FACTORS IN INFLUENCING INDIVIDUAL'S PURCHASE INTENTION TOWARDS GREEN CARS

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A research project submitted in partial fulfilment of the requirement for the
Bachelor Degree in Technology Management
(High Technology Marketing) with Honours

Faculty of Technology Management and Technopreneurship
Universiti Teknikal Malaysia Melaka

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APPROVAL FOR SUBMISSION

I hereby declare that I have read through this report entitle "Factors in Influencing Individual's Purchase Intention towards Green Cars" and found that it has complied the partial fulfillment for awarding the Bachelor Degree in Technology Management (High Technology Marketing) with Honours.

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DECLARATION

I hereby declare that this report entitle “Factors in Influencing Individual’s Purchase Intention towards Green Cars” contain of original research work of my own research. All information in this research has been obtained and presented in accordance with academic rules and ethical conduct. I also declare this research is free of obvious typos, spelling and grammatical errors. This research has satisfied the format and style as prescribed in the Writing Manual.

Signature : _____

Name : CHUA KAH YING

Date : _____

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DEDICATION

Firstly, I would like to dedicate this research project to my supervisor Dr. Fam Soo Fen for her guidance and advice on this research project.

Besides that, I would also like to dedicate this research project to my parents, families and friends who provide me several of support throughout the process of completion of this research project.

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ABSTRACT

The aim of this research is to examine factors in influencing individual's purchase intention towards green cars. In today's global warming is rapidly growing day by day, Malaysians are currently facing critical environmental issues and challenges. Ajzen and Fishbein (2009) developed the Reasoned Action Approach (RAA) has been successfully applied to a wide range of behaviors. In this research, investigations focus on the relationship between the independent variables (experiential attitude, instrumental attitude, subjective injunctive norm, subjective descriptive norm, perceived capacity and perceived autonomy), mediator (purchase intention) and dependent variable (behavior). Primary data were collected through survey questionnaire with 300 respondents. Subsequently through the Statistical Package for Social Science (SPSS) version 23 to perform the analyses the results are discussed in the form of table and chart. Hence, the relationship among the independent variables, mediator, and dependent variable could be explained. All the variables tested are significant and normative element is more significantly influencing behavior. Lastly, managerial implications and theoretical implications have been discussed. At the end of the research, the limitations and recommendation will be addressed and presented.

Keywords: green car, experiential attitude, instrumental attitude, subjective injunctive norm, subjective descriptive norm, perceived capacity, perceived autonomy, purchase intention, behavior.

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LIST OF ABBREVIATION

ABBREVIATIONS	TITLE
B	Behavior
CO2	Carbon Dioxide
EATT	Experiential Attitude
EEV	Energy Efficient Vehicles
GHG	Greenhouse Gas
H	Hypothesis
IATT	Instrumental Attitude
NAP	National Automotive Police
PA	Perceived Autonomy
PC	Perceived Capacity
PI	Purchase Intention
RAA	Reasoned Action Approach
RO	Research Objective
RQ	Research Question
SDN	Subjective Descriptive Norm
SIN	Subjective Injunctive Norm
SPSS	Statistic Package For Social Science
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action

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CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter proposes a research of the factors in influencing individual's purchase intention towards green vehicle. In this chapter discussed by research background, problem statement, significant of study, research questions, research objective, scope of study, limitation of study and structure of thesis.

1.1 Research Background

In recent years, global warming has become more and more severe and meteorological. Scientists claimed greenhouse gas (GHG) concentration increased in the atmosphere caused of global warming (Montoya et al., 2016). The climate change of today has led in global greenhouse emissions from urban development as well as uncontrolled pollution. In addition, increasing demand for transport using an internal combustion engine has resulted to an increasing demand for petroleum. Malaysia also requires to discover an alternative way to store energy while concurrently decreasing damaging fuel emissions as one of the world's oil-producing nations (Zainul Abidin, 2018).

