World Academy of Science, Engineering and Technology International Journal of Environmental and Ecological Engineering Vol:15, No:01, 2021

The User Acceptance of Autonomous Shuttles in Pretoria

Authors: D. Onanena Adegono, P. Altinsoy, A. Schuster, P. Schäfer

Abstract : Autonomous vehicles look set to drastically alter the way we move people and goods, in urban as well as rural areas. However, little has been written about Africa with this regard. Moreover, in order for this new technology to be adopted, user acceptance is vital. The current research examines the user acceptance of autonomous minibus shuttles, as a solution for first/last mile public transport in Pretoria, South Africa. Of the respondents surveyed, only 2.31% perceived them as not useful. Respondents showed more interest in using these shuttles in combination with the bus rapid transit system (75.4%) as opposed to other modes of public transportation (40%). The significance of these findings is that they can help ensure that the implementation of autonomous public transport in South Africa is adapted to the local user. Furthermore, these findings could be adapted for other South African cities and other cities across the continent.

Keywords: autonomous buses and shuttles, autonomous public transport, urban mobility, user acceptance

Conference Title: ICSUMPT 2021: International Conference on Sustainable Urban Mobility and Public Transport

Conference Location: Rome, Italy Conference Dates: January 18-19, 2021