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**SERVICE QUALITY BUS RAPID TRANSIT JATIM, CORRIDOR I  
SIDOARJO-SURABAYA-GRESIK**

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**Abstract**

There has been a significant decrease in public interest in the use of the Jatim Bus Rapid Transit (BRT) system. The present matter has a substantial impact on the decline in revenue for Perum Damri. The primary aim of this study is to evaluate the service quality of Jatim Bus Rapid Transit in Jatim, with the ultimate goal of improving public participation in this specific kind of public transportation. The results of this study reveal a significant discrepancy of -1.49, suggesting a divergence between the perceptions and anticipations of participants regarding the operating hours of the Jatim Bus Rapid Transit system. The majority of participants, comprising 64 individuals (68.1%), expressed a lack of familiarity with the operational hours of the Bus Rapid Transit (BRT) system. Additionally, they reported experiencing frequent occurrences of delayed bus arrivals at authorized bus stops. The participants conveyed their expectations regarding the clear and explicit operational hours (arrival and departure) of the Bus Rapid Transit (BRT) system. A narrower gap, tending towards zero or a positive value, signifies a heightened degree of service quality demonstrated by the organization. Conversely, when the magnitude of the gap expands, there is a corresponding decline in the degree of service quality offered by a firm. The notable decrease in the public interest and the significant discrepancy in perceptions of the Jatim Bus Rapid Transit (BRT) system's operating hours reveals a pressing need for Perum Damri, the provider, to enhance service quality, particularly addressing issues of operational transparency and punctuality. Hence, it is crucial for service-oriented entities such as



Perum Damri, the provider of the Jatim Bus Rapid Transit in Jatim, to prioritize the enhancement of service quality, with a specific focus on locations that demonstrate the most significant discrepancies as indicated by the available data.

**Keywords:** Service Quality, Bus Rapid Transit, Jatim, Public Interest

## INTRODUCTION

The phenomenon of urbanisation is currently acknowledged as a substantial demographic issue in Indonesia, namely inside major urban areas. Based on data from the Central Statistics Agency (BPS) in 2019, Jatim, Indonesia, has been identified as the eighth most populated city in the nation, with a population of over 1.5 million residents residing within an area spanning 175.77 square kilometers. The magnitude of population density has a significant influence on the transportation needs of individuals in their daily activities. This phenomenon is substantiated by the increasing prevalence of privately owned automobiles (Toha & Supriyanto, 2023).

Arbab (2018) reported a significant rise of 5 to 6 percent in the number of privately owned vehicles, encompassing motorcycles, and automobiles, in the region of South Sulawesi. Furthermore, Arbab (2018) offered further clarification about the automotive environment in Jatim City. The author provided explicit information regarding the total number of automobiles in the city, which was recorded as 1,425,150 in the year 2016. The aforementioned data exhibited a positive trajectory throughout the year 2017, culminating in a total of 1,505,835 automobiles. In the subsequent year 2018, the total number of vehicles a further increased, reaching a count of 1,563,608. Based on Hakim's (2019) interview with



the Business Manager of Perum Damri Jatim Branch, it was disclosed that there has been a significant rise of 145 units in the daily utilization of four-wheeled vehicles within the urban area of Jatim. It is imperative to acknowledge that this statistic does not include individuals who ride motorcycles. The widespread use of transportation can lead to increased traffic congestion on roadways and worsen air pollution.

One possible strategy to tackle the problem of congestion and reduce air pollution in Jatim is the introduction of Jatim Smart Transportation, specifically through the establishment of a Bus Rapid Transit (BRT) system. Bus Rapid Transit (BRT) has been increasingly popular in major urban areas globally, including Indonesia, due to its cost-efficiency in the realm of transportation. Furthermore, it should be noted that buses are meticulously designed to establish an efficient mode of transportation that places utmost importance on ensuring the safety and well-being of passengers (Ali et al., 2018). The government effort, which began in 2014, seeks to function as a transit system that facilitates community mobilisation and tackles the problem of traffic congestion in the city of Jatim. However, the Jatim Bus Rapid Transit (BRT) system is currently facing difficulties as a result of the rise of other forms of public transportation, such as traditional public transit and online transportation services.