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Conventional vehicles used gasoline combusts to discharge end products of carbon dioxide, carbon monoxide, and nitrogen oxides which may contribute to climate change (Bryan Cohen). According to Alpha Online, even the infusion of 10% ethanol into gasoline did not solve the issue of emissions, particularly since the transformation from fuel to corn effectively involves the use of fossil fuels. Unlike conventional cars, green cars have less negative effect on the environment. Many of people assume that only electric vehicles are referred to by the term "green cars". However, there are various type of green cars that work in different ways to reduce fossil fuel reliance (Clean Green Compare).

A green car consumes less petroleum than standard vehicles or utilizes renewable energy to power engines. Usually, to determine the vehicle whether is a green car can be measure by how it is fuel (Crossline on the fort). Green cars can include hybrid cars, solar cars, electric cars and hydrogen cars on the market (Joshi & Rao, 2013). In Malaysia, the concept of implementation "green" had be concerned. Seri Mustapa Mohamed of Minister of International Trade and Industry Datuk announced on 12 January 2014 the amended National Automotive Police (NAP) offering a sequence of rewards to increase green vehicle manufacturing (Lim, 2014). This shown that automotive companies are supported by the government.

Green cars are also described as Energy Efficient Vehicles (EEV) which generate minimal, if not null, damaging environmental impacts and the most effective energy with the highest energy consumption. The notion of Malaysia's Efficient Energy Vehicle (EEV) is described as any car that reaches a fixed energy consumption and carbon emission standards. In nearly all Petronas fuel stations throughout Malaysia, including Klang Valley, Penang, Melaka, and Johor, the government introduced and constructed electronic vehicle shifting outlets (MAI, 2018). With regard to the proportion of vehicle, most advanced nations have started manufacturing EEVs which includes car driven by diesel, solar, and sustainable power (Mansor, 2018).

Based on data from Jabatan Pengangkutan Jalan (JPJ), there were 16,944 hybrid vehicle units on the highway in 2013. EEV's percentage of the complete quantity of sector quadrupled from 8.1% (2014) to 32.6 (2015) and 42.8% (2016). It is expected that 85% of cars manufactured in Malaysia will be EEVs by 2020. The target CO^2 decrease result for EEVs is laid at 199.7 ktCO2 eq by 2020. The measure of outlets has ascended because of the mind-boggling response from vehicle clients

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and automaker alike, and TNB ES has expanded its mean to 1000. Green Technology and TNB ES anticipated 3000 charging stations in Malaysia to be set up by the middle of 2019 (Zarina Zakariah, 2018).

This research will examine the factors that influencing purchase intention on green cars. Purchase intention is a decision-making process that explores why clients purchase a specific product (Shah, Aziz, Jaffari, Waris, Ejaz, Fatima, & Sherazi, 2012; Mirabi, Akbariyeh, & Tahmasebifard, 2015).

1.2 Problem Statement

According to World Data Atlas, carbon dioxide (CO2) outflows per capita for Malaysia were reported at 8.53 metric tonnes in 2016. Malaysia's carbon dioxide consumption per annum rose from 4.88 metric tonnes in 1997 to 8.53 metric tonnes in 2016. It was increasing at an overall annual pace of 3.09%. The primary source of global warming contributing to climate change is high carbon dioxide (CO2) levels.

In 2016, 71 percent of complete land-transport carbon emissions came from vehicles and 9 percent from motorcycles. Therefore, fuel efficiency and carbon emission concentrations will have an important effect on the setting for personal cars (Green Technology Master Plan, 2017).

Since the Tenth Malaysia Plan period starting in 2011, the Government has as ventured up endeavours to diminish the assembling division's GHG outflows by empowering vitality productivity, empowering manageable strategies, and utilizing green products. Green are secured by eco item characterizations that enable ecological carbon discharges to be reduced. Green autos have been broadly upheld by the government. In a developing country such as Malaysia, however, the adoption of green products by clients is still small owing to the small amount of environmentally friendly products relative to their non-green peers (Ismi, 2011). Whereas for Malaysian customers' adoption of green cars, there was a 44.5% fold decline in hybrid car revenues in Malaysia relative to 2014 in the MAA industry evaluation in 2015 (Sze, 2015).

