Bus Trans Semarang: Service Improvement During the New Normal Era

Anita Ratnasari Rakhmatulloh, Diah I Kusumo Dewi, Djoko Suwandono
Urban and Regional Planning Department Diponegoro University, Indonesia
anita.ratnasari.r@gmail.com

Abstract. Public transportation is an effort towards sustainable transportation. The City of Semarang has public transportation such as the Bus Rapid Transit (BRT), called the Bus Trans Semarang. The opening of the Bus Trans Semarang in 2009 continues to grow and increase the number of passengers. However, the number of passengers is still far below the expected target, even though the Bus Trans Semarang service continues to be improved. The decrease in the number of passengers further exacerbated by the existence of restrictions on community activities in Semarang City due to the pandemic COVID-19. Bus Trans Semarang services during the COVID-19 Pandemic need handled or minimized to reduce the risk of spreading COVID-19 to passengers when using the Bus Trans Semarang. This study aspires to determine what service variables are based on passenger preference that needs improvement, especially in the new normal era. The hope is that by knowing these variables, services can be made on the Bus Trans Semarang to increase public transportation use while reducing private vehicles’ use. Thus, Bus Trans Semarang can be suitable public transportation since users’ safety and comfort are essential for the success of public transportation in breaking the COVID-19 chain. This study uses the Importance Performance Analysis (IPA) of passengers. This study produces service variables expected by passengers, namely ease of mode change with other types of vehicles, timeliness of arrival at bus stops or terminals, and health protocol expectations on the Bus by both officers and passengers.

Keywords: Public transportation; Service improvement; COVID-19; Bus Trans Semarang

1. Introduction

Bus services need to improve in the new normal era based on the preferences of passengers. The spread of the COVID-19 shows the fragility of the urban system related to virus transmission and the need for careful preparation in responding to the emergence of the COVID-19 Pandemic [1]. The spread of COVID-19 globally occurred in December 2019, starting in Wuhan City, China, and entered Indonesia in early March 2020 [2]. The government is trying to take quick action to prevent the spread of COVID-19 by carrying out physical distancing, regional quarantine until lockdown. Cities must be able and have a muscular endurance in dealing with the COVID-19 outbreak. Rapid and massive urbanization is regarded as a possible factor for spreading infectious diseases [3]. Challenges in such conditions require city planning based on disaster mitigation, natural disasters, and non-natural disasters such as disease outbreaks. Therefore, improving public transportation services in urban areas must be carried out [4].

Quality of service is the provision of services to the needs of people who have importance in a particular organization following predetermined basic rules and procedures. A quality is interpreted as
a dynamic condition related to products, human resources, services, processes in it, and the environment that meets or even defines as dynamic conditions of products, services, human resources, processes, and the environment that fulfill or exceed expectations [5]. Based on this definition, quality is the correlation between products and services provided to consumers or users that must meet consumer expectations and satisfaction.

The quality of public transportation services is important to attract more general interest in using public transportation so that services on public transportation can meet user needs [21]. Service quality is regarded as the overall result of the service system received by consumers or users. It is dynamic, evolving according to the perceptual demands of the customer. In principle, service quality focuses on efforts to fulfill the needs and desires according to user perceptions, as well as the purpose of providing services according to the user’s needs [6]. Improving the quality of public transport services can be a basic solution for the creation of a sustainable transportation system by providing optimal satisfaction for service users [7]. Parasuraman (1990) identified the factors that influence service quality, then carried out an analysis process that resulted in five dimensions of service quality such as reliability, responsiveness, assurance, empathy, and tangible [8]. Reliability is defined as the ability to complete the promised service immediately. Meanwhile, Responsiveness is the willingness to provide good service to customers. Assurance is the knowledge and friendliness of employees and their ability to generate customer trust. Then the last tangible is interpreted as the appearance of physical facilities, equipment, employees, and means of communication.

