

I hereby confirm that I have examined this project paper entitled:

**THE FACTORS THAT INFLUENCE IN THE TECHNOLOGY
TRANSPORTATION (LAND VEHICLE) TO THE ENVIRONMENT**

By

NURUL NABILAH BINTI NORDIN

I hereby acknowledge that this project paper has been accepted as part fulfilment for
Bachelor Degree of Technology Management in Innovation Technology

Signature :

Supervisor : DR. YUSRI BIN ARSHAD

Date : 26th JUNE 2015

**THE FACTORS THAT INFLUENCE IN THE TECHNOLOGY TRANSPORTATION
(LAND VEHICLE) TO THE ENVIRONMENT**

NURUL NABILAH BINTI NORDIN

**Report submitted in fulfilment of the requirement for the Bachelor Degree of
Technology Management in Innovation Technology**

**Faculty of Technology Management and Technopreneurship
Universiti Teknikal Malaysia Melaka**

JUNE 2015

“I declare that this project is the result of my own research except as cited in the references.
The research project has not been for any degree and is not concurrently submitted in
candidature of any other degree.”

Signature :

Name : NURUL NABILAH NORDIN

Date : 26th JUNE 2015

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DEDICATION

This research paper is special dedicated to my parents, En. Nordin bin Yahya and Puan. Hasimah binti Yusof, who has been my main source of inspiration and encouragement during my studies. Thank you for giving me the opportunity and a new experience in my life to complete this meaningful research. To all my family thank you for allowed and always give full support to me for further and complete my study.

ABSTRACT

To perform a good environment for the using of technology transportation (land vehicle) that can satisfied all the users and customers especially in Malacca. The main objective of this research is to identify the relationship between the main aspects to the environment. A survey was carried out through a set of questionnaires to determine the model regulation, different modes, safety, requirements and convenience to the environment towards 250 respondents of public. . The collected data was analyzed using descriptive analysis and coded into SPSS 20.0. The findings see that there is significant relationship between model regulation, different modes, requirements and convenience towards environment. However, there is one not significant relationship between safety and environment.

ABSTRAK

Untuk mengpersembahkan satu persekitaran yang baik kepada penggunaan teknologi pengangkutan (pengangkutan darat) yang dapat memuaskan hati semua pengguna dan pelanggan terutamanya di Malaka. Objektif kajian ini dijalankan adalah untuk mengenalpasti hubungan kait diantara aspek utama terhadap persekitaran. Satu kajian telah dijalankan melalui satu set soal selidik untuk menentukan regulasi model, keadah berbeza, keselamatan, keperluan dan kecekapan terhadap persekitaran di Melaka dengan respon seramai 250 orang awam. Data yang diperolehi dianalisis dengan menggunakan analisis deskriptif dan dikodkan ke dalam SPSS 20.0. Penemuan melihat bahawa terdapat hubungan yang signifikan antara regulasi model, keadah berbeza, keperluan dan kecekapan terhadap persekitaran. Bagaimana pun, terdapat satu hubungan yang tidak signifikan antara keselamatan dandan persekitaran.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

In this chapter 1 consist of the introduction of the background of the study that the factors of influence the technology transportation. According to the book Saunders et al. (2012) define that research as something people find out in a way to increase knowledge. The most thing important in this chapter are the researcher construct on research objectives and research questions also include significant, limitation, scope of the study, and structure of thesis to fulfil the research requirement.

1.2 Background of the study

Nowadays, the using of transport (land vehicle) is the main role to society. Land vehicle in transport also use by the visitor that came from other country as the transport easy to go to somewhere else. These strategies are to increase the transit ridership and to improve the satisfaction on the environment and on-going area of research in Malacca. This is broadly defined to include effects of transport on land, air, water and resources.

A voluminous has commented on the roles the transit effective and efficiency on the services provided by the transport. The other ways that provided by the transit also the information to the customer in great improvements. Usually the transports of land vehicle served in Malacca are bus, taxi, and trishaw, and car, bicycle and so on. Another research that have found are done by (E.Seelens.etl.2012) about findings from the transportation, urban design, planning literatures. These researches are help to improve the understanding on the influences on physical activity. This environment character plays the main role and the activity on walking and cycling. In this land vehicle also focus on the Panorama Bus as the famous transport using in Malacca.

