
ANALYSIS THE QUALITY OF SERVICES FOR KRL JABODETABEK BEKASI JAKARTA CITY LINE BASED ON THE USER'S POINT OF VIEW DURING THE COVID-19 PANDEMIC

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Abstract

KRL Commuter Line is one of the dominant modes of public transportation used by the public in the Jabodetabek area, including commuting from the Bekasi area to Jakarta and vice versa. The KRL Jabodetabek Bekasi-Jakarta city line is one of the busiest KRL lines. This study aims to describe the usability aspects as well as the convenience and comfort aspects in order to evaluate the quality of the KRL commuter line based on the user's point of view. This study uses quantitative methods and descriptive analysis. The results showed that during the Covid-19 pandemic, the quality of service level of the KRL Jabodetabek Bekasi-Jakarta city line was quite adequate category. Therefore, it can be concluded that the majority of users consider that the aspects of availability and aspects of convenience and comfort are adequate in the services of KRL Jabodetabek Bekasi Jakarta city line.

Keywords: KRL; Bekasi Jakarta City Line; Users, Quality of Service; Covid-19 Pandemic Period

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Introduction

The increasing number of residents in the DKI Jakarta Province has led to an increase in motor vehicle users. In the past ten years (2010-2020), the population of DKI Jakarta has increased by approximately 954,000 people, an average of 88,000 people per year. According to the 2020 census, the population of DKI Jakarta in September 2020 was 10.56 million (BPS DKI Jakarta, 2021). This increase causes congestion that can affect economic and social activities in the city of Jakarta (Handayani, Afriyanti, and Suryandari, 2021). According to data from the Tom Traffic Index, Jakarta's congestion level in 2020 is 36%. Therefore, one of the public services that the DKI Jakarta Provincial Government must provide is the public service in the transportation field. Public transportation is one of the important issues that city managers must consider to support

the accessibility and mobility of their citizens in the city's daily activities (Zakiyah and Fadiyah, 2020).

The public as users certainly wants a high-quality public transportation system. Starting from the availability of the fleet that matches the number of passengers, the quality of traffic and timely travel time that can provide comfortable, clear and easily accessible information services are an overview of public expectations regarding the ideal transportation system that the government should implement (Iriyanti et al., 2021). Therefore, the public transportation system provided by the government must be reliable, efficient, and effective. Effective transportation means that the transportation system achieves unified or integrated transportation capabilities with other transportation methods in an orderly, regular, smooth, fast, accurate, safe,

comfortable, and economical manner. At the same time, the efficiency is higher in the sense of lower public burden and higher utility as users of transportation services (Ariesandi, Resita, & Salsabila, 2020).

The development of public transportation services in DKI Jakarta began in 2004, where the DKI Jakarta Provincial Government issued a policy in the form of the operation of Transjakarta. Following that, in 2007 the Provincial Government of DKI Jakarta issued a policy related to public transportation through the Regulation of the Governor of the Special Capital Region of Jakarta No. 103 of 2007 concerning Macro Transportation Patterns. The governor's regulation contains directions for the development of the macro transportation system in DKI Jakarta through the development of the priority bus network (Transjakarta), Light Rapid Transit (LRT), and Mass Rapid Transit (MRT), also known as the Integrated Raya Mode. A decade later, the DKI Jakarta Provincial Government began to realize the MRT operational policy in 2019 (Nugrahani and Yudhistira, 2020).

Since the Covid-19 pandemic hit in early March 2020, the transportation sector has been one of the most affected with a 15.04 percent decline rate throughout 2020 (Andriani, 2021). More specifically, for the MRT, the total number of passengers in January 2020 reached 85,000 thousand people per day, until April 2020 it fell to 5,000 passengers per day or 94.11% compared to January 2020. Then the Integrated Railroad (LRT) also experienced similar conditions. not much different. Normally, in January 2020 there are around 3,800 people per day but until April 15, 2020 only 264 people per day. Where down about 93.05%. At the same time, the third decline in passengers, namely KRL (Commuter Line) where the percentage of passengers decreased by 78.69% or equivalent to 1,830 thousand passengers per day until April 15, 2020. For Transjakarta services until April 15, 2020, the number of

users decreased by approximately 83,000 thousand people per day.