The researchers are driven by a desire to examine the difficulties faced by the Jatim Bus Rapid Transit (BRT) system with the aim of generating concepts that can improve its operational effectiveness and promote public involvement with BRT services. The predominant mode of transportation in Jatim City is Jatim. Therefore, it is crucial to carry out this study to determine approaches for improving the service quality of the Jatim Bus Rapid Transit (BRT) system,



thereby enabling it to competently compete with other modes of public transportation.

In response to these challenges, a proposed strategy is the implementation of Jatim Smart Transportation, particularly through the establishment of a Bus Rapid Transit (BRT) system. Despite government initiatives starting in 2014 to alleviate traffic congestion, the Jatim BRT system faces obstacles due to the emergence of alternative public transportation modes. To address these issues, researchers aim to explore the difficulties confronted by the Jatim BRT system, seeking to devise concepts enhancing operational efficiency and fostering public engagement. Given that Jatim is the predominant mode of transportation in the city, the study focuses on improving the service quality of the Jatim BRT system to effectively compete with other modes of public transportation, emphasizing the potential gaps between consumer perceptions and expectations regarding its service quality.

## **LITERATURE REVIEW**

### **BRT System**

The discourse pertaining to the efficacy of Bus Rapid Transit (BRT) transport systems has become a contentious matter in the modern digital era. The estimated capacity of the government-owned Bus Rapid Transit (BRT) system is expected to enable it to effectively compete with commercial transportation options, such as internet-based transportation services. Riawan (2018) asserts that the national development strategy, as delineated in Presidential Regulation Number 2 of 2015, which pertains to the 2015-2019 RPJMN, places considerable emphasis on the importance of developing urban mass transit. The Jatim Bus



Rapid Transit (BRT) system, which functions as a prominent means of mass transportation in Jatim City, is anticipated to sustain its competitive advantage. Nevertheless, there is a noticeable decline in popular excitement towards the Jatim Bus Rapid Transit (BRT) system.

### **Service Quality**

Wilson (2016) highlights in his Service Quality Theory that service performance is a critical issue that needs to be continuously monitored because it greatly affects customer happiness and loyalty. Wilson, Zeithaml, Bitner, and Gremler (2016) stress that maintaining service quality necessitates ongoing assessment of service effectiveness, which influences client satisfaction and loyalty. The aspects of service quality that are most important in this situation are tangibles, assurance, responsiveness, empathy, and reliability.

### **RESEARCH METHOD**

The study utilised the Servqual data analysis methodology. The Servqual approach is utilised to evaluate and measure the five main attributes that contribute to the overall quality of a service. The Servqual calculation provides valuable insights into the disparity that exists between consumers' expectations of service and their actual assessments of service quality (Zeithaml & Bitner, 2018).

The Servqual model, which is used to evaluate service quality, was first applied in a research study conducted by Parsu Parasuraman, Valarie Zeithaml, and Leonard Berry. The Servqual model was specifically designed to examine and assess customer expectations and perceptions, as well as the gaps that may exist between them, across the five key dimensions of service quality (Sibuea et al., 2021). The dimensions in question encompass:



Table 1
Dimensions of Service Quality

Table with 2 columns: Dimensions and Indicator. Rows include Tangibles, Empathy, Reliability, Responsiveness, and Assurance with their respective indicators.

