

SUMMARY

Abdul Samad, Department of Civil Engineering, Faculty of Engineering Universitas Brawajaya University , December 2017, Rapid Transit (BRT) Study Performance Improvement of Bus Rapid Transit (BRT) in Yogyakarta, Surakarta and Semarang, Supervisor: Harnen Sulistio, Achmad Wicaksono and Ludfi Djakfar.

Implementation of the operation of Bus Rapid Transit (BRT) requires evaluation of performance, by exploring the quality of service. The quality of service is important for the success of Trans Jogja, Trans Semarang, and Trans Solo. All three cities are considered representative of the entire territory of Indonesia organizing BRT. The problems that often occur in the three cities BRT organizing are among them is the stop is still less so that passengers are too far to reach shelter, user complaints, or passengers on BRT's performance service and the placement of the bus stop becomes a problem between the needs and constraints on the one hand the community requires, for those whose activities are disrupted.

The objectives of this research are to know the condition of existing level of performance and service of Bus Rapid Transit (BRT), priority of management strategy implementation of BRT management in location of study, and recommendation of regulation appropriate to policy of BRT implementation in Yogyakarta, Surakarta and Semarang in the future. The research method used is survey research. The study was designed from the preliminary stage of compilation of questionnaires, collection and compilation of field data, and data analysis. Primary data were obtained by collecting qualitative, quantitative, and technical response data and response targets by interview. Secondary data was obtained by interview technique to management and customer

Data analysis methods used are descriptive statistical analysis, Importance Performance Analysis (IPA) analysis, Quality Function Deployment (QFD) Analysis, and Structural Equation Modeling (SEM) Analysis. The result of quadrant analysis with IPA method shows that the priority attributes of BRT Yogyakarta, Surakarta, and Semarang are divided into four quadrants. Quadrant is the most attribute that is in quadrant three about

maintaining achievement that there are 12 attributes. In the combined analysis of BRT Yogyakarta, Surakarta, and Semarang with QFD method it is explained that BRT service priority attributes at operational time, tariff suitability, ticket service, and free from noise, glare, and view are not good.

The results of the combined BRT Yogyakarta, Surakarta, and Semarang with SEM analysis explained that the Management Variable (X1) has a total effect of 0.428, Policy Variable (X2) has a total effect of 0.346, and Performance Variable (Y) has a total effect of 0.240. The Total Effects of Management Variables (X1) are greater than other exogenous variables. This indicates that the Management Variable (X1) has the strongest influence (dominant) on Service (Z).

The appropriate recommendations to be made in Yogyakarta, Surakarta, and Semarang are the availability of the BRT special lanes. Procurement and improvement of facilities and infrastructure is needed to increase the comfort and trust of the community. Management recommendations for the three study cities need to be re-established in tariff setting to determine upper and lower tariff limits, as well as clear organizational structures and their roles and functions in managing BRT facilities. To improve service quality, feasibility studies should be made for the operation of the BRT fleet, the regional administrations should make regulations on the importance of special lanes for the BRT fleet, and increase the tariff of private vehicle parking so switch to using BRT.

Keywords: BRT Performance and Service, IPA Method, QFD, SEM Modeling