

ABSTRACT

The pursuit of a global strategy for environmental sustainability and enhancing urban mobility was acknowledged by many nations as being dependent on increasing public transportation. Even with more number of buses, it is unable to attract travelers to bus service. So, a broad approach is required to understand various clusters of travelers. Segmentation of travelers is usually done based on socio-economic characteristics such as income, education, car ownership etc., but there has been no evidence on how effective this classification was based on the above characteristics. The present study has been done to identify the best method for segmentation of travelers and to understand various clusters and attract them based on their needs. For this, cluster analysis was done to divide users into clusters based on the importance of various travel attributes. Fuzzy-c clustering was identified as the best clustering method for the present context using Spearman's rank correlation. The priority areas for each cluster were determined by examining passenger factor structures and management schemes for bus services. Results indicated that users in the two clusters had different travel needs and their priority areas of intervention for improving bus service also varied. These findings serve as guidelines for enhancing bus service in Kolkata by taking the travelers' needs in each cluster into account. In various situations, the methodology can be applied to prepare policies and strategies for service improvement.

Keywords: Segmentation, public transport, customer satisfaction