"I/We hereby declared that I/We had read through this thesis and in my/our opinion that this thesis is adequate in terms of scope and quality which fulfill the requirements for the award of Bachelor of Technology Management (High Technology Marketing)"

Signature	:
Name of Supervisor	: PROF. DR. ADI SAPTARI
Date	·

DECLARATION

"I admit that this report is the result of my own, except certain explanations and passages where every of it is cited with sources clearly."

Signature :

Name : NURFARAHIN BINTI ABDUL WAHAB

Date

DEDICATION

I would like to dedicate the appreciation to my beloved family especially my parents who always provide the support and encouragement to me when I faced the challenges in university life. Next, I would also like to dedicate to my supervisor and panel who offered valuable suggestion to me throughout the research, friends and course mates for the assistance during the completing of research.

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Last but not least, I am thankful to all the people who involved either directly or indirectly in this bachelor degree dissertation. I appreciated the assistance and suggestions on every stage in completing this research. I hope this report will be a reference for other researchers in the future.

ABSTRACT

Understanding how levels of satisfaction differ across transportation modes can be helpful to encourage the use of active as well as public modes of transportation over the use of the automobile. This study uses a large-scale travel survey to compare commuters satisfaction on how the determinants of commuters satisfaction towards MRT services. The service quality is measured by the difference between customers" expectations towards a service and their actual experience from that service. Besides that, the framework guiding this research using quality management framework SERVQUAL. Quantitative data on customer satisfaction levels divulged from questionnaires were scrutinized against service quality factors, which were later replaced in the service quality model using a five-point Likert scale and conducting simple regression. The result of the study found positive impact of tangibility, reliability, assurance and empathy dimensions of service quality model on customers" satisfaction level pertaining to MRT services operators. Findings from this study provide a better understanding of determinants of trip satisfaction to MRT services in this topic and working on increasing commuters" satisfaction among MRT services.

Keywords: commuters" satisfaction, service quality, Mass Rapid Transit (MRT).

ABSTRAK

Memahami bagaimana tahap kepuasan yang berbeza merentasi mod pengangkutan boleh membantu untuk menggalakkan penggunaan mod pengangkutan awam yang aktif dan juga cara penggunaan kereta. Kajian ini menggunakan tinjauan perjalanan berskala besar untuk membandingkan kepuasan pengguna tentang bagaimana penentu kepuasan pengguna terhadap perkhidmatan MRT. Kualiti perkhidmatan diukur dengan perbezaan antara jangkaan pelanggan terhadap perkhidmatan dan pengalaman sebenar mereka dari perkhidmatan tersebut. Selain itu, rangka kerja membimbing penyelidikan ini menggunakan rangka kerja pengurusan kualiti SERVQUAL. Data kuantitatif mengenai tahap kepuasan pelanggan dibentangkan dari soal selidik diteliti terhadap faktor kualiti perkhidmatan, yang kemudian digantikan dalam model kualiti perkhidmatan menggunakan skala Likert lima mata dan melakukan regresi mudah. Hasil kajian mendapati kesan positif ketaksamaan, kebolehpercayaan, jaminan dan dimensi empati model kualiti perkhidmatan pada tahap kepuasan pelanggan yang berkaitan dengan pengendali perkhidmatan MRT. Penemuan dari kajian ini memberikan pemahaman yang lebih baik tentang penentu kepuasan perjalanan kepada perkhidmatan MRT dalam topik ini dan berusaha meningkatkan kepuasan pengguna di kalangan perkhidmatan MRT.

Kata Kunci: kepuasan pelanggan, kualiti perkhidmatan, Mass Rapid Transit (MRT).

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LIST OF ABBREVIATION

A =Assurance

CS =Customer Satisfaction
DV =Dependent Variables

E =Empathy

IV =Independent Variables

KL =Kuala LumpurKV =Klang Valley

MRA = Multiple Regression Analysis

MRT = Mass Rapid Transit

R =Reliability

RP =Responsiveness

SPAD = Suruhanjaya Pengangkutan Awam Darat
SPSS = Statistical Package for Social Sciences

SQ =Service Quality

T =Tangibility

LIST OF SYMBOL

 H_0 = Null Hypothesis

= Alternatif Hypothesis H_1

β = Beta

α = Constant

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CHAPTER 1

INTRODUCTION

1.0 Background of the Study

Every great city in the world such as London, New York, Paris, Berlin, Moscow, Sydney, Tokyo, Hong Kong and Singapore have well-functioning public transport system that can transport commuters efficient and quickly to arrive at the destination. Living in the crowded urban area makes people need public transport as the main transportation. It makes people easy to travel form one destination to other destination in the specific period. The increasing number people of using public transportation and local communities are expanding public transit services. Looking to the future, as population and employment within the region grows so will the demand for transport.

