### UNIVERSITI TEKNOLOGI MARA

# SEGMENTATION OF KUALA LUMPUR TRANSIT MARKET BASED ON THE ATTITUDE OF TRAVELLER TOWARDS TRAVELLING

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Thesis submitted in fulfilment
of the requirement for the degree of

Master of Science

Malaysia Institute of Transport

May 2015

#### CONFIRMATION BY PANELS OF EXAMINERS

I certify that a Panel of Examiners has met on 4<sup>th</sup> December 2014 to conduct the final examination of Mohd Shahriman bin Shafein on his Master of Transport & Logistics thesis entitled "Segmentation of Kuala Lumpur Transit Market Based on the Attitude of Traveller Towards Travelling" in accordance with Universiti Teknologi MARA Act 1976 (Akta 173). The Panel of Examiners recommends that the student be awarded the relevant degree. The panel of Examiners was as follows:

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#### ABSTRACT

The Malaysian government has invested heavily to encourage modal shift from private vehicles to public transport, as severe problems arises from the usage of the former mode. The need of understanding human psychological factor toward transport modal shift has gained much interest from public transportation researchers, especially in rapidly-urbanised area such as Kuala Lumpur, Malaysia. This study aims to identify the socio-demographics and attitude characteristics of travellers that are "easy-toreach" and "hard-to-reach" based on their attitudes toward travelling. This is achieved by fulfilling the objectives which include an investigation into the key attitudinal factors and its relationship with the willingness to use transit, and the determination of market segments and positions in KL transit market. A questionnaire survey was designed and randomly distributed to travellers within Kuala Lumpur, Malaysia. Total response was 366 respondents. The study has found that six key attitudes are present within the thirty two attitudinal variables. Conclusion made from Structures Equation Modelling (SEM) analysis shows that Sensitivity to Safety & Privacy, Sensitivity to Stress & Comfort and Need for Fixed Schedule was significant in influencing travellers to use transit. Based on the loadings and level of significant, Sensitivity to Safety and Sensitivity to Stress & Comfort was chosen to construct the market segments, together with the dependent factor (Willingness to Use Transit), Eight segments were constructed and examined to identify the socio-demographics and attitude characteristics, and fifteen combination of market position was analysed. It is found that easy-to-reach segment consist of travellers who are least sensitive to safety and privacy, least sensitive to stress and comfort yet show the lowest willingness to use transit. It has the least desire for productivity and reliability, not sensitive to time and the most flexible with travel schedule. On the other hand, the hard-to-reach travellers have the highest sensitivity to safety and privacy, very high sensitivity to stress and comfort but show the highest willingness to use transit. It also has the highest desire for productivity and reliability, are the most sensitive to time and highest in the need for fixed schedule.

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# CHAPTER ONE INTRODUCTION

#### 1.1 BACKGROUND

Since the French introduced the first organized public transit system far back in 1662, the system has constantly evolving and becoming an important part of human civilisation. In its far-stretch history, public transportation system throughout the world struggle to compete with the usage of private vehicle (De Vos et al., 2012; Jawi & Voon, 2012; Borhan et al., 2011; Kitamura, 2010; Muñoz & de Grange, 2010; Lucas & Jones, 2009). The advancement of engineering and mass-manufacturing has made the later an affordable household item, supported by popular culture that portray private vehicles as a symbol of social status. As nations become more affluent, usage of public transport loses out to the private cars (Stradling et al., 2000). Additionally, cities and urban areas in developing countries are now faced with the challenge of rapid motorization and modernization. With excellent economic growth, the quality of life increases and lead to the affordability to own private vehicles especially in the urban society. A predominantly public sector service, the governments of the world undertook active role in conceiving, financing, regulating and operating the public transit services (Kitamura & Mohamad, 2009). Demand for higher standards of services, new types of public transport services and the limitations of funds is the common issues confronting transportation planners and decision makers (Johnson, 2003: Cullinane, 2002).

The public transport has played a vital role in mass movement of peoples and goods throughout the world's transportation network, and proves to be an important backbone of economic and social development in Malaysia (EPU, 2011). As the wealth of the nation grew, Malaysia has undergone a rapid urbanization and increasing regional movement of goods and people. Speedy economic growth and development of transportation infrastructure has fuel the increasing private vehicle ownership in Malaysia. Number of cars and motorcycles has tripled in the last three decade (Shariff, 2012), and the increasing trend is forecasted to continue at least until