## **UNIVERSITI TEKNOLOGI MARA**

# FREIGHT TRANSPORT BY ROAD: CHALLENGES TOWARDS THE FREIGHT TRANSPORT EFFICIENCY

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Thesis submitted for fulfilment of the requirements for the degree of **Masters of Science** 

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#### **AUTHOR'S DECLARATION**

I declare that the work in this thesis was carried out in accordance with the regulation of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for other degree or qualification.

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#### **ABSTRACT**

Freight transport by road is the transportation of the raw material and finishing product from one location to another location and it is essential for the development of the country as it support the daily life of the residents and operation of industry. However, the challenges in freight transport by road has becomes the limitation to its efficiency. Therefore, identification of the challenges in freight transport by road is a need. The aim of this research is to identify the factors behind the challenges in freight transport by road. To achieve the aim, three objectives have been formulated which are identification of the challenges in freight transport by road, evaluation of the characteristic of freight transport by road and examination of the factors behind the challenges in freight transport by road. To achieve all the objectives, questionnaire survey, observation method and the development of partial least square (PLS) have been conducted. Questionnaire survey is conducted to the haulage companies. 12 challenges regarding the freight transport by road have being survey and the results indicates that the major challenges in freight transport by road are poor road condition access to port, congestion and poor loading/unloading activity at ports. From the results of observations on five selected major roads from Port Klang to Kuala Lumpur meanwhile, verified that some of challenges as stated by haulage companies in the questionnaire survey especially in terms of road condition and congestion, are still exist at present situations. The model for the challenges factor in freight transport by road then developed by using PLS. Six hypotheses are establishing and three were accepted. These three accepted hypothesis are Management has a positive significance influence to the Distribution, Authority has a positive significance influence to the Others and Authority has a positive significance influence to the Management, and reveal the challenges factor in freight transport by road. Therefore, it is hope that the government can address these factors in increasing the efficiency in freight transport by road.

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