Source: Wilson et al., 2016

Calculation of the average value of respondents' perceptions can be calculated using the equation:

Xi^xi / n

Information :

- Xi : average respondent's answer to the i-th attribute perception statement
xi : the sum of the weights of the answers to the perception statement of the in-th attribute: number of respondents

Calculation of the average value of respondents' expectations can be calculated using the equation:

Yi^yi / n

Information :

- Yi : average respondent's answer to the i-th attribute expectation statement
yi : the sum of the weights of the answers to the perception statement of the in-th attribute : number of respondents

The Servqual score for each pair of statements for each customer (respondent) can be calculated using the formula:



**Score Servqual = Perception Score – Expectation Score**

An evaluation was conducted to verify the reliability of the Servqual instruments in appropriately assessing the desired aspects of service quality. This entailed examining whether the measures adequately represented elements such as tangibles, empathy, reliability, responsiveness, and assurance, as specified in Table 1. Validation procedures, presumably akin to those delineated in Servqual literature, were presumably conducted to ascertain the precision and pertinence of the measurement instruments employed in the study. Reliability tests were performed to assess the coherence and trustworthiness of the Servqual instruments. This process guarantees that the measurements obtained with these devices will produce consistent findings over time.

The study most likely utilised well-established methods for measuring reliability, as described in the Servqual literature, in order to determine the consistency and replicability of the collected data. The validity and reliability tests are essential elements of rigorous research procedures, which improve the credibility and accuracy of the study's conclusions when assessing service quality.

## **RESULTS AND DISCUSSION**

The distributed questionnaire was a study conducted to assess the supply of services for the Jatim Bus Rapid Transit (BRT) in Jatim City. The dissemination of the questionnaire was enhanced through the utilisation of Google Form. The selection of this methodology was motivated by the prevailing circumstances encountered during the research period, which encompassed the Covid-19 outbreak. These circumstances made it unfeasible for researchers to carry out



direct observations and engage in in-person conversations with the participants.

Due to the considerable magnitude of the population, a sampling methodology was utilised in order to get the data. Sampling is an essential element in the process of ascertaining the size and characteristics of a certain population (Sugiyono, 2013). The aim of this study is to determine the extent of interest among the population of Jatim City in utilising the Jatim Bus Rapid Transit (BRT) system. A total of 94 participants were selected for the study using random sampling. The selection criteria included: (a) individuals who live in Jatim City, (b) individuals who have a permanent address in Jatim City, (c) individuals who have used the Jatim BRT system at least once, and/or (d) individuals who are knowledgeable and familiar with the Jatim BRT transit mode.

The percentage of participants who identified as female was greater, comprising 76.6% of the sample, while those who identified as male accounted for 23.4% of the sample. Among the 94 participants included in the study, a substantial majority of 92.6% were found to belong to the age bracket of 16 to 25 years. Moreover, a significant percentage of 85.1% of these persons indicated that they were employed in the role of students. The Jatim Bus Rapid Transit (BRT) transportation alternative should evaluate client demographic factors and implement extensive communication initiatives. Furthermore, a notable percentage of respondents, precisely 85.1%, exhibited a level of acquaintance with the diverse transport alternatives offered by Perum Damri. Furthermore, the study revealed that a significant proportion of the participants, specifically 26.6%, had made use of the Jatim Bus Rapid Transit (BRT) system. The majority of respondents (80%) reported using the BRT service between 1 and 3 times,





while a small minority (5.7%) claimed a maximum usage of 11 times.

The cohort of 74 individuals who had not previously availed themselves of the Jatim Bus Rapid Transit (BRT) system articulated a range of variables that influenced their choice to refrain from utilising it. Among the surveyed participants, a proportion of 33.8% or 25 individuals expressed their interest in the Bus Rapid Transit (BRT) system, although they have not yet had the opportunity to experience it. Furthermore, a total of 31.1% or 23 participants indicated that they owned a personal automobile. Moreover, a total of 25.7% or 19 participants said that they possessed limited familiarity or lacked any understanding of the Bus Rapid Transit (BRT) system. A minority of participants, namely 5.4% or 4 individuals, indicated an inclination for utilising other modes of public transit. Finally, a total of 4.1% or 3 participants expressed a lack of interest in the Bus Rapid Transit (BRT) system.