The decline was driven by the transportation policy that the DKI Jakarta Provincial Government is trying to implement related to Covid-19, namely by presenting various capacity limitation policies and strict enforcement of health protocols in all types of public transportation. Even so, the Jabodetabek Transportation Management Agency (BPTJ) of the Ministry of Transportation always tries to coordinate and create new policies that ensure that public transportation is safe, comfortable, healthy and environmentally friendly and strictly enforces health protocols (Suryanto, 2021). This is also supported by the DKI Jakarta Transportation Agency, which drafts various rules so that people can still use public transportation safely and comfortably.

However, the new policies and rules imposed by the DKI Jakarta Provincial Government in the field of public transportation have not been able to guarantee the availability of satisfactory services for the user community. Therefore, an assessment is needed from the user's point of view which is intended to be an improvement material in improving the quality of public transportation services in the future. This study focuses on the Jabodetabek Electric Rail Train (KRL) with a case study on the Bekasi Jakarta City line. KRL Jabodetabek is one of the public transportation modes that people use for the Jakarta route from or to supporting cities such as Bogor, Tangerang, and Bekasi. In its operation, the KRL Commuter Line has stations, as a place to pick up and drop off passengers using rail transportation services, with a total of 80 stations for 6 lines. The KRL Jabodetabek is an alternative transportation that is cheap, accessible to the public, has extensive operational services, and is technologically easy when compared to other 'train' models.

The large number of passengers for the KRL Jabodetabek Bekasi-Jakarta city line

shows that the KRL mode of transportation is the main choice of transportation for people in this region. This condition can also affect the user's point of view on the quality of services provided, especially from aspects that are felt directly by the user, namely availability and convenience and comfort. Therefore, the purpose of this study was to determine the quality of services for KRL Jabodetabek Bekasi-Jakarta city line in order to increase user satisfaction. In addition, another objective is also to provide recommendations in making policies related to the needs of the KRL Jabodetabek Bekasi-Jakarta city line that are in line with community expectations.

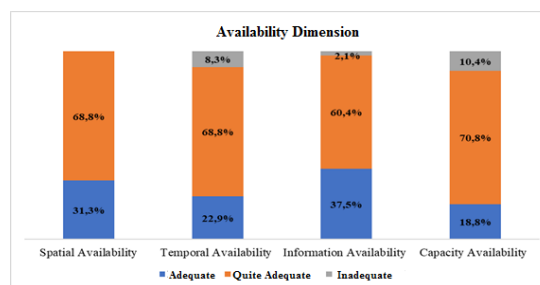
Method

In this study, the approach we use is a quantitative approach. The framework of thinking used in this research is deductive reasoning, which is a thought that starts from the general and is then narrowed down to become more specific. The variable that will be tested in this study is the quality of services derived from the theory of Transit Quality of Services proposed by Kittleson, et al (2013) with 2 dimensions consisting 10 sub-dimensions. This type of research based on the objective is a descriptive study in

which this study aims to describe the quality of services for KRL Jabodetabek Bekasi Jakarta city line during the Covid-19 pandemic from the user's point of view. This type of research based on benefits is research purely for academic purposes. This type of research based on the time dimension is a cross-sectional study. Then the type of research based on data collection techniques is quantitative data collection techniques, namely by using a questionnaire instrument whose distribution is carried out using online survey techniques.

The population in this study is the community of service users the KRL Jabodetabek Bekasi Jakarta city line who routinely carry out commuter activities during the Covid-19 pandemic. The sample selected in this study was determined as a target sample of 48 samples. Furthermore, the data that has been obtained will go through the analysis stage. In this study, researchers used quantitative data analysis techniques. The first quantitative data analysis carried out by the researcher was univariate data because it only used one variable with an ordinal scale. The next quantitative data analysis used is descriptive method with a measure of mode data concentration.

