



THE SATISFACTION LEVEL OF LOCAL BATAM CITY BUS (BIMBAR), INDONESIA

Ahmad Mawardi Lubis¹, Andri Irfan Rifai^{2*}, Susanty Handayani³

¹Faculty of Civil Engineering and Planning, Universitas Internasional Batam, Indonesia

²Trisakti Institute of Transportation and Logistics, Indonesia

* e-correspondence: andri.irfan@uib.ac.id

ARTICLE INFO

ABSTRACT

Published: December 20th, 2022

Keywords: *Bimbar, local city bus, public transportation*

This work is licensed under CC

BY-SA 4.0

Public transportation has a significant role in urban life. One of the well-known public transportation in Batam City is the "Bimbar" City Bus. This research aims to get the satisfaction level of Bimbar users. The method used is data collection techniques using questionnaires, then the data obtained is processed using descriptive analysis techniques using the IPA (Importance Performance Analysis) method. As a result, the average gap between performance and importance is -0.96. The indicator with the highest gap is Cleanliness on city buses, with a value of -1.75, which means that service providers must prioritize their performance on Cleanliness on the bus so that users can feel satisfied. Another indicator that must be improved is adequate vehicle facilities and conditions because users still need to be satisfied with the performance of city bus service providers with relatively high gaps.

INTRODUCTION

Currently, every country in the world must have public transportation. Public transportation, commonly called public transportation, has a significant role in urban life. The efficient operation of public transport is a critical factor in improving living conditions in cities (Rahman, Chowdhury, Haque, Rahman, & Islam, 2017). In addition to helping people access urban areas, public transportation also helps reduce city traffic jams. Transportation is a major urban challenge in Cambodia, causing traffic jams and accidents to be the most severe problems in the city (Sum, Champahom, Jomnonkwao, & Ratanavaraha, 2019). It is undeniable that the main problem of traffic around the world is congestion. Traffic jams also often occur in big cities in Indonesia, especially the capital city of Jakarta. Reducing congestion and traffic jams can be done by expanding the road system or reducing the number of vehicles crossing the highway (Nguyen, 2019). Therefore, we should use public transportation to reduce traffic congestion and pollution.

In every economy, transportation infrastructure acts as a baseline to ensure the smooth flow of public and goods mobility as input and output from all economic sectors (Fafurida & Oktavilia, 2020). In Indonesia, many transportations operate, such as buses, public transportation, trains, ferries, airplanes, and others. This public transportation is undoubtedly beneficial for humans in carrying out their respective activities and affairs. Thus, public transportation is a very important element in the economy of Indonesia.

The Satisfaction Level of Local Batam City Bus (Bimbar), Indonesia

The performance of public transport in several cities in Indonesia has yet to match passenger satisfaction (Ambarwati & Indriastuti, 2019). Batam City is one of the cities with the fastest growth in Indonesia, so Batam is one of the cities with the densest traffic in Indonesia. There are many types of transportation in Batam, such as taxis, motorcycle taxis, and public buses. There are three types of public buses in Batam city, namely Trans Batam, which can accommodate up to 40 passengers. The Bimbar City Bus can accommodate up to 16 passengers, and Carry can accommodate 8 to 10 passengers. The three public buses have their routes according to their colors. Unlike the Trans Batam Bus which has fixed stops, Bimbar and Carry passengers can get on and off the vehicle along the route. However, this research will focus on public or city buses, "Bimbar".

There are two types of city buses Bimbar, dark red and dark blue, which are distinguished by the routes they pass. The community likes this city bus because the price is relatively low. However, besides that, there are some drawbacks to this city bus, including uncomfortable facilities, ranging from a hot atmosphere without air conditioning to uncomfortable and cramped seats, and others. In addition, the condition of this city bus is often found to be very bad. This condition not being suitable for use with the many parts inside and outside the bus that are not maintained. Bus transportation performance must demonstrate safety performance capabilities, one of which is the condition of the vehicle (Suraji, Djakfar, & Wicaksono, 2021).



Figure 1 View of Local City Bus “Bimbar”

The "Bimbar" local city bus is also known for its fast speed on the road, which worries passengers and other road users. However, this city bus is the choice for some passengers with low prices and above-average speeds, even though the facilities provided need to be improved. In developing countries, improving the quality of public transportation services is very important (Al-Amin, Islam, & Ahammed, 2021). The services provided by public transportation, including city buses, must, of course, be improved for the comfort and safety of passengers.

