a percentage value that can be calculated from the comparison between the value of customer perceptions to the value of their expectations for the actual performance of PT. Indonesian Railways (Persero) felt by customers. The calculation of this value can be calculated using the formula below:

$$ASS = (\text{Perception Value} / \text{Expectation Value}) \times 100\%$$

In Table 2, it can be seen the calculation of the Quality value using the Actual Servqual Score calculation.

No	Dimensions	Perception Value	Expectations Value	ASS
1	Tangible	3,412	3,31	97%
2	Reliability	3,496	3,388	97%
3	Responsiveness	3,482	3,336	97%
4	Assurance	3,443	3,315	96%
5	Empathy	3,356	3,19	96%

Table 2:- Calculation of Actual Service Quality Value for each Dimension

Regarding the results of the analysis above, we have also conducted interviews with passengers. From the results of interviews with passengers (the target passengers interviewed are >20 years old) regarding the availability of officers station, it can be known that consumer behaviour requires the availability of officers with the following information:

- Ease of information:
 - Not all passengers know the KAI Access application and how to use it; where in the application, there is much information about train travel;
 - Passengers who come to Gambir Station for the first time do not understand the location/area inside the station that provides information, so they must ask fellow passengers;
- Security:
 - Seeking information by asking fellow passengers (migrants) does not guarantee safety because there is an opportunity for insecurity (criminal acts or other forms of action);
 - With officers who are easy to see (find), the potential risks that will arise can be minimized.
- Convenience:
 - Passengers who use train services, especially at Gambir station, want good service with the availability of field officers;
 - The availability of communicative, neat and polite officers can increase the level of passenger satisfaction with the services provided;
 - Speed in responding to customer complaints and problems;
 - The availability of officers can ensure the cleanliness of the station, where the cleanliness of the station must always be maintained throughout the station area.
 - The experience factor in its pragmatic aspect, where the practical actions of passengers are attached to the presence of field officers.
 - Some passengers buy conventional tickets (queuing at the counter), namely consumers in the middle and old age groups. This age group is an age group that tends only to understand old ways or habits and is supported by its limitations in following technological developments so

that it requires the help of officers.

- Time efficiency
 - With the availability of officers always on standby, passengers who require information do not need to ask everyone they meet. It can streamline time in searching for information according to needs;
 - The passenger's personality, which is relatively consistent or remains enduring for a long time to their environment, will result in less adaptability to something new, thus requiring the assistance of officers.

B. Importances Performances Analysis (IPA) Method

Based on the analysis data, information was obtained that the level of performance/service satisfaction at Gambir station is outstanding according to the passengers is the station officer conveys the departure/arrival schedule of the train and the appropriate departure line; this can be seen from the amount of average performance value that is the largest, namely 3.50. Passengers perceive the delivery of information as one of the responsiveness of officers that is very satisfying for passengers. While the lowest level of performance according to passengers is the Gambir Station Officers paying individual attention to the passengers, as can be seen from the average performance value of at least 3.07. Passengers assume that if station officials have not paid individual attention to passengers, which is evidence of unsatisfactory concern, this aspect should be further improved.

According to the level of importance of the results of the analysis, it can be conveyed that a critical attribute according to passengers is that the station officer conveys the departure/arrival schedule of the train as well as the departure line following the data that we have obtained, namely the average value of the level of importance of at most 3.56. Passengers assume that the station officer conveys the departure/arrival schedule of the train as well as the appropriate departure line is an important thing that the Gambir station management must further improve. While the lowest level of importance according to passengers, namely Gambir Station Officers, pays individual attention to passengers, which can be seen from the average value of the lowest importance level of 3.25, passengers consider that this is not so important that there is no need to overdo it.