Kuala Lumpur is one of the busiest city in Malaysia with the region had a population of approximately 7.1 million, according to the 2010 census. This includes 1.6 million in the federal territory (core city) of Kuala Lumpur and 5.5 million in the suburbs (which include Putrajaya) (Cox, 2013). Kuala Lumpur is a great city with MRT as part of an efficient transport system. Meanwhile, Kuala Lumpur/ Klang Valley area needs a great development in public transport is undeniable for upwards people who live and work that take long distances. According to Jala (2012), a key part of making a large city like Kuala Lumpur and its environs liveable for work, play, leisure and learning is an efficient urban public transport system.

The number of population was increase over the year. The 51km MRT Sungai Buloh – Kajang Line is expected to have daily ridership around 400,000 (Pillay, 2017). According to National Transformation Programme Annual Report (2016), the greater Kuala Lumpur and Klang Valley (Greater KL/KV) is unique among the National Key Economic Area in that it is focused on a geographical location, centred on Malaysia's capital city and its surrounding suburbs. Mass Rapid Transit (MRT) Sungai Buloh - Kajang is the second fully automated and driverless rail system in the Klang Valley. In the years to come, the public transport becomes backbone of the Greater Kuala Lumpur/ Klang Valley (Choong, 2017).

Mass Rapid Transit (MRT) Sungai Buloh – Kajang are feature that can prompt commuters to arrive the destination in a limited time. The new implement for 51 km MRT Sungai Buloh – Kajang Line is one of the improvement for a better customer service and future growth. The MRT Sungai Buloh – Kajang Line have 31 stations, which 24 stations are elevated station and another seven is underground stations. The management been has provide some facilities for consumer convenient. Such as, Lifts, escalators, customer service centres, public telephones, ticket vending machines, toilets and prayer rooms.

According to Government"s Initiative on Public Transport Results in Increased Ridership (2017) while in 2015, an urban rail fare review exercise was undertaken as it had not been reviewed over the past 19 years. The immediate impact was a decline of 9% in ridership in 2016, however this normalised with a significant pick up of 12% in ridership in 2017 i.e from 570,021 to 638,605. This numbers does not include the MRT Line ridership. The full opening of the MRT Line 1 alone, recorded a daily ridership of 101,024. Therefore, public transportation services need to operate more effective and efficient in order to attract more people to use public transportation as well as overcome the issue of traffic congestion (Khalid et al., 2014).

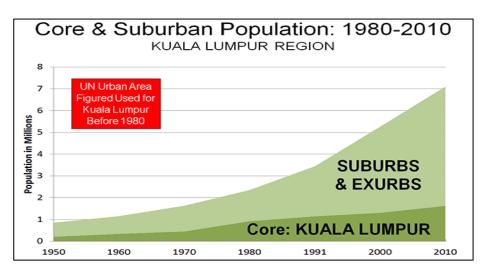


Figure 1.1 Kuala Lumpur Region Populations 2010

1.1 Problem Statement

The definition of the passenger peak hour is fundamental for a facility's design purposes (Wang and Pifield, 1999). Thus, the peak hour is a part of the day amid which traffic congestion on roads and crowding of public transport. Further, when two periods with different demands and travel times are considered, the optimal frequency (equal for both periods) depends on the demands of both peak and off peak periods (D'Iaz and Gschwender, 2003). Figure 1.2 shows during the peak period the number of ridership increased significantly and it cause congestion (SPAD Annual Report, 2013). AM refers to the morning rush hours from 6am to 10am. As mention by Khalid et al., (2014), nowadays, traffic congestion is one of the significant problems that confront many urban areas in Malaysia, including the Klang Valley area. Thus, public transportation services need to perform more effective and efficient with a specific end goal to draw in more individuals to utilize public transportation and in order to overcome the issue of traffic congestion. Most of the public transportation systems in Klang Valley area, cannot offer the quality of the services needed by passengers. Besides that, the train delay also causes too many ridership waiting. It shows that the train are not punctual to arrive at the destinations. The issues of public transports in Malaysia, in general, are becoming more widespread, and services are below required levels, which could not satisfy the consumer needs and expectations (Zaherawati et al., 2010). Providing punctual and reliable services is a main goal of train operating companies (TOC"s) in order to maintain and further improvement their competitiveness in the rapidly changing multimodal transport market (Luan et al., 2016).

Dzuhailmi et al. (2014), found that the level of prejudice among youth in Klang Valley Malaysia towards public transport was at a moderate level. In a month roughly around 450 000 commuters used this services. Everyday more than 15,000 people are using the MRT Sungai Buloh – Kajang Line. Due to increase number of user every year, it is necessary to investigate the level of satisfaction among the commuters. This study is to identify the satisfaction level of commuters based on the different segmentation. Besides that, from the observation, the researcher wants to analyse the demographic and psychographic segmentation in satisfaction of MRT commuters. Some survey will be conducted in order to know the feedback from commuters and how they are satisfied with the facilities and punctuality of MRT Sungai Buloh – Kajang.