Along with increasing population mobility, inter-city transportation is demanded to meet the smoothness, comfort, and security requirements (Afiantara, 2019). In this paper, the author will analyze how the level of satisfaction with the City Bus "Bimbar" according to passengers who use it. Starting from comfort, security, facilities provided, and so forth.

LITERATURE REVIEW

Public transportation is an essential element in city traffic. Public transport systems are the cornerstone of urban mobility, representing the most efficient, sustainable, and socially equitable

The Satisfaction Level of Local Batam City Bus (Bimbar), Indonesia

modes of transport (Massobrio & Nesmachnow, 2020). With public transportation, people can get access to their destinations, although they may have to walk or continue with other transportation because the routes taken by public transportation are limited.

Automated and connected vehicles will perform more driving tasks without human input and lure customers away from traditional public transportation (Buehler, 2018). Public transportation in developed countries is very modern. Some have implemented driverless automated transportation. Meanwhile, in Indonesia, the focus of transportation development in the capital city of Jakarta is the MRT, KRL, and the like.

Public transportation has a key and undeniable role in people's lives and influences significant economic, social, cultural, and environmental (Keshavarz-Ghorabae, Amiri, Hashemi-Tabatabaei, & Ghahremanloo, 2021). Public transportation helps the economy of a country. If a country's public transportation system and services are sound, then the country's economy will be good.

The increasing number of tourists indicates the need for transportation policies to support tourist destinations on the island of Bali (Putri, et al., 2021). Batam City is also a developed tourist city. Therefore, modes of transportation in Batam must be improved, especially in terms of service, so that it will make tourists visiting the city of Batam comfortable when traveling. In public transport, adverse incidents, such as vehicle delays, lack of information, missing information, or rude employees have the highest impact on customer satisfaction (Rifai, Rafianda, Isradi, & Mufhidin, 2021).

Public Transportation Services

The level of mobility must also be balanced with the existence of transportation which is the primary need for every individual in carrying out various activities (Fernando, Irianto, Adelina, & Nugraha, 2020). Transportation is a necessity for people to do their daily activities. Then the services provided by public transportation must be reasonable and adequate. Public transportation services can be seen in terms of security, comfort, regularity, equality, etc.

Using public transportation such as buses is a way to reduce congestion. Prioritizing the development of urban public transport is one of the common understandings and one of the most effective ways to solve traffic problems in many countries in the world (Luhua, Yin, & Xinkai, 2011). Thus, the quality of service from city buses must be considered so that they can become an option for the community. The bus system generally provides safe, comfortable, and cost-effective transportation compared to several alternative ways (Miskeen, et al., 2019).

Public transport must offer a quality level that accommodates current users' demands and, most importantly, the wishes of potential users (Mahmoud & Hine, 2016). Moreover, humans can only live with an internet network in this modern era. So, most passengers want accessible wifi facilities on public transportation. In addition, it must be supported by other facilities such as a relaxed atmosphere with air conditioning, soft and comfortable seats, and others so that passengers feel comfortable using public transportation.

The needs and expectations of the people who use Trans Jakarta facilities are not only the comfort and safety, and low prices offered but also the ease and speed of transactions (Murad,

The Satisfaction Level of Local Batam City Bus (Bimbar), Indonesia

Abbas, Trisetyarso, Suparta, & Kang, 2018). In Jakarta, the service currently expected by passengers is the convenience of transactions. In contrast to the city of Batam, on average operating public transportation still uses direct/cash payments.

Local City Buses

City buses, also called transit buses, are public transportation that delivers passengers from one area to another in urban areas. There are several types of city buses, such as tourist buses, school buses, worker buses, trans buses, and others. In Jakarta, the regular bus is the TransJakarta bus. The TransJakarta Bus is one of the efforts to overcome the problem of the poor performance of public transport, especially in bus transportation in Jakarta (Wijaya, 2009).

In the city of Batam, there is also a trans bus named Trans Batam. This bus is the choice of Batam people when traveling. However, these bus stops still need to be expanded and spread throughout Batam. Bus stops and buses are public transportation facilities and infrastructure, which must provide an optimal function (Shaza & Hirawan, 2019).

Another bus that still survives in the city of Batam is a city bus named Bimbar. This city bus has been operating for about a decade in Batam. Many drawbacks can be seen from this bus, such as narrow and uncomfortable seats and a hot atmosphere without air conditioning, but because of the low fares, this bus is still the choice of some Batam people. In this case, there is a need to improve service quality to achieve customer satisfaction (Ulkhay, Ardiani, Farhan, Bagja, & Hanif, 2019).