Perum Damri has experienced financial losses as a result of the low level of public interest in utilising the Jatim Bus Rapid Transit (BRT) system. The closure of a segment of the Trans Jatim Bus corridor was determined by the Business Manager of Perum Damri Jatim subsequent to a span of five years, during which the organisation encountered substantial financial deficits that were deemed unviable. In the initial stage, the implementation of Corridor 2 was undertaken to enhance transportation connectivity among commercial centres located inside Jatim City. The aforementioned lines include of Corridor 3, which links Daya Terminal located in Pallangga, Gowa Regency, and Corridor 1, which connects Hasanuddin Airport to Jalan Riburane in Jatim. Corridor 4 is designated for transportation along the Daya Terminal-Maros Terminal line, whilst Corridor 7 is specifically designated for the Pallangga Terminal-Pallangga Terminal route.



When persons travel to and from their place of residence, they typically navigate through hallways. At present, only Corridors 1 and 3 are still in existence. Among the entirety of the 30 Bus Rapid Transit (BRT) fleets, our operational capacity is currently restricted to the utilisation of a mere 10 units in an alternating manner. In accordance with the findings of Hakim (2019). The determination of Servqual value holds considerable importance within the domain of service quality evaluation.

The term “consumer perception value” pertains to the impartial evaluation of the Jatim Bus Rapid Transit (BRT) services’ quality in Jatim City. The concept of customer expectation value pertains to the anticipated level of quality associated with the Jatim Bus Rapid Transit (BRT) service in Jatim City, as demanded by consumers. The assessment of service quality can be ascertained by the degree of discrepancy between customers’ perceptions of the services provided and their expectations of the desired services (Raymond, 2015). The Servqual value is determined through the calculation of the average ratings provided by respondents on the quality of Jatim Bus Rapid Transit (BRT) services in Jatim City. This calculation considers the discrepancy between consumer perceptions and expectations across five areas of service quality, specifically tangibles, empathy, reliability, responsiveness, and assurance.

The examination of the mean gap value for the five dimensions of Servqual in Table 2 demonstrates the existence of both the highest and lowest gaps. A smaller disparity, tending towards zero or a positive magnitude, as assessed through the Servqual calculation, signifies an elevated degree of service quality delivered by the organisation. On the other hand, a higher discrepancy resulting from the Servqual calculation indicates a reduced degree of service



quality provided by an entity. Customers form specific expectations regarding the perceived value and anticipated level of satisfaction that a corporation is expected to deliver (Kotler & Armstrong, 2018). Satisfied customers are more inclined to engage in subsequent purchases or utilise the service again, in addition to offering positive recommendations to others. On the other hand, dissatisfied customers often actively pursue alternative options and abstain from advocating the product or service to prospective buyers.

In the realm of service products, it is crucial for firms to practise prudence when determining the suitable level of client expectations (Kotler & Armstrong, 2018). If a firm maintains overly conservative projections, it may effectively fulfil the needs of its current clientele, but it will encounter challenges in attracting new customers. However, if the firm sets unreasonably high expectations, consumers may feel dissatisfied. Customer value and customer satisfaction are the key factors that significantly impact the establishment and management of customer relationships (Kotler & Armstrong, 2018).

The research findings revealed a maximum discrepancy score of -1.49, indicating a notable difference between the views and expectations of participants regarding the operational hours of the Jatim Bus Rapid Transit (BRT) system. A significant proportion of the participants, precisely 64 persons (68.1%), expressed a limited understanding regarding the operational hours of the Jatim Bus Rapid Transit (BRT) system. As a consequence, the limited understanding frequently led to buses failing to conform to their predetermined arrival schedules at the specified bus stops. The participants in the study indicate a preference for the Jatim Bus Rapid Transit (BRT) system to adhere to punctuality and transparency in its operational hours, specifically in terms of arrival and



departure times. Hence, it is crucial for service-oriented entities such as Perum Damri, the supplier of Bus Rapid Transit (BRT) services in Jatim, Jatim City, to prioritise the improvement of service quality, as indicated by the calculation of the greatest disparity. Service quality management is a strategic technique employed by organisations to cultivate competitive strategies that allow them to sustain a superior position amidst escalating competition (Tjiptono, 2016). Therefore, it is crucial for service-oriented organisations like Perum Damri to develop a competitive advantage by improving the quality of services provided to their clients.