Figure 1. Service Quality Diagram

The high mobility of urban residents using public transportation can trigger the rapid spread of the COVID-19. Public transportation becomes a container for the spread of the COVID-19 if there are too many passengers with limited ventilation, the inability to identify passengers who are potentially sick and various types of facilities that are touched can be a source of COVID-19 transmission [9]. However, not a few public transportations such as buses and trains are used, often carrying passengers with overcapacity. This can contribute to the spread of the virus among passengers using public transportation [10]. Public transportation developed in the urban transportation system has become problematic since it can spread the COVID-19 disease outbreak. Meanwhile, public transportation is an effort towards sustainable transport. In Semarang, one of the modes of transportation that are still operating during the COVID-19 Pandemic is the Bus Trans Semarang. Bus Trans Semarang as an implementation model of Bus Rapid Transit (BRT), is a transit-based transportation system that has a high capacity and speed as well as an adequate level of service at a relatively affordable cost [11]. Another definition implies that BRT is a transit-based transportation system that can increase the land movement of people in urban
areas [12]. Therefore, BRT is a transportation that has the flexibility and speed of a train public transportation with a more affordable version similar to conventional buses with better quality [13].

Bus Trans Semarang is a fast bus transport system in Central Java that operates in Semarang City. The Bus Trans Semarang services operated to solve congestion in Semarang and commutes to downtown Semarang and tourist destinations. The opening of the Bus Trans Semarang in 2009 continued to increase the number of passengers. However, the Bus Trans Semarang services must continue to be improved, especially during this new normal era. Public transportation is considered as one of the public facilities that have the opportunity to spread COVID-19. Semarang City itself has issued a policy to prevent COVID-19, such as a Mayor Regulation on Guidelines for Restricting Community Activities in the Context of Accelerating Handling of COVID-19 in Semarang City [14]. The Mayor’s Regulation refers to the prevention of transmission and handling of COVID-19 issued by the World Health Organization (WHO) [15]. Based on this, it mentioned the health protocol that must be implemented by public transportation and public transportation users, limiting passenger capacity by 50%, to limit the operating hours of public transport. Implement health protocols for officers and passengers boarding and alighting the mode of transportation by using masks, hand sanitizers, and also maintaining a distance between passengers.

This study focuses on service levels and user satisfaction, especially Bus Trans Semarang service workers during the COVID-19 pandemic and priority handling to find out the benefits needed. According to Parasuraman in [8], the variables or attributes of Bus Trans Semarang services during the COVID-19 Pandemic are grouped into five dimensions of service quality. In assessing service quality, based on service dimensions, precisely the dimensions of reliability, responsiveness, assurance, empathy, and tangible [8]. The study of the Bus Trans Semarang service during the COVID-19 Pandemic adopted an assessment according to user preferences considering that users experienced or had direct contact with the service. So that users can judge in terms of the importance of service performance of the service. Bus Trans Semarang services during the COVID-19 Pandemic need to be handled or improved to reduce the risk of spreading COVID-19 to passengers when using the Bus Trans Semarang. Therefore, Bus Trans Semarang can be appropriate public transportation because user safety and comfort are very important for the success of public transportation in breaking the chain of COVID-19.

2. Method

A research method is a method used to obtain scientific data to achieve specific goals [16]. This study adopts quantitative methods with data collection techniques performed by observation and distributing questionnaires. Sampling utilizes a questionnaire via google form with selected respondents, specifically Bus Trans Semarang users, during the COVID-19 Pandemic. The collected data were then analyzed using the Customer Satisfaction Index (CSI). After that, an analysis performed using Importance Performance Analysis (IPA) to determine gaps between the level of performance and level of importance of Bus Trans Semarang services during the COVID-19 Pandemic, which will be used as material to prioritize handling and improving the quality of BRT services.

Customer Satisfaction Index (CSI) is used to determine overall customer satisfaction by analyzing the importance of the measured service quality attributes. In this study, CSI analysis was used to assess the satisfaction level of Bus Trans Semarang service users during the COVID-19 Pandemic, provided that the maximum CSI value is 100%. The CSI value is said to be low or unsatisfactory if it is in the range of 0 - 50%, and in the relatively satisfied category, if it has a value between 51 - 65%, the CSI value that stated to be satisfied is in the range of 66 - 80%, and the CSI value is in the very satisfied category if it has a value between 81-100% [17].

Importance Performance Analysis (IPA) applied to assess various service attributes performance by providing data interpretation and providing recommendations for service improvement [18]. The level of importance of service quality is how important service is to users toward service performance. The Likert scale on a scale of 1 until five is used to measure the level of importance and level of understanding. In this study, there are two variables, namely X, which is the level of service quality of
Bus Trans Semarang, while Y is the level of customer interest. The BRT service quality is considered to have sufficed customer satisfaction if \( T_{ki} > 100\% \) and vice versa. The formula used is:

\[
T_{ki} = \frac{\sum X_i}{\sum Y_i} \times 100\% \ [1]
\]

Where:
- \( T_{ki} \) = Respondent suitability level.
- \( X_i \) = User assessment score on the integration performance of Bus Trans Semarang.
- \( Y_i \) = User assessment score on the level of attributes importance of Bus Trans Semarang.