Students use buses provided by the university to travel from one place to another around the campus area (Saad, Ishak, Fauzi, Baharudin, & Idris, 2018). School buses or campus buses are also commonly found in Indonesia. This bus is very helpful for students or students who do not have a vehicle. In addition, school buses usually have cheap fares and are even free, thus helping students save their pocket money.

METHOD

A systematic scientific research process must begin with identifying the right problem (Rifai, Hadiwardoyo, Correia, & Pereira, 2016). The method used in this study is data collection techniques using a questionnaire. Questionnaires were distributed online using Google Forms to people who could use Bimbar. The questionnaires stopped distributing after getting 100 respondents who had used Bimbar. Data is one of the main strengths in compiling scientific research and modeling (Rifai, Hadiwardoyo, Correia, Pereira, & Cortez, 2015).

Furthermore, the data obtained from the questionnaire will be processed using descriptive analysis techniques with the IPA (Importance Performance Analysis) method. The IPA method or service quality measurement compares passenger satisfaction with passengers' importance (Rifai, Andriyani, & Dermawan, 2021). This method will result in a comparison between the importance of passengers and the performance of the city bus service provider. So what factors will be obtained that must be maintained and repaired by the city bus service provider so that it is in line with the expectations of passengers who use it.

The Satisfaction Level of Local Batam City Bus (Bimbar), Indonesia

RESULT AND DISCUSSION

Of the 100 respondents who filled out the questionnaire, 63 were men, and 37 were women. The age of the dominant respondents was under 21 years with 61%, ages 21-30 years as many as 30%, and ages 31-40 years as 9%. As many as 70% of the respondents were students, 20% worked in private companies, and the remaining 10% worked as civil servants. Then, based on monthly income, 51% of or as many as 51 people are respondents who do not have income, 16% or 16 respondents have income below 2 million, 23% or 23 respondents have income 2-5 million, 9% respondents have an income of 5-10 million, and 1% has an income of over 10 million.

Importance Performance Analysis (IPA)

In this study, researchers used several variables, including comfort and safety (Afiantara, 2019), vehicle condition (Suraji, Djakfar, & Wicaksono, 2021), service quality (Fatmawati & Susanty, 2016), convenience (Arifin, Gemina, & Silaningsih, 2015). These variables are broken down into ten indicators included in the questionnaire to be filled out by 100 respondents according to their opinion. The results are presented in the following table.

Table 1. Average and Gap of each indicator

No.	Indicators	Performance Average	Importance Average	Gap
1.	Adequate facilities (seating, air conditioning, and others)	2.80	4.46	-1.66
2.	Cleanliness in the City Bus	2.78	4.53	-1.75
3.	Passenger Density in City Bus	2.75	3.90	-1.15
4.	City Bus Security	3.27	4.70	-1.43
5.	Adequate vehicle condition	3.04	4.59	-1.55
6.	Friendliness of City Bus officers (drivers and kernel)	3.40	4.11	-0.77
7.	Travel Speed	3.75	3.99	-0.24
8.	Relatively cheap rates	3.95	4.24	-0.29
9.	Ease of making payments	4.03	4.40	-0.29
10.	Ease of getting information	3.71	4.11	-0.40
	Average	3.35	4.30	-0.96

Based on table 1, the average performance value (X) of the 10 indicators is 3.35. Meanwhile, the average value of importance (Y) is 4.30. Thus, the gap or difference between the two values is -0.96. However, because the value of the gap between performance and importance is minus, the Bimbar city bus service provider still needs to improve its performance to meet user expectations.