Results And Discussion



Source: Obtained from Primary Data, 2021

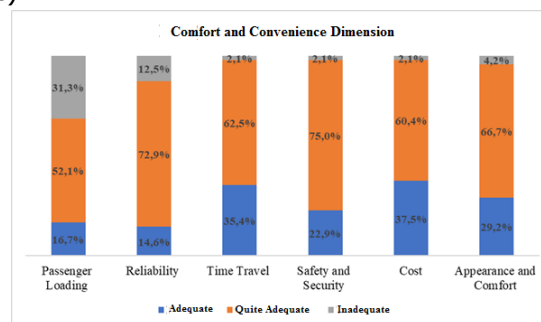
In all sub-dimensions on the availability dimension, most of them are in the quite adequate category. The sub-dimension of capacity availability shows the highest adequate percentage of 70.8%, while the

sub-dimension of information availability has the smallest percentage of 60.4%. Overall, the level of availability the quality services for Jabodetabek KRL during the Covid-19 pandemic was in the quite adequate

category, which was 62.5%. The four sub-dimensions that exist are a manifestation of the level of availability in spatial, temporal, information, and capacity aspects that can determine the quality services for KRL Jabodetabek Bekasi Jakarta City Line from the user's point of view during the Covid-19 pandemic.

In the sub-dimension of spatial availability related to the review of availability in transit services that can affect a prospective passenger to use a transit service, as many as 68.8% (33 respondents) considered it quite adequate. At the same time the remaining 31.3% (15 respondents) considered it adequate. In the temporal availability sub-dimension related to a review of the time or schedule for the availability of transit services that will make it easier for passengers to choose a travel schedule, as many as 68.8% (33 respondents) chose quite adequate. While the remaining 22.9% (11 respondents) answered that they were adequate, and continued with the answers of respondents who chose inadequate as many as 8.3% (4 respondents).

In the sub-dimension of information availability it is related to reviewing the interests of passengers to find out information on how to use transit services, service access procedures, explanations of destinations and information on departing and arriving scheduling, as many as 60.4% (29 respondents) chose quite adequate. While the remaining 37.5% (18 respondents) answered that they were adequate, and continued with the answers of respondents who chose inadequate as much as 2.1% (1 respondent). In the sub-dimension of capacity availability related to the availability of an adequate amount of transit capacity and in line with maintenance efforts on passenger loads which can be an important factor in providing the expected quality of service, as many as 70.8% (34 respondents) chose quite adequate. At the same time, the remaining 18.8% (9 respondents) answered adequate, and continued with the answers of respondents who chose inadequate as many as 10.4% (5 respondents).



Source: Obtained from Primary Data, 2021

In all the sub-dimensions of the comfort and convenience dimension, most of them are in the quite adequate category. The safety and security sub-dimension shows the highest adequate percentage of 75.0%, while the passenger loading sub-dimension has the lowest percentage, which is 52.1%. Overall, the level of convenience and comfort in the quality of services the KRL Jabodetabek Bekasi Jakarta City Line during the Covid-19

pandemic is in the quite adequate category, which is 62.5%. The six sub-dimensions that exist are a manifestation of the level of convenience and comfort in aspects of passenger loading, reliability, travel time, safety and security, cost, and appearance and comfort which can determine user ratings of the quality of services for KRL Jabodetabek Bekasi Jakarta City Line during the Covid-19 pandemic.

Based on the graph above, in the passenger loading sub-dimension related to passenger comfort, it is determined by the passenger load capacity in the carriage, as many as 52.1% (25 respondents) chose quite adequate. At the same time, the remaining 31.3% (15 respondents) answered inadequately, and continued with the answers of respondents who chose adequate as many as 16.7% (8 respondents). Thus, it can be concluded that the KRL Jabodetabek Bekasi Jakarta City Line has not been able to meet the indicators in the passenger loading sub-dimension, namely that the passenger load in one transport has been adjusted during the Covid-19 pandemic and the comparison of the number of passengers with seating capacity according to health protocols has been ideal during the pandemic. Covid-19.

