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"Gheorghe Asachi" Technical University of Iasi, Romania

IMPROVING USERS' SATISFACTION BY IMPLEMENTING THE ANALYTIC HIERARCHY PROCESS IN THE PUBLIC TRANSPORTATION SYSTEM

RuxandraDinulescu[1*], Alexandru-Mihai Bugheanu[2]

Management Department, The Bucharest University of Economic Studies, 6 Piata Romana, Bucharest, Romania

Abstract

This paper develops investigations in the field of analytic hierarchy techniques that could be applied in public transportation systems. The study focuses particularly on the public transport bus services in Bucharest, the European capital of Romania. The research aims to investigate the methodological feasibility of the analytic hierarchy process to analyze and measure the perceptions and needs of the Romanian public transportation users.
Towards this objective, the study presents the current state of the Bucharest bus network. Furthermore, an investigation is conducted based on one of the most used multiple criteria decision-making tool – Analytic Hierarchy Process (AHP).
Unlike most of the previous studies, this analysis has a double approach: researching the essential total quality management principles in public transportation and simultaneously developing a one stage methodology used for measuring the quality of the Romanian public transportation system. This final step involves using the AHP methodology to determine the priority of service quality attributes.
Our contribution to the literature focuses on the advantage of using an analytic hierarchy technique in evaluating complex decisions in terms of public transportation. This contribution provides an initial analysis of the public transportation field in the Capital of Romania. Additionally, the study develops the premises for our further research and concludes on the efficiency and sustainability of an AHP method assessment in the local transportation network.

Keywords: analytic hierarchy process, Bucharest, public transportation system, service quality

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[*] Authors to whom all correspondence should be addressed: e-mail: ruxandra.dinulescu@man.ase.ro; Phone: +40 0745191414