The Satisfaction Level of Local Batam City Bus (Bimbar), Indonesia

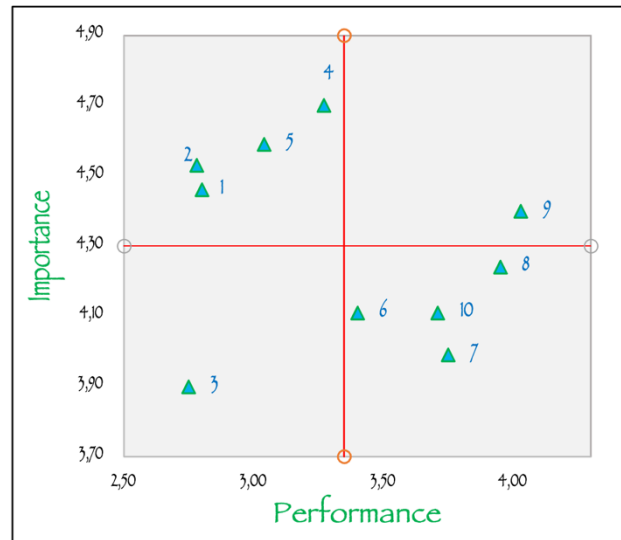


Figure 2 IPA Diagram

The IPA diagram consists of 4 quadrants: A, B, C, and D. Quadrant A means low performance but high user importance or expectations. In this quadrant, there is a need for performance improvements by the city bus service providers so that users can feel satisfied and reasonable when using them. The indicators included in this quadrant are adequate facilities (1), city bus cleanliness (2), city bus safety (4), and adequate vehicle condition (5).

Quadrant B means high performance and high user importance or expectations. This quadrant must be maintained to maintain performance consistent with service user satisfaction. Out of a total of 10 indicators, only one indicator is included in this quadrant, namely the ease of making payments (9).

Quadrant C means low performance and low importance or expectations. This quadrant is considered unimportant and can even be ignored because the expectations or interests of the user need to be higher. So no improvement is needed on the performance of the indicators in this quadrant. The indicator in this quadrant is city bus passenger density (3). Lastly, quadrant D means high performance but low user expectations or importance. This quadrant is felt redundant in its implementation because user expectations are low, but the performance provided needs to be higher. Therefore, adjusting performance on indicators in this quadrant is reduced and prioritized in quadrants that have a high level of importance. The indicators in quadra D are the friendliness of the city bus staff (6), travel speed (7), relatively cheap fares (8), and ease of obtaining information (10).

CONCLUSION

This research aims to get the satisfaction level of the "Bimbar" city bus users. From the results obtained, the average performance is 3.35 and the average importance is 4.30. so the average gap between performance and importance is -0.96. The indicator with the highest gap of -1.75 is Cleanliness in the City Bus. This means that city bus service providers must prioritize

The Satisfaction Level of Local Batam City Bus (Bimbar), Indonesia

performance on city bus cleanliness because users assess the performance provided still needs to improve. Other indicators that must also be prioritized because of the relatively high gap are Adequate facilities, vehicle conditions, and City Bus Security. The lowest gap of -0.24, namely travel speed, means that Bimbar city bus users are pretty satisfied with the performance on this one indicator. Indicators of Relatively cheap rates and Ease of making payments also include the lowest gap with -0.29. However, overall, the Bimbar city bus service provider needs to improve its performance, especially on indicators with high gaps, so that Bimbar can continue to be the choice of users and can compete with other public transportation.

REFERENCE

- Afiantara, H. R. (2019). Analisa Jarak Tempuh Dan Biaya Operasional Bus Kota Samarinda-Balikpapan. *Kurva Mahasiswa*, 1202-1224.
- Al-Amin, M., Islam, M. S., & Ahammed, M. S. (2021). Service Quality Analysis of Intercity Bus Service of Pabna-Dhaka Highway. *American Journal of Traffic and Transportation Engineering*, 6(4), 116-127.
- Ambarwati, L., & Indriastuti, A. (2019). Evaluation of Public Transport Performance Supporting Monorail Planning. *In 11th Asia Pacific Transportation and the Environment Conference*, 26-31.
- Andriyani, A., Dermawan, W. B., Isradi, M., & Rifai, A. I. (2021). Operational Performance Analysis of Rapid Transit Bus (BRT) Corridor 11 in Pulogebang Bus Station. *World Journal of Civil Engineering*, 2(2), 71-80.
- Arifin, M. A., Gemina, D., & Silaningsih, E. (2015). Analisis tingkat kepuasan penumpang pada fasilitas pelayanan bus transjakarta berbasis standar pelayanan minimal (SPM). *Jurnal Sosial Humaniora*, 104-121.
- Asadulhaq, S. P., Rifai, A. I., & Handayani, S. (2022). Passenger Occupancy Phenomena of Trans Jakarta due to COVID-19: A Case Corridor X (2019-2021). *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2(5), 766-775.
- Buehler, R. (2018). Can public transportation compete with automated and connected cars? *Journal of Public Transportation*, 21(1), 2.
- Dewantoro, R. B., Rifai, A. I., & Akhir, A. F. (2022). The Satisfaction Analysis of Bus Double Decker Passengers: A Case Bekasi-Semarang Route. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2(5), 720-728.
- Fafurida, F., & Oktavilia, S. (2020). Sustainable Transportation Strategy in Semarang City, Indonesia. *Test Engineering and Management*, 83, 16868-16872.
- Fatmawati, Z., & Susanty, A. (2016). Analisis Tingkat Kepuasan Pengguna bus rapid transit (Brt) trans Semarang Dengan Metode heterogeneous customer satisfaction index Dan importance performance analysis. *Industrial Engineering Online Journal*, 5, 4.
- Fauziawati, R., Rifai, A. I., & Handayani, S. (2022). Passengers Satisfaction Analysis of Quality and Schedule of Commuter Line Service: A Case Citayam-Tebet Route. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2(5), 833-842.