A cartesian diagram is a diagram consisting of four parts bounded by two perpendicular lines at points X and Y [19], where X is the average score of the level of performance, and Y is the average score of the level of importance. The X and Y attribute values are used as coordinating pairs of points to position an attribute where the Cartesian diagram is located.

**Figure 2.** Cartesian Diagram of Analysis of Importance Performance

Cartesian diagram (IPA) quadrant I show a high level of importance in service attributes, but the level of performance is relatively low. Quadrant II has a high level of importance and performance in all service attributes. Meanwhile, in quadrant III, the level of importance and level of performance have relatively low values. The latter is quadrant IV, which has a low level of importance but a high level of performance. The attributes of the quality of Bus Trans Semarang services during the COVID-19 Pandemic presented in Table 1.

**Table 1.** Attributes of service quality for the Bus Trans Semarang during the COVID-19 Pandemic

| Service Variables | Code | Indicators |
|-------------------|------|------------|
| Reliability       | (R1) | Limitation on the number of passengers as prevention of COVID-19 transmission in the Bus Trans Semarang. |
|                   | (R2) | Restrictions on safe distances within passengers of at least one arm-length both inside the Bus and at the Bus Trans Semarang bus stop. |
|                   | (R3) | Payment for Bus Trans Semarang tickets uses electronic money to avoid physical contact between passengers and officers. |
Service Variables | Code | Indicators
--- | --- | ---
| (R4) | Availability of information related to health protocols in using Bus Trans Semarang public transportation.
| (R5) | Easiness for Bus Trans Semarang passengers to switch to other modes of transportation.

**Responsiveness**

(RP1) Responsiveness and accuracy in providing information related to health protocols in using public BRT transportation to passengers.

(RP2) The Responsiveness of the Bus Trans Semarang in responding to passenger complaints and problems related to health protocols in using public transportation.

**Assurance**

(A1) Safety and comfort of passengers in Tans Semarang.

(A2) The timely arrival of the Bus Trans Semarang at the bus stop or terminal.

**Empathy**

(E1) Officer warns passengers who are not wearing masks.

(E2) Officer warns passengers who do not perform physical distancing.

(E3) Officer’s ability to provide information on board health protocols in using public transportation.

(E4) Kindness and compassion of officers in warning passengers if they do not follow directions according to health protocols.

**Tangible**

(T1) Availability of hand sanitizers in Bus Trans Semarang.

(T2) Availability of a portable sink at the Bus Trans Semarang bus stop.

(T3) Availability of chairs that are given an “x” as a physical distancing effort.

(T4) Availability of signs on the Bus Trans Semarang floor as prevention of transmission of COVID-19 with physical distancing.

(T5) Clean and comfortable Bus Trans Semarang.

Reference: Researcher Analysis, 2020

### 3. Finding and Discussion

#### 3.1 User Satisfaction Level of Bus Trans Semarang Services During the COVID-19 Pandemic

Calculation of the Customer Satisfaction Index (CSI) is a comparison of the value of the Weight Score (WS) to the maximum value of the Likert scale, where the Mean Importance Score (MIS), Mean Satisfaction Score (MSS), and Weight Factor Value (WF) are identified. Then, in the end, the Weight Score (WS) is determined to get the Customer Satisfaction Index (CSI) value. Based on Table 2, which shows the calculation of the level of user satisfaction with the quality of Bus Trans Semarang services during the COVID-19 Pandemic, it observed using the Customer Satisfaction Index (CSI) analysis.