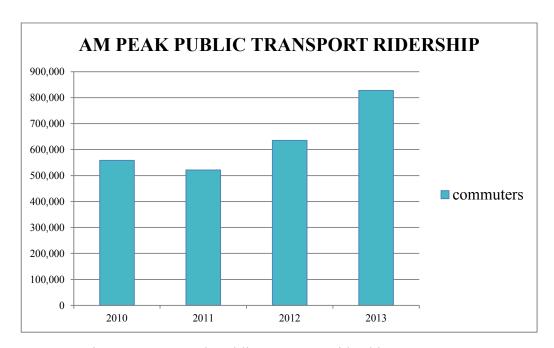


Figure 1.2 Am Peak Public Transport Ridership 2010 to 2013

1.2 Research Question

The study is related to the level of satisfaction of commuters based on MRT services. The research questions are as the following:

- 1. What are factors that affecting commuters" satisfaction of MRT services?
- 2. What are the most factors influence commuters" satisfaction of MRT services?

1.3 Research Objective

- 1. To identify factors that affecting commuters" satisfaction of MRT services.
- To analyse the most factors influence commuters" satisfaction of MRT services

1.4 Scope of Study

The scope of this study is MRT Sungai Buloh – Kajang line which is to analyse the MRT commuters" on their satisfaction of MRT services at Sungai Buloh-Kajang line. The researcher will collect data from survey in questionnaire form. The respondents are randomly selected at MRT Sungai Buloh – Kajang line in order to obtain the adequate and comprehensive information. In addition, the age range was 18 years old and above.

This study assumes that the respondent has same general knowledge to be a part of primary data collection. The researchers expect that the respondent will be give authentic answer which can assist the researcher with the correct information. Besides that, time constraint also is the one factor that faces by researcher. The researchers only have several months in completing this research. Due to the limitation of time, the researcher cannot collect as much of the information from

respondent and it quite difficult to analyse the customer satisfaction. Other aspect like customer perception and acceptance would not be covered in this research.

1.5 Significant of the Study

The priority of this study is to identify the factor that affecting the commuter"s satisfaction of using MRT as the main transport in their daily life. The researcher wants to analyse the satisfaction in terms of safety / security, reliability of the public transport and waiting time. By doing this research the researcher can gain more information and knowledge. This research may give feedback to operator of MRT to improve their services.

1.6 Summary

The conclusion in this chapter is to construe regarding the introduction or the background of the study. From the top, we can see that the researcher explain general about the study. For background of study, it is explain about little information of Mass Rapid Transit (MRT) Sungai Buloh – Kajang. Likewise, it is also explained the focuses towards the satisfaction in terms of safety / security, reliability of the public transport and waiting time. Researcher also provides the research questions and research objective.

Then, this chapter also explains about scope, limitations and key assumption on this study. MRT Sungai Buloh – Kajang has being chosen in this research. The important of this study is to analyse the satisfaction of commuter swhile using the MRT. The problem that researcher will face in this research is either the respondent will be give authentic answer which can assist the researcher with the correct information to finish the report.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

Literature review is referring to the collection of materials that includes knowledge that support for new insight as well as theoretical and methodological to a particular topic. In this chapter, it covers public transport and market segmentation. There are several sources that were used such as journal, articles, book and internet. On this chapter also clarifies regarding factor of service quality and theory SERVQUAL for measuring the satisfaction of commuters.

2.1 Public Transport

According to Oxford dictionary, public transport is buses, trains, and other forms of transport that are available to the public, charge set fares, and run on fixed routes. Besides, public transport system is a complex system consisting of various sub-system including various road, rail, water, and air system, vehicles or rail coaches system, track and signalling system, road and scheduling system, fare and ticketing system, interchange and transfer system and integrated information system (Bachok et al., 2013). Abreha, (2007), defines public transport as all modes of transport available to the public irrespective of ownership. Meanwhile, public transport systems have been revived as a key component of a broader strategy to

mitigate the major economic and environmental problems related to the massive use of private automobiles (Cruz, Barata and Ferreira, 2012). However, evaluation of the transportation service quality is the first step of increasing customer satisfaction in any system (Awasthi et al., 2011). Therefore, transportation arranging is critical element in the evolution and development of metropolitan region.

Public transport also known as shared passenger-transport that can be usable for general public. Transportation system form the basis by economic advancement can occur and the methods by society interact. An ineffective transport system and related urban form will confine economics and social opportunities. Although the importance of public transportation is increasing with rapid growing population of Kuala Lumpur / Klang Velly, the transport infrastructure is not appropriate for the current transport demand (Nassereddinea and Eskandarib, 2017).

According to Land Public Transport Commission Rail usage is also the fastest growing among all modes of urban public transportation according to ridership data from rail operators. Daily ridership for urban rail services rose 8.5% to 631,988 commuters in 2015 from 557,921 in 2011. Besides that, The Land Public Transport Commission (SPAD) welcomes the significant allocations announced by YAB Prime Minister Dato" Sri Mohd Najib Tun Abdul Razak in Budget 2018 for key infrastructure projects in Greater Kuala Lumpur/ Klang Valley and across the nation as stated in Government's Initiative On Public Transport Results In Increased Ridership (2017). Since 2010, the Government invested heavily in improving public transport infrastructure under the Urban Public Transport (UPT). Therefore, below table show the trends of the Land Public Transport Commission Rail. Where there is increase, except for KTM komuter, KL Monorail and KLIA express which show a bit decrease.