The Satisfaction Level of Local Batam City Bus (Bimbar), Indonesia

- Fernando, A. S., Irianto, H., Adelina, A., & Nugraha, X. (2020). Legal Analysis On The Management Of Suroboyo Bus Public Transportation In Surabaya City. *Syariah: Jurnal Hukum dan Pemikiran*, 72-89.
- Hasan, M., Rifai, A. I., & Djamal, E. Z. (2022). Phenomena of Online Transportation Mode Choice as an Alternative Public Transport in South of Jakarta. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2(5), 776-784.
- Keshavarz-Ghorabae, M., Amiri, M., Hashemi-Tabatabaei, M., & Ghahremanloo, M. (2021). Sustainable public transportation evaluation using a novel hybrid method based on fuzzy BWM and MABAC. *The Open Transportation Journal*, 15, 1.
- Kurniawan, A. N., & Rifai, A. I. (2022). Phenomena of Transportation to Work Mode Choice, Due to The Increase of Oil Prices in Indonesia: A Case Light Rail Transit Depot Project Office-Jakarta. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2(5), 785-793.
- Luhua, S., Yin, H., & Xinkai, J. (2011). Study on Method of Bus Service Frequency Optimal Model Based on Genetic Algorithm. *Procedia Environmental Sciences*, 869-874.
- Mahmoud, M., & Hine, J. (2016). Measuring the influence of bus service quality on the perception of users. *Transportation Planning and Technology*, 284-299.
- Massobrio, R., & Nesmachnow, S. (2020). Urban mobility data analysis for public transportation systems: a case study in Montevideo, Uruguay. . *Applied Sciences*, 10(16), 5400.
- Miskeen, M. B., Fakroun, M., Dow, H., Ishtewi, A., Elbasir, O., & Abuham, A. (2019). Using Importance-Satisfaction Analysis (ISA) To Identify the Most Critical Criteria to Improve Service Quality of Public Bus Transport in Libya. *Journal of Pure & Applied Sciences*, 4.
- Murad, D. F., Abbas, B. S., Trisetyarso, A., Suparta, W., & Kang, C. H. (2018). Development of smart public transportation system in Jakarta city based on integrated IoT platform. *In 2018 International Conference on Information and Communications Technology (ICOIACT)*, 872-878.
- Nguyen, X. P. (2019). The bus transportation issue and people satisfaction with public transport in Ho Chi Minh city. *J. Mech. Eng. Res. Dev*, 42, 10-16.
- Pratama, A., Rifai, A. I., & Thole, J. (2022). The Analysis of Pedestrian Service in Railway Station Area: A Case Tanah Abang Station, Jakarta A Case Tanah Abang Station, Jakarta. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2(5), 794-803.
- Putri, A. B., Farda, M., Santosa, S. P., Dirgahayani, P., Suthanaya, P. A., Andani, I. G., & Nurjanah, N. (2021). Study of Public Transport Development in South Bali Districts: Potential Public Transport Mode. *International Journal of Sustainable Transportation Technology*, 4(1), 9-21.
- Rahman, F., Chowdhury, T. D., Haque, T., Rahman, R., & Islam, A. (2017). Identifying existing Bus service condition and analyzing customer satisfaction of Bus service in Dhaka city. *Journal of Transportation Technologies*, 7(2), 107-122.
- Rifai, A. I. (2021, December). Evaluasi of Performance and Services of Integrated Transportation System (Case Study: Connecting Line between MRT Dukuh Atas Station and KRL Sudirman