With this research also help on the environment by reducing the carbon dioxide and lower the cost that land. Transport has significant factors on the built and natural environment and hence on society. After all the using of transportation (land vehicle) provides and maintains the classified the user transport effect and manage. Them better the change to success will be improved. In a nutshell, transports play an important role to the environment.

1.3 Problems Statement

According to the journal *Transport and The Environment* by Stantcher and May.(2009) say that noise is a one of the problem that effect on the environment. About 2% of the total disease burden could attribute to the traffic noise. Recent estimate of noise relate to the health impact currently associated with 1.5 – 2 million people (16 out of population). The implications of this for the transport policy are considerable, especially with predict increase in both ground-based and air transport.

Another problem that occur is sources that effect on the environment. Based on the article (Jean-Paul Rodrigue.2013) say that specific sources are concerned, like road transportation, user only take the account on direct cost by gain the sources. So in this case, the user are not able to gain the profit from the sources because of the pollution by the spear out the carbon dioxide of transport. Sources are definitely come from the natural sources especially in green living. In this problem, need to manage and protect the green living very well. In this condition, we need to do something to manage the factors of technology transportation, that the key brings towards successful to society.

From the website Wikipedia the impact of transport is significant a major user of energy to the environment. This effects create the pollution and contributor to global warming through carbon dioxide. The characteristics or criteria of the transportation are depending on the location where to go. There also have the pros and cons about that. There are several problems statements that identify in the research. One of them is human health effects. The human health are very important in each of people. So, the effect to the society include happen when the release of carbon dioxide in fossil fuels burning of the transportation use. The big problem has the negative effect on human that can cause people hard to breath because of the carbon dioxide. Also include, human easy to get disease. From the research, another disease happens such as cataract, dry skin, dehydration.

Refer to the article (The Discovery of Global Warming.2014) say that carbon dioxide is the key that change the global temperature by effecting the greenhouse. Almost instantly change the average amount of water vapour in air. While this also may cause the increasing of temperature. In 1890 Arrhenius suggested to lower the carbon dioxide to effect the ice age level. Although the release of carbon dioxide by transportation brought the future warming to the global.

This recent issues must be taken serious according to the world nowadays that might effect to the environment by the factors of technology transport. This problems could be discharged into the environment that can cause bad effect to the society and also can damage the individual human health. Stay healthy and productive to ban the bad effect this problems. The community who involve in this problems must do something and take a lot of action to protect the environment. Government also must take action to overcome the problem occurs and bring happiness to the new generation.

1.4 Research Objectives

There is a various type of technology in transportation of land vehicle that evaluate the frameworks. These efforts have to identify the main aspects and relationship to the environment. In order to achieve the underlying purpose are:

- 1) To identify the factors that influence of technology transportation (land vehicle) towards the environment in Malacca.
- 2) To investigate the correlation between technology transportation (land vehicle) towards the environment in Malacca.
- 3) To find the relationship between technology transportation (land vehicle) towards the environment in Malacca.
- 4) To know the multiple regression impact factor that influence to the environment in Malacca towards the technology transportation (land vehicle).

- 5) To elaborate the recommendation of these factor overall by reduce the pollution by technology transportation (land vehicle).

This study will later show the result on the factors of technology in transport and whether on how to coordinate and improve the quality and productivity of the transport land vehicle.

1.5 Research Questions

There are few studies that contribute to the relationship on the factors that influence in the technology transportation to the environment in land vehicle. Informed above statement, this research explored the following key questions:

- 1) What are the factors that influence of technology transportation (land vehicle) towards the environment in Malacca?
- 2) What are the correlation between technology transportation (land vehicle) towards the environment in Malacca?
- 3) What are the relationship between technology transportation (land vehicle) towards the environment in Malacca?
- 4) What are the multiple regression impact factor that influence to the environment in Malacca towards the technology transportation (land vehicle)?
- 5) What are the recommendation of these factor overall by reduce the pollution by technology transportation (land vehicle)?

1.6 Significant of the study

The issue of the transportation are naturally involve the factors that increasing of technology transport to the environmental systems. From them nowadays, the transportation activity for public and passengers are increase due to the useful for everyone. Transportation also became an important dimension of the concept that focus on transportation activity from the journal (The Environmental Impacts of Transportation) by the author Dr. Jean.elt.2013. The significant of the study are more need to determine on the relationship of transportation (land vehicle) to the environment. In this case, the factors are need to focus by transportation. The result on the study will express and whether on the challenge and improve of the productivity of the transportation. Due to the significant of the study also people will know more about the information about the factors transportation to the environment.

