

Title: Predicting Public Willingness to Use Autonomous Shuttles: Evidence from an Emerging Economy

Author Names: Ying Wei Liew, Ali Vafaei-Zadeh, Thurasamy Ramayah

Abstract: The purpose of this paper is to investigate the public's willingness to adopt autonomous shuttles for public transport. This study proposes a research framework to explain people's adoption intentions. Therefore, this study adapts and extends the value-based adoption model based on the cost-benefit theory. Using empirical data from 312 respondents in Malaysia, a structural equation model is utilized to test the hypotheses. The results indicate that perceived usefulness and perceived enjoyment have a positive influence on perceived value. Furthermore, perceived value positively influences the intention to use autonomous shuttles. Perceived risk was found to have no influence on perceived value, and the relationship between perceived risk and perceived value was not moderated by personal innovativeness. To improve consumer adoption intention predictions for this complex and new technology, future research should consider incorporating additional variables. Additionally, once autonomous shuttles are introduced into the market, future studies can utilize market data for more precise analysis. This study adds to past research findings by providing a detailed understanding of the role of perceived value in the adoption of autonomous shuttles. It contributes new knowledge on consumers' psychological stance toward this emerging technology. Consequently, it serves as a valuable benchmark for further studies seeking to provide a more comprehensive understanding of consumer acceptance of autonomous shuttle services, particularly in emerging economies.

Key words: Autonomous shuttles Public transport adoption Perceived value Value-based adoption model Cost-benefit theory

<https://doi.org/10.1177/036119812311920>

<https://journals.sagepub.com/doi/10.1177/03611981231192099>