C. Satisfaction Level with the CSI method

Atribut	MIS	WF	MSS	WS
P1	3.37	4.08	3.35	13.68
P2	3.48	4.22	3.37	14.22
P3	3.50	4.24	3.35	14.21
P4	3.30	4.00	3.21	12.84
P5	3.41	4.13	3.27	13.52
P6	3.51	4.25	3.33	14.17
P7	3.46	4.19	3.39	14.22
P8	3.49	4.23	3.38	14.30
P9	3.53	4.28	3.41	14.59
P10	3.49	4.23	3.43	14.51
P11	3.56	4.32	3.50	15.10
P12	3.49	4.23	3.34	14.13

P13	3.41	4.13	3.24	13.39
P14	3.48	4.22	3.33	14.05
P15	3.47	4.21	3.27	13.75
P16	3.38	4.10	3.24	13.27
P17	3.46	4.19	3.33	13.97
P18	3.45	4.18	3.31	13.84
P19	3.48	4.22	3.38	14.26
P20	3.25	3.94	3.07	12.09
P21	3.36	4.07	3.18	12.95
P22	3.37	4.08	3.15	12.87
P23	3.40	4.12	3.34	13.76
P24	3.40	4.12	3.21	13.23
Jumlah	82.50	100	79.38	330.92

Table 3:- Satisfaction Calculation with CSI method

From the table above, based on the average performance value (MSS), the station officer conveyed the departure/arrival schedule of the train as well as the corresponding departure line of 3.50 is the highest level of performance. Meanwhile, the attribute value of the gambir station officers paying individual attention to the passengers, namely 3.07, is the lowest level of performance. Based on the average value of importance (MIS), the station officer conveys the departure/arrival schedule of the train, as well as the departure line, following the value of 3.56, which is the highest level of importance. Meanwhile, the attribute value of the gambir station officers paying individual attention to the passengers of 3.25 is the lowest level of importance.

➤ Furthermore, the calculation of CSI is carried out

$$CSI = \frac{\sum WSi}{HS}$$

Where:

- CSI = Customer Satisfaction Index
- $\sum WSi$ = Total WSi
- HS = Largest scale (according to scale i.e. 4)

So the Results of the CSI are:

$$CSI = \frac{330,92}{4} = 82,73\%$$

From the results of the analysis using CSI carried out at the Gambir station service following the stipulated attributes, the value of the level of service satisfaction at Gambir Station is 82.73%, meaning that the level of passenger satisfaction is categorized as satisfied. In this study, it was identified that passengers were satisfied with the services provided by the management of Gambir Station.

The CSI value result was obtained based on the assessment results using the Customer Satisfaction Index (CSI) method, which was 82.73%. Looking at the CSI assessment criteria, the level of passenger satisfaction related to the passenger satisfaction attributes compiled is outstanding. However, in assessing the servqual method, there are still attributes that need to be improved to be aware of and keep the level of passenger satisfaction at different times in the future not decrease.

D. Accessibility of Intermodal Integration

➤ Walk (Pedestrian)

- Pedestrians are next to the vehicle access road;
- The width of the pedestrian is appropriate to facilitate the number of passengers and the accessibility available;
- On pedestrians, there is also a guiding block as a directional aid for passengers with disabilities;
- There is no rest area for the pedestrian;
- The road network on the pedestrian is well connected and has a reasonably good light intensity.