In the sub-dimension of reliability related to service performance which includes timeliness and regularity of the distance between successive transit transports, 72.9% (35 respondents) chose quite adequate. At the same time, the remaining 14.6% (7 respondents) answered adequate, and continued with the answers of respondents who chose inadequate as many as 12.5% (6 respondents). Thus, the KRL Jabodetabek has met the reliability sub-dimension indicator that affects the amount of time passengers spend waiting at transit stations and the consistency of the arrival time of passengers to their destination every day.

In the time travel sub-dimension (travel time) related to the total travel time required by passengers, it includes travel time from the place of origin to the transit stop, time to wait for transit, travel time in transit, travel time from the stop of transit to the destination, as well as the time taken required to make transfers between routes during the trip. A total of 62.5% (30 respondents) chose quite adequate. At the same time, the remaining 35.4% (17 respondents) answered adequate, and continued with the answers of respondents who chose inadequate as much as 2.1% (1

respondent). Thus, the KRL Jabodetabek has met the indicators on the time travel sub-dimension, namely in the form of a shorter travel time than other transportation alternatives during the Covid-19 pandemic, and the frequency of arrivals during the Covid-19 pandemic.

In the sub-dimension of safety and security (safety and security) related to the potential for contracting disease while using transit and the potential for crime while using transit, 75.0% (36 respondents) chose quite adequate. At the same time, the remaining 22.9% (11 respondents) answered adequate, and continued with the answers of respondents who chose inadequate as much as 2.1% (1 respondent). Thus, the KRL Jabodetabek has not fulfilled one of the indicators in the safety and security sub-dimension, namely safety related to the guaranteed health of passengers during the Covid-19 pandemic.

In the sub-dimension of costs related to service fees and the value of using transportation to the costs incurred when using other transportation modes, 60.4% (29 respondents) chose quite adequate. While the remaining 37.5% (18 respondents) answered adequate, and 2.1% (1 respondent) chose the inadequate answer. Therefore, the KRL Jabodetabek has met the indicators on the cost sub-dimension, namely transportation rates that are affordable and in accordance with the quality obtained during the Covid-19 pandemic, as well as transportation fares according to the quality obtained during the Covid-19 pandemic.

The appearance and comfort sub-dimension relates to transit services that have clean and attractive stops, stations, and transit vehicles. A total of 66.7% (32 respondents) chose quite adequate. At the same time, the remaining 29.2% (14 respondents) answered adequate, and continued with the answers of respondents who chose inadequate as many as 4.2% (2 respondents). Thus, it can be concluded that the health support facilities at the KRL

Jabodetabek station are still inadequate. Thus, the KRL Jabodetabek has not met the indicators in the appearance and comfort sub-dimension, namely in the form of transportation conditions during the trip to avoid noise and odors during the Covid-19 pandemic.

Conclusion

The level of quality of services for the KRL Jabodetabek Bekasi Jakarta city line from the point of view of users during the Covid-19 pandemic is in a quite adequate category. The dimensions used in this study are the dimensions of usability and comfort and convenience. The availability dimension includes sub-dimensions such as space availability, time availability, information availability, and capacity availability. At the same time, the dimensions of comfort and convenience include sub-dimensions such as passenger capacity, reliability, travel time, security, cost, appearance, and comfort. With reference to the existing dimensions, it can be seen that the usability dimension is at the same level as the comfort and convenience dimensions, which is 62.5%. This shows that passengers can obtain the availability of space, time, information and capacity when using KRL Jabodetabek. In addition, it can be concluded that passengers feel that the KRL Jabodetabek service organized by PT KCI provides comfort and convenience for them in terms of passenger load, reliability, travel time, security and safety, cost, as well as physical appearance in the carriages and KRL stations.

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