**Table 2.** Customer Satisfaction Index (CSI) of service quality of Bus Trans Semarang

| No. | Service Attributes | Average of Performance Level (X = X/120) (MSS) | Average of Importance Level (Y = Y/120) (MIS) | WF = (MIS/Total MIS) x 100% | WS = (WF x MSS)/100 | CSI = (WS/5) x 100% |
|-----|--------------------|-----------------------------------------------|-----------------------------------------------|----------------------------|-------------------|-------------------|
| 1   | R1                 | 4.22                                          | 4.88                                          | 5.82                       | 0.25              | 4.91              |
| 2   | R2                 | 4.23                                          | 4.81                                          | 5.74                       | 0.24              | 4.85              |
| 3   | R3                 | 3.45                                          | 3.95                                          | 4.72                       | 0.16              | 3.26              |
| 4   | R4                 | 3.98                                          | 4.74                                          | 5.66                       | 0.23              | 4.51              |
| 5   | R5                 | 3.82                                          | 4.50                                          | 5.38                       | 0.21              | 4.10              |
| 6   | RP1                | 3.94                                          | 4.69                                          | 5.60                       | 0.22              | 4.42              |
| 7   | RP2                | 3.92                                          | 4.65                                          | 5.55                       | 0.22              | 4.35              |
| 8   | A1                 | 4.34                                          | 4.81                                          | 5.74                       | 0.25              | 4.99              |
| 9   | A2                 | 3.89                                          | 4.62                                          | 5.52                       | 0.21              | 4.29              |
| 10  | E1                 | 4.49                                          | 4.85                                          | 5.79                       | 0.26              | 5.20              |
| 11  | E2                 | 4.40                                          | 4.73                                          | 5.64                       | 0.25              | 4.97              |
The overall satisfaction level of Bus Trans Semarang service users during the COVID-19 Pandemic was 79.94%. The CSI value was stated to be low or unsatisfactory in the range of 0 - 50%, and the CSI value stated in the entirely satisfactory range of 51 - 65%. Meanwhile, the Customer Satisfaction Index (CSI) value is said to be sufficient in the field of 66-80%, and the CSI value is very satisfying in the range of 81-100%. Based on these criteria, it can be assumed that the overall satisfaction level of Bus Trans Semarang users included in the requirements for being satisfied with the Bus Trans Semarang services during the COVID-19 Pandemic.

In the CSI analysis, it is known the benefits of a high level of user satisfaction. Where the service attributes with a high level of user satisfaction, particularly the Officer warns passengers who do not wear masks (E1) of 5.20%, clean and comfortable services of Bus Trans Semarang (T5) of 5.15%, also safety and comfort services for passengers in Bus Trans Semarang (A1) of 4.99%.

### 3.2 Importance Performance Analysis (IPA) of Bus Trans Semarang Services During the COVID-19 Pandemic

Importance Performance Analysis (IPA) in this study is used to determine the difference (gap) and suitability between the performance and importance of Bus Trans Semarang services during the COVID-19 Pandemic. By calculating the average level of performance and level of importance. Based on Table 3, it can be seen that the statistical data from the questionnaire results regarding the value of the gap between performance and importance in each service attribute.

### Table 3. Importance Performance Analysis (IPA) of Bus Trans Semarang services during COVID-19 Pandemic

| No. | Service Attributes | Performance Level (X) | Importance Level (Y) | Average of Performance Level | Average of Importance Level | Gap | Suitability Level |
|-----|--------------------|-----------------------|----------------------|------------------------------|-----------------------------|-----|-------------------|
| 1   | R1                 | 506                   | 585                  | 4.22                         | 4.88                        | -0.66| 86.50 %           |
| 2   | R2                 | 507                   | 577                  | 4.23                         | 4.81                        | -0.58| 87.87 %           |
| 3   | R3                 | 414                   | 474                  | 3.45                         | 3.95                        | -0.50| 87.34 %           |
| 4   | R4                 | 478                   | 569                  | 3.98                         | 4.74                        | -0.76| 84.01 %           |
| 5   | R5                 | 458                   | 540                  | 3.82                         | 4.50                        | -0.68| 84.81 %           |
| 6   | RP1                | 473                   | 563                  | 3.94                         | 4.69                        | -0.75| 84.01 %           |
| 7   | RP2                | 470                   | 558                  | 3.92                         | 4.65                        | -0.73| 84.23 %           |
| 8   | A1                 | 521                   | 577                  | 4.34                         | 4.81                        | -0.47| 90.29 %           |
| 9   | A2                 | 467                   | 554                  | 3.89                         | 4.62                        | -0.73| 84.30 %           |
Based on Table 3, it is observed that the level of suitability of the Bus Trans Semarang service during the COVID-19 Pandemic is considered unable to meet the expectations of its users given that the TKi value is <100%. Then, the calculation results have been obtained presented in a Cartesian diagram. Service attribute in the diagram, where the average score of the level of service quality assessment (X) shows the position of the attribute on the X-axis. While the attributes in the Y-axis are expressed by the average score of the attribute importance (Y).