The Satisfaction Level of Local Batam City Bus (Bimbar), Indonesia

- Station). In *Proceedings of the International Conference on Industrial Engineering and Operations Management* (pp. 496-507).
- Rifai, A. I., Andriyani, A., & Dermawan, W. B. (2021). Operational Performance Analysis of Rapid Transit Bus (BRT) Corridor 11 in Pulogebang Bus Station. *World Journal of Civil Engineering*, 2(2), 71-80.
- Rifai, A. I., Hadiwardoyo, S. P., Correia, A. G., & Pereira, P. A. (2016). Genetic Algorithm Applied for Optimization of Pavement Maintenance under Overload Traffic: Case Study Indonesia National Highway. *Applied Mechanics and Materials* (Vol. 845) (pp. 369-378). Trans Tech Publications Ltd.
- Rifai, A. I., Hadiwardoyo, S. P., Correia, A. G., Pereira, P., & Cortez, P. (2015). The data mining applied for the prediction of highway roughness due to overloaded trucks. *International Journal of Technology*, 6(5), 751-761.
- Rifai, A. I., Putra, M. G. D., Isradi, M., Mufhidin, A., & Prasetijo, J. (2022). Evaluation of Selection of Public Transport Mode Corridor Blok M–Bundaran Hotel Indonesian in the New Normal Era with Stated Preference. *IJEED International Journal Of Entrepreneurship And Business Development eISSN 2597-4785 pISSN 2597-4750*, 5(4), 792-805.
- Rifai, A. I., Rafianda, D. F., Isradi, M., & Mufhidin, A. (2021). Analysis Of Customer Satisfaction On The Application Of The Covid-19 Protocol At The Inter-City Bus Terminal. *International Journal of Engineering, Science and Information Technology*, 1
- Rifai, A. I., Rafianda, D. F., Isradi, M., & Mufhidin, A. (2021). Analysis Of Customer Satisfaction On The Application Of The Covid-19 Protocol At The Inter-City Bus Terminal. *International Journal of Engineering, Science and Information Technology*, 1(1), 75-81.
- Rifai, A. I., Rafianda, D. F., Isradi, M., & Mufhidin, A. (2021). Analysis Of Customer Satisfaction On The Application Of The Covid-19 Protocol At The Inter-City Bus Terminal. *International Journal of Engineering, Science and Information Technology*, 1(1), 75-81.
- Rulianto, B., Rifai, A. I., Isradi, M., & Mufhidin, A. (2021). A Comparative Analysis of the Effectiveness of Airport Public Transport System in Jakarta. *World Journal Of Business, Project And Digital Management*, 2(01), 22-31.
- Saad, S. A., Ishak, M. H., Fauzi, M. H., Baharudin, M. A., & Idris, N. H. (2018). Real-time on-campus public transportation monitoring system. In *2018 IEEE 14th International Colloquium on Signal Processing & Its Applications*, 215-220.
- Saraswati, M., Rifai, A. I., & Yudhistira, P. (2022). Review of Customer Satisfaction Index by INACA for Pattimura International Airport Ambon, Indonesia. *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2(5), 865-872.
- Shaza, M. F., & Hirawan, D. (2019). Development Of Trans Batam Bus Monitoring System Based On Internet Of Things In Department Transportation Of Batam CitY.

The Satisfaction Level of Local Batam City Bus (Bimbar), Indonesia

- Sony, S., Rifai, A. I., & Handayani, S. (2022). The Effectiveness Analysis of Bus Rapid Transit Services (A Case Trans Semarang, Indonesia). *Citizen: Jurnal Ilmiah Multidisiplin Indonesia*, 2(5), 712-719.
- Sum, S., Champahom, T., Jomnonkwao, S., & Ratanavaraha, V. R. (2019). An application of importance-performance analysis (IPA) for evaluating city bus service quality in Cambodia. *International Journal of Building, Urban, Interior and Landscape Technology*.
- Suraji, A., Djakfar, L., & Wicaksono, A. (2021). Analysis of bus performance on the risk of traffic accidents in East Java-Indonesia. *EUREKA: Physics and Engineering*, 111-118.
- Ulkhag, M. M., Ardiani, A. J., Farhan, M., Bagja, R. P., & Hanif, R. Z. (2019). Service quality analysis of bus rapid transit: a case in Semarang, Indonesia. *In 2019 4th International Conference on Intelligent Transportation Engineering (ICITE)*, 6-10.
- Wijaya, D. H. (2009). Study of Service Quality in the Public Bus Transport: Customer Complaint Handling and Service Standards Design: Case Study: Transjakarta Busway and Värmlandstrafik Ab Bus.