Logistics modelling for the university transport service using choice experiment

ABSTRACT

The use of Single Own Vehicle (SOV) among university students in the campus area has been increased lately. Many factors attributed to this scenario. One of them is the availability of the university transport service in the campus area. The benefits of using SOV to the students is undeniable. However, such a scenario gives traffic or environmental problems if the number of SOV users are not regulated. One common approach that has been applied in many universities for reducing the SOV users is by providing the university transport service to their students. But why such service fails to reduce the number of SOV users? Using a Choice Experiment (CE) technique, this study is undertaken to investigate the UUM students' preferences and satisfaction on the university transport service. The results from the Latent Class Model (LCM) show that the respondents in UUM are not satisfied with the currently provided service and put a hope that the service will be improved soon. This study also found that the respondents are willing to pay (WTP) an additional amount of money if the service is improved where the focus attributes of the service are such passengers loading and service to the nearby towns.

Keyword: Single own vehicle; University transport service; Choice experiment; Latent class model; Willing to pay