1.7 Limitation of the study

This limitation of the study are to discuss the overall implications of the findings in the current research. In the other words, the limitation are based on to stimulate the data processing, that there are some excess or shortage of this study. This study also referring to the article Urban Transportation Planning for a Vibrant and Distinctive Singapore by Micheal QUAH and Dickson YEO said that this limitation are include or examine the pros and cons of the transformation in the vehicle. The complex interaction to the society that interact on the consumer preference and choice. In addition, the factors technology transport to the environment include on the public transportation policy. However, the discussion of this limitation are relevant to the significant of the study that give effect on the individual, society and future. There are a few factor of limitation to the study that I have which are:

1- Time management

As a student degree in UTeM, I would say that the time is very important and the most challenge to us. Student must manage the time very well and concentrate on doing the research. However, in the final year student, I should be more focus on the study. Also include to all the assignments and quizzes that have done before of the submission date given. So, time management skill very important this time. I would be able to do much more further research for my bachelor degree project. This limitation challenge my time-management skill.

2- Cost

Cost also one of the factor of the limitation of study. Because cost are the mainly used to doing anything in this research. I would say that cost can influence the charge on the research. The cost of book, photocopy, stationary and note are need for each of student. The money of student are limited. So, student must use the money very well and plan the only important things that needs.

1.8 Scope of study

The scope of the study are more interact on what, who and which that need to focus in this research. According to the follow, this research are need to focus on the factors of technology transportation (land vehicle) to the environment. Who the target are need to interview or to get the feedback in this research are the society in Malacca. Also interested in focus group of many kind of races man or women normally that use the transport of land vehicle. In addition, public transport are more use in variation of society in Malacca especially bus. The purpose on this interview are to collect data and analysis from the respondent of the uses of the transportation in land vehicle to the society in Malacca.

Another respondent for interview in questionnaires that the researcher focus on are about fifty respondents. The respondents are mix with the local and the tourism in Malacca. The location that the researcher focus in Malacca at area bus stop (Malacca centre). Why choose this location, because it's the place where many people use the transport land vehicle and it is suitable for the researcher to do survey and questionnaires to get data and information relate to the topic research. Malacca centre is the place where people mostly used technology transport especially in bus. In addition, the place also full with tourism that using land vehicle.

1.9 Structure of Thesis

Chapter	Brief description
Chapter One	This chapter has describe about the relationship between the factors that influence in increasing the technology transport to the environment. In this case also include to the objective and the question that refer on this factors of technology transport to the environment.
Chapter Two	In this chapter has describe about the literature review on the theoretical framework. Also include dependent variable (Environment) and independent variable (Factors of Technology Transportation).
Chapter Three	Refer to this chapter which is about research design and methodology. This chapter involve the research design and methodological choice to get the information in this research. Choose survey method to collect information in population of group.

Chapter Four	According to this chapter that are include to know the describe factor, correlation, relationship, multiple regression and reliability of the research between independent variable and dependent variable. Those all analysis are according by research question and research objective.
Chapter Five	In this chapter, about the conclusion and recommendation. Recommendation are include for the future analysis.

1.10 Summary

Transportation plays important role to the contemporary in society. As we know that the technology in transportation especially vehicle continuously improve and achieved a high level in quality and quantity of production due to the advance in this period. This research developed to investigate the factors that influence of the technology transportation (land vehicle) to the environment.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Due to the transport and the environment it seems more to describe about the factors that involve. Thus, Stantcher and May, (2009) explained that they have performed a review of the research knowledge centre about on transport and the environment. This climate system are more introduce about the factors to the environment change cause of the technology in transport include land vehicle. Society and economy are more include. Another on the global that means increase the temperature, sea level rise and leading to increasing the risk

The main factors to the environment are about the environment effects, technology and behaviour. The research results on the study of the effect could be found in waste, air pollution, noise and Land Lake.

For the future research developments impress in the directly on ecosystem exposure and human that gives impact on health and biodiversity. Another research are to identify the way on sustainable produced especially electric vehicles to reduce the negative effect on the environment. This research for long term global environment benefit and study on the factors of technology transportation in land vehicle.