The acceptance of the green cars is still low. Malaysia Automotive Institute (2014) reported that Malaysia has only 18,967 customers of hybrid cars (Teoh &

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Noor, 2015) owing to Malaysian customers' willingness to accept new technologies (Edison & Geissler, 2003). Moreover, out of the complete personal car in 2015 there are only 32.6 percent of Energy Efficient Vehicles (EEV) (Green Technology Master Plan, 2017). Consumers are not prepared to alter their existing standard vehicles (Razak et al., 2014). For them, cars is just a transportation that either conventional or green are not important.

Therefore, this research will focus on the factors in influencing individual's purchase intention toward green cars. In this manner, this research study around the impact of Reasoned Action Approach (RAA) components which attitude (experiential attitude, instrumental attitude), subjective norm (subjective injunctive norm, subjective descriptive norm), and perceived behavioral control (perceived capacity, perceived autonomy). Purchase intention is a significant component to research as it assumes a job in an ultimate choice creation of behavior. This research explored regarding mediating effect of purchase intention toward factors and behavior on green cars.

1.3 Significant of Study

The major purpose of this study is to examine the factors in influencing individual's purchase intention toward green cars. Hence, this study aim to investigate the correlation between independent variables (experiential attitude, instrumental attitude, subjective injunctive norm, subjective descriptive norm, perceived capacity and perceived autonomy), mediator (purchase intention) and dependent variable (behavior) of Reasoned Action Approach (RAA) (Ajzen, 2010).

This research study is significant and contribute to further studies on green car conduct in term of organisational and customer view. The assurance and accuracy of the results in Malaysia's green car industry can function as guidelines for further studies. This research study enables marketer greater comprehend the capacity of the green car industry through the responsive participants from an institutional view.

The significant consumption results observed in this studies are practically helpful in producing green cars that fit the customer's decision for local automotive businesses. Manufacturers can plan their marketing strategies, resulting in quicker

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distribution of green cars to their customers. This research also increases awareness of green cars among customers, which in addition promotes them to buy green cars.

This research, on the other side, could also be a helpful guidance for potential scientists. Researchers could use other kinds of methods to examine experiential attitude, instrumental attitude, subjective injunctive norm, subjective descriptive norm, perceived capacity, and perceived autonomy on the green car behavior. Furthermore, researchers have comprehensive understanding and knowledge of the purpose of the individual on green car can reproduce comparable cohort studies and figure out the variations in distinct areas.

1.4 Research Questions

The research questions have been formulated as below:

RQ 1: What are the relationship between factors and purchase intention on green cars?

RQ 2: What are the relationship between purchase intention and behavior on green cars?

RQ 3: What is the mediation effect of purchase intention between factors and behavior on green cars?

1.5 Research Objectives

In order to achieve the aim of this research, three objectives have been set out as below:

RO 1: To identify the relationship between factors and purchase intention on green cars.

RO 2: To identify the relationship between purchase intention and behavior on green cars.

RO 3: To determine the mediation effect of purchase intention between factors and behavior on green cars.

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1.6 Scope, Limitation and Key Assumption

1.6.1 Scope of Study

The primary objective of the research study is to define the relationship between factors (experiential attitude, instrumental attitude, subjective injunctive norm, subjective descriptive norm, perceived capacity, and perceived autonomy) and purchase intention on green cars, identify the relationship between purchase intention and behavior on green cars, and determine the mediation effect on purchase intention toward behavior on green cars.

1.6.2 Limitation

This research was conducted based on the Reasoned Action Approach (RAA) model. RAA is a conceptual framework for natural social behaviour modelling, describing and altering (Ajzen, 2012). This research contains only conduct in Melaka that respondents are collected in Melaka. Next, this research's hypothesis is the participants' sincerity and truthful answers. The participants respond to the issues depending on their own knowledge and without other participants interfering.

1.6.3 Key Assumption

The study assume that the research carry the RAA model is useful in predicting, explaining, and changing toward individual's behavior on green cars. Besides, this research's hypothesis is the participants' sincerity and truthful answers. The participants respond to issues on the basis of their own knowledge and without interference from other participants.

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