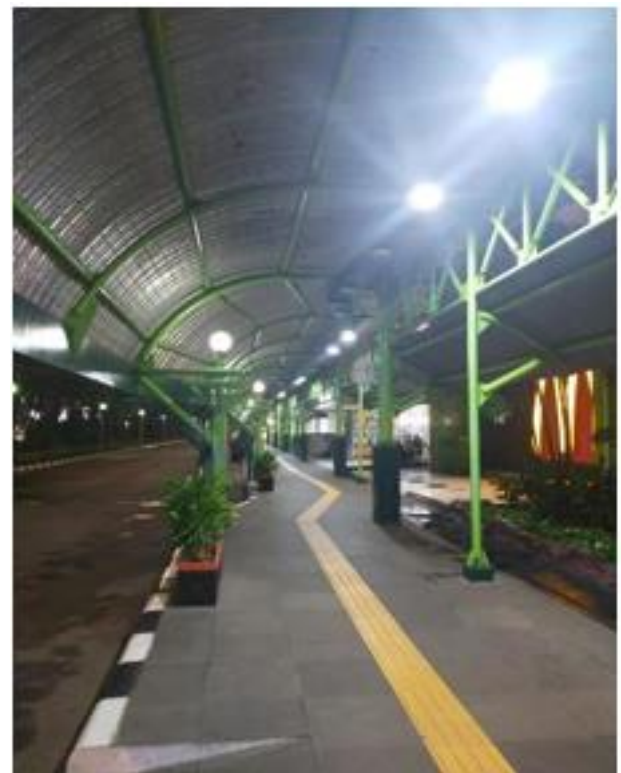


Fig 1:- Pedestrian access at Gambir Station

➤ Bicycle

- There are no dedicated bike lanes in the station area;
- There is no dedicated parking lot for bicycles;
- There is CCTV in the parking area.



Fig 2:- Parking Area and Gambir Station Street



Fig 4:- Gambir Station Drop-Off Area

➤ Buses

- The feeder bus stop is in front of the east side of the station, and there is a pedestrian path and zebra cross to cross the drop-off area.
- No bus arrival information
- The distance of the drop-off area is closer to the station entrance compared to the bus stop
- Bus stop and passenger drop-off area separate



Fig 3:- Transjakarta bus stop at Gambir Station

➤ Kiss and Ride (KnR)

- the drop-off area is relatively safe for disembarking passengers, separate from the bus and highway lanes, and side by side with pedestrian paths in the station area.
- Drop-off area close to the entrance
- The entrance is close to the pedestrian street, and there is a zebra cross for crossing places.
- There is no telecommunications facility (public telephone)

➤ Park and Ride (PnR)

- The distance from the entrance to the parking area is less than 450 m (160 m).
- There is pedestrian access from the entrance to the parking area.
- One-way circulation pattern.
- There is CCTV in the parking area.
- Adequate lighting in the car park area, but for motorbike parking, the lighting is still inadequate (there are not enough lighting lights).

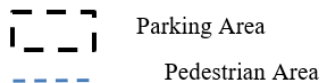


Fig 5:- Distance and Lighting Conditions of the parking area

➤ Accessibility and integration between station modes



Fig 6:- The layout of Pedestrian Access and Parking Lots



Gambir Station has facilities for integrating intramodal and intermodal transportation; the location of Gambir Station is very strategic with other transportation such as busways, taxis and other local transportation. Access to transportation integration is vital for the mobility of passengers to and from Gambir Station.

Based on field observations, the physical integration of intermodal integration facilities at Gambir Station is as follows:

- Within the station area
 - Availability of taxis
 - Availability of Damri Buses
- Outside the station area
 - Availability of trans-Jakarta bus stops
 - Passenger boarding

Based on observations in the field, the physical integration facilities between modes at Gambir Station can be said to be quite complete. However, the accessibility of people to change modes is felt to be very lacking. It is due to:

- Pedestrian hallways that have not been connected to the location:
 - taxis
 - DAMRI bus
 - transjakarta bus stop
- There is no entry for online motorcycle taxis to pick up and drop off passengers comfortably and safely

Several things still have to be improved in order to improve the accessibility of intermodal integration at Gambir Station, namely as follows:

- Build a lobby that connects the location/area:
 - taxis
 - DAMRI bus
 - transjakarta bus stop
- Create a unique login for online motorcycle taxis

It is in line with the findings at the time of the survey; namely, we found that out of the 100 respondents we surveyed, as many as 65 respondents used online transportation; we can compare this with the results of field observations at Gambir station related to kiss n ride (drop off)

services. For service to the kiss n ride, (drop off) passenger facilities at the gambir station only serve four-wheeled vehicle (car) users, while for motorcycle users, it is still unavailable. Currently, the process of dropping off motorcycle passengers is directly pulled over by the road, which is likely to interfere with the flow of traffic and, in our opinion, is not safe.

IV. CONCLUSION

Based on the results of the analysis and discussion above, it can be concluded that 1) passengers at Gambir station feel excellent service while at Gambir station when compared to the service experience at other stations, 2) service attributes that need to be improved according to passenger expectations, and 3) accessibility and integration of modes at Gambir Station still need to be improved in terms of accessibility of people to Damri, taxis, trans-Jakarta bus stops and access to online motorcycle taxis.

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