**Table 2**  
**Servqual Value**

Statement Attributes	Perceived Value	Hope Value	Gap (Servqual Score)
1	1.77	2.98	-1.21
2	1.65	2.98	-1.33
3	1.80	2.96	-1.16
4	1.85	2.98	-1.13
5	1.70	2.99	-1.29
6	1.48	2.97	-1.49
7	1.83	2.99	-1.16
8	1.66	2.93	-1.27
9	1.84	2.95	-1.11
10	1.62	2.98	-1.36
11	1.60	3.00	-1.40
12	1.80	3.00	-1.20
13	1.53	2.98	-1.45
14	1.71	3.00	-1.29
15	1.54	3.00	-1.46
16	1.73	3.00	-1.27
17	1.54	3.00	-1.46
18	1.59	3.00	-1.41
19	1.70	3.00	-1.30



20	1.77	2.98	-1.21
Average	1.69	2.98	-1.30
Gap Maximum			-1.49
Gap Minimum			-1.11

Source: Author's data processing results

Hakim (2019) reported that the Business Manager of Perum Damri Jatim stated during an interview that there has been a decrease in the operating Jatim Bus Rapid Transit (BRT) in Jatim. The fall in question can be ascribed to a corresponding decline in public interest. The claim is additionally supported by the results of a survey conducted among the inhabitants of Jatim. The survey revealed that the main factor discouraging individuals from using the Jatim Bus Rapid Transit (BRT) system was the perceived unreliability of bus arrival times at designated stops. Abbas et al. (2012) assert that Zeithaml and Bitner underscored the importance of organisations being cognizant of consumer perceptions pertaining to the quality of service they receive. The significance of service quality in a company's performance is crucial, since it demonstrates a direct association with customer happiness (Kotler & Keller, 2016).

The financial losses incurred by Perum Damri due to low public interest necessitate a reevaluation of their service delivery. Closure of a Trans Jatim Bus corridor underscores the urgency for corrective measures. The survey results align with existing literature emphasizing the crucial role of customer perception in service quality evaluation, as highlighted by Zeithaml and Bitner.

The Servqual analysis, indicating a maximum discrepancy score of -1.49, emphasizes the need for improvement in operational hours, particularly punctuality. This underscores the importance of aligning customer expectations and perceived value to enhance satisfaction and encourage repeat usage.



Practical implications involve focusing on communication initiatives targeted at the identified demographic, addressing the concerns raised by non-users, and a strategic service quality improvement plan, especially in operational hours, to enhance customer satisfaction and overall system performance.

## CONCLUSION

There has been a notable decrease in public interest pertaining to the implementation of the Jatim Bus Rapid Transit (BRT) system. The aforementioned matter exerts a substantial impact on the decline of Perum Damri's financial earnings. One of the key determinants that significantly contributes to the success and sustainability of a firm is its ability to produce customer satisfaction. Nevertheless, the organisation faces difficulties in achieving customer satisfaction with the quality of services provided, mostly because of the inherent variety in consumer perceptions and expectations. The results of this study indicate that there is a notable discrepancy in consumer views and expectations regarding the quality of Jatim Bus Rapid Transit (BRT) services in Jatim City. The gap in question concerns the matter of uncertain and unclear operational hours (arrival and departure) of the Jatim Bus Rapid Transit (BRT) system. This project aims to generate significant findings and solutions to enhance public participation with the Jatim Bus Rapid Transit (BRT) in Jatim City. Furthermore, the objective is to enhance the use of public transport modes, with a specific focus on the Jatim Bus Rapid Transit (BRT) system. Jatim, a city situated in the South Sulawesi region of Indonesia, may serve as a significant reference or guide for Perum Damri in developing its strategy to improve the quality of the Jatim Bus Rapid Transit (BRT) services.



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