**Figure 3. Cartesian Diagram of Importance Performance Analysis**

In Figure 3, the Cartesian diagram image above, it observed that the service attribute diagram is dispersed in quadrants one, two, and three, where these quadrants interpreted as follows:

1. **The First Quadrant** is a quadrant that shows that service attributes have a high level of importance, however with a low-performance group. In providing services during the COVID pandemic, Bus Trans Semarang did not follow the users’ needs, or the users were not satisfied. Therefore, this quadrant is called the top priority quadrant. Based on the Cartesian diagram image, the service...
attributes included in Quadrant one are five service attributes where these attributes are the main priority that must be improved of its performance to increase user satisfaction. Service attributes included in Quadrant one (top priority), i.e.:
   a. T4 Availability of signs on the Bus Trans Semarang floor as prevention of COVID-19 transmission with physical distancing (service attribute 17).
   b. T1 Availability of hand sanitizers in Bus Trans Semarang (service attribute 14).
   c. R4 Information availability related to health protocols in using public transportation BRT (service attribute 4).
   d. RP1 Responsiveness and accuracy in providing information related to health protocols for using BRT public transportation to passengers (service attribute 6).
   e. RP2 Responsiveness of Bus Trans Semarang in responding to passenger complaints and problems related to health protocols in using public transportation (service attribute 7).

2. The Second Quadrant is a quadrant with a high level of importance and performance on its service attributes. Therefore, this quadrant is usually called the maintain quadrant and must continue to managed properly. Based on the Cartesian diagram image, the service attributes that included in Quadrant two (retained) are nine service attributes, i.e.:
   a. E3 The ability of officers to provide information on health protocols in using public transportation (service attribute 12).
   b. R1 Limitation on the number of passengers as prevention of COVID-19 transmission in the Bus Trans Semarang (service attribute 1).
   c. T3 Availability of seats with an “x” mark as the prevention of COVID-19 transmission with physical distancing (service attribute 16).
   d. R2 Safe distance limitation within passengers at least one arm-length of the hand both inside the Bus and at the Bus Trans Semarang bus stop (service attribute 2).
   e. A1 Passenger safety and comfort in Bus Trans Semarang (service attribute 8).
   f. E1 Officer warns passengers who do not wear masks (service attribute 10).
   g. E4 Kindness and compassion of officers in warning passengers if they do not follow directions according to health protocols (service attribute 13).
   h. E2 Officer warns passengers who do not perform physical distancing (service attribute 11).
   i. T5 Cleanliness and comfort of Bus Trans Semarang (service attribute 18).

3. The Third Quadrant is a quadrant that has a low level of performance and importance. This quadrant was considered not too crucial by Bus Trans Semarang users to improve its performance. Therefore, the third quadrant is called the lower priority quadrant. Based on the Cartesian diagram image, four service attributes included in Quadrant three (low priority), i.e.:
   a. T2 Availability of a portable sink at the Bus Trans Semarang bus stop (service attribute 15).
   b. A2 Timely arrival of the Bus Trans Semarang at the bus stop or terminal (service attribute 9).
   c. R5 Easiness of Bus Trans Semarang passengers in switching to other modes of transportation (service attribute 5).
   d. R3 Payment of Bus Trans Semarang tickets uses electronic money to avoid physical contact between passengers and officers (service attribute 3).

3.3 Priorities for Improving and Handling the Quality of Bus Trans Semarang Services During the COVID-19 Pandemic
Based on the Importance Performance Analysis (IPA) analysis of Bus Trans Semarang services during the COVID-19 Pandemic, observed that service attributes need to be prioritized in improving service quality for the development of better Bus Trans Semarang services in the future. Therefore, the overall Bus Trans Semarang service can provide satisfaction to its users. Prioritized service attributes are those in quadrant 1 in the Cartesian diagram, which included in the dimensions of service quality reliability, Responsiveness, and tangible (direct evidence). According to Table 4, the handling priorities for service attributes are sorted based on the attributes with the lowest suitability.
### Table 4. Priorities for Improving Bus Trans Semarang Services During the COVID-19 Pandemic

| Priority | Code | Service Attributes |
|----------|------|--------------------|
| 1        | (T4) | Availability of signs on the Bus Trans Semarang floor as prevention of COVID-19 transmission. |
| 2        | (T1) | Availability of hand sanitizers in the Bus Trans Semarang |
| 3        | (R4) | Availability of information related to health protocols in using public transportation to Bus Trans Semarang passengers. |
| 4        | (RP1) | Responsiveness and accuracy in providing information related to health protocols for using public transportation to Bus Trans Semarang passengers. |
| 5        | (RP2) | Responsiveness of Bus Trans Semarang in responding to passenger complaints and problems related to health protocols in using public transportation. |

Reference: Researcher Analysis, 2020

#### 3.3.1 Availability of Signs on the Bus Trans Semarang Floor to Prevent COVID-19 Transmission

The availability of signs on the Bus Trans Semarang’s floor to prevent the transmission of COVID-19 stated to have not provided full service to its users. This is due to there is still a Bus Trans Semarang which does not give signs on the floor of the Bus. It only offers characters that it is prohibited to sit on the seats in the BRT fleet. Based on the Mayor’s Regulation regarding Guidelines for Implementation of Restrictions on Community, activities in the Context of Accelerating Handling of COVID-19 in Semarang City [14], explained that public transportation modes are required to maintain distance within passengers (physical distancing) to reduce risks of physical contact among passengers on public transportation. Therefore, marking the Bus Trans Semarang floor is considered very important to urge passengers to move away from each other and provide distance between passengers to reduce virus transmission risk.

#### 3.3.2 Availability of Hand Sanitizer in Bus Trans Semarang

The provision of hand sanitizers at Bus Trans Semarang is considered very important by users because it can minimize the transmission and spread of COVID-19. In addition, it is very important to maintain personal and environmental hygiene by using antiseptics and disinfectants. In the field, hand sanitizers in several Bus Trans Semarang fleets are available, although the hand sanitizers have run out and are not refilled periodically by bus officers. Based on research conducted by Sohrabi [20], the use of antiseptic or hand sanitizers is considered useful in preventing the transmission of COVID-19. Then according to the Mayor’s Regulation regarding Guidelines for Limiting Community Activities in the Context of Accelerating Handling of COVID-19 in Semarang City [14], it is explained that public transportation is required to apply health protocols to officers and passengers entering public transportation modes. Therefore, the provision of hand sanitizer facilities for each Bus Trans Semarang fleet is essential to keep passengers and officers clean while using the Bus Trans Semarang.

![Figure 4](image-url)
3.3.3 Information Availability Relating to Health Protocols in Using Bus Trans Semarang

The provision of information regarding health protocols in using public transportation of Bus Trans Semarang stated that users were not yet satisfied with the service. This was indicated by the presence of passengers still sitting on the seats on the Bus marked with an “X” sign, and there was no distance among standing passengers. Whereas the Mayor’s Regulation concerning Guidelines for Implementation of Restrictions on Community Activities in the Context of Accelerating Handling of COVID-19 in Semarang City [14], explained concerning the health protocol that accomplished by public transportationation modes and users of public transportationation modes. Significantly limiting the number of passengers to 50% of the transportation capacity, public transportation modes are subjected to operating hours limitation, implementing health protocols for officers and passengers entering public transportationation by wearing masks and hand sanitizers, and also maintaining the distance between passengers. This information is distributed to Bus Trans Semarang passengers through social media, health protocol information signage on each bus fleet, and Bus Trans Semarang big bus stops. By doing this, users from Bus Trans Semarang were educated concerning the importance of implementing health protocols to break the COVID-19 chain.

4. Conclusion

The Trans Semarang Bus Service during the COVID-19 Pandemic as a whole has become the right action to create comfort and safety for its users. However, there are still services that need improving an effort to reduce the risk of spreading COVID-19 when using the Bus Trans Semarang. Service improvement, which is a priority for handling the dimensions of tangible service quality, is the availability of signs on the Bus Trans Semarang floor to create distances between passengers to prevent transmission of COVID-19 and availability of hand sanitizers on the Bus Trans Semarang. Then, priority handling that included in the dimension of service quality reliability is to improve services by providing information related to health protocols in using the Bus Trans Semarang priority handling that included in the dimension of service quality responsiveness is service improvements to Responsiveness and accuracy in providing information related to health protocols when using the Bus Trans Semarang. Also, including service improvements in the responsiveness of the Bus Trans Semarang, in responding to passenger complaints and problems related to health protocols when using public transportation such as Bus Trans Semarang. These service attributes need to follow up so that Bus Trans Semarang can provide optimal service to its users, especially during the COVID-19 Pandemic. It hoped that with the improvement of these services, Bus Trans Semarang could become public transportation that is suitable for use because it meets the requirements for preventing the transmission of COVID-19.

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