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**THE STUDY OF GREEN MARKETING TOOLS' EFFECTS ON  
CONSUMER PURCHASE BEHAVIOUR**

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**This thesis is submitted in partial fulfilment of the requirements for the award  
of Bachelor Degree of Technology Management (High Technology Marketing)**

**Faculty of Technology Management and Technopreneurship  
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## DECLARATION OF ORIGINAL WORK

‘I hereby declared that this project is the result of my own research except as cited in the references. This research project has not been any degree and is not concurrently submitted in candidature of any other degree.’

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## **DEDICATION**

This research paper is exclusively dedicated to my parents and my siblings who give me their endless of love, support, motivation and concern when I am conducting this research. Next, thanks to my friends for generous information sharing during project report completion. Finally, I also would like to express my heartfelt gratitude for my supervisor, Dr. Mohammed Hariri bin Bakri for his guidance and precious time.

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## ABSTRACT

Malaysia had started to implement green strategies to encourage citizen to protect the environment throughout the years. The “green trend” of the consumer to purchase environmentally friendly products give rise to marketers and entrepreneurs to add green values to their business. This study aims to analyse the factors that affect consumer purchase behaviour through green marketing tools and to examine the relationship of green marketing tools and consumer purchase behaviour based on theory of planned behaviour (TPB). The third objective is to validate the most significant factor that affects consumer purchase behaviour through green marketing tools. This study reviews the previous green marketing tools (green advertisement, eco-label, and eco-brand) and Theory of Planned Behaviour (TPB) in consumer purchase behaviour towards green products. Next, the explanatory research design of quantitative survey form was distributed to 384 valid respondents to generate the latest information of consumer purchase behaviour towards green marketing tools in Melaka. Factor analysis and multiple regression analysis in SPSS were conducted to ensure the construct and convergence validity of results. The descriptive and inferential analysis explained in tables and figures form. The results show that perception towards eco-label is the strongest relationship with consumer purchase behaviour. The TPB theory can be further elaborated by the consumer belief, environmental concern, awareness, and trust in these green marketing tools to implement the green marketing strategies in Malaysia.

## ABSTRAK

*Malaysia telah mula melaksanakan strategi hijau untuk menggalakkan rakyat melindungi alam sekitar sepanjang tahun. "Trend hijau" dalam pengguna untuk membeli produk mesra alam menimbulkan pemarkas dan usahawan untuk menambah nilai 'hijau' kepada perniagaan mereka. Kajian ini bertujuan untuk menganalisis faktor-faktor yang mempengaruhi tingkah laku pembelian pengguna melalui alat pemasaran hijau dan mengkaji hubungan antara alat pemasaran hijau dan tingkah laku pembelian pengguna berdasarkan teori TPB. Objektif ketiga adalah untuk mengesahkan faktor yang paling penting dalam mempengaruhi tingkah laku pembelian pengguna melalui alat pemasaran hijau. Kajian ini mengkaji semula alat pemasaran hijau sebelumnya (iklan hijau, eko-label, eko-jenama) dan Teori of Planned Behaviour (TPB) dalam tingkah laku pembelian pengguna terhadap produk hijau. Seterusnya, reka bentuk penyelidikan dalam kuantitatif dan borang telah diagihkan kepada 384 responden yang sah untuk menghasilkan maklumat terbaru tentang tingkah laku pembelian pengguna ke alat pemasaran hijau di Melaka. Analisis faktor dan analisis regresi dalam SPSS telah dijalankan untuk memastikan kesahihan, konstruktor dan penumpuan keputusan. Analisis deskriptif dan inferensial dijelaskan dalam bentuk jadual dan gambar rajah. Keputusan menunjukkan bahawa persepsi terhadap eko-label adalah paling kuat hubungannya dengan tingkah laku pembelian pengguna. Teori TPB boleh dikaji semula oleh kepercayaan pengguna, kebimbangan alam sekitar, kesedaran, dan kepercayaan dalam alat pemasaran hijau untuk melaksanakan strategi pemasaran hijau di Malaysia.*

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## ABBREVIATION

ANOVA	=	Analysis of Variance
CPB	=	Consumer Purchase Behaviour
EA	=	Environmental Attitude towards Green Products
EE	=	Energy Efficiency
H <sub>0</sub>	=	Null Hypothesis
H <sub>1</sub>	=	Alternative Hypothesis
KMO	=	Kaiser-Meyer-Olkin
P	=	Perception towards Eco-Label
p	=	symbol of Significant
PBC	=	Perceived Behavioural Control towards Eco-Brand
r	=	symbol of Pearson's Correlation Coefficient
SIRIM	=	Standards and Industrial Research Institute of Malaysia
SN	=	Subjective Norm of Green Advertisement
SPSS	=	Statistical Package for Social and Sciences
TPB	=	Theory of Planned Behaviour
UTeM	=	Universiti Teknikal Malaysia Melaka
β	=	Beta

## **APPENDICES**

- A. QUESTIONNAIRE
- B. FIGURES OF GREEN MARKETING TOOLS IN MELAKA
- C. GANTT CHART



## CHAPTER 1

### INTRODUCTION

Environmental sustainability is not the new topics to discuss in this 21<sup>st</sup> century. The raise of global pollution, depletion of resources, climate changes and greenhouse effect become concern of human beings. Thus, a result of solving these problems is in human actions of innovating new business and technical strategies to sustain the global (Junior et al., 2015). Green technology and green marketing are introduced to sustain the business and reduce impact to environment. Green marketing was also known as terms ‘eco-marketing’, ‘environmental marketing’, ‘sustainable marketing’ or ‘marketing of green product’ involves firm, customers and environment with designed to meet consumer demand through innovative products that have the least impact on the environment, and secondly through the competitive advantage of positioning products in mind of consumers. Green marketing strategy act as useful tool in green movement and consumer also start to purchase green products and shift to green behaviour in developed countries like Europe and US due to raising of environmental concern and awareness (Nguyen and Nguyen, 2016).

#### 1.1 Background of Study

According to Rahbar and Wahid (2011), Malaysia had started to implement green to encourage citizen to protect the environment throughout the years. The Malaysia’s national labelling program by the Standards and Industrial Research Institute of Malaysia (SIRIM) launched, ISO14000 of industry for environmental care,

energy efficiency (EE) products introduced, social responsibility and green marketing had been integrated into management and marketing vocabulary. All of these initiatives towards implement green marketing strategies that support environment conservation and protection.

According to Devi Juwaheer and Pudaruth (2012), several researches had been conducted to explore the relationship between green marketing strategies and its effect on consumer purchase behaviour. Those strategies includes consumers' responsiveness and environmental beliefs in green advertisement, eco-label, eco-brand and green packaging. All elements showed positive perspective towards green purchase patterns. However, different culture and demographic context may show different results in green purchase behaviour and generalization of these behaviour is not easy in developing countries such as Malaysia.

Melaka also known as 'Green Technology City' since 2003 with slogan "Melaka Maju Negeriku Sayang, Negeri Bandar Teknologi Hijau" to achieve the vision of Melaka in the year 2020. Hence, a lots of green technology had been designed and implemented to ensure the sustainable development and preserving the environment for future generations (Melaka Government). This strategy increase publics' education, awareness, conscious and knowledge towards the environment and enhance their intention to purchase environmentally products.

The "green trend" of consumer to purchase environmental friendly products give raise to marketers and entrepreneurs to add green values into their business. However, there are many variables to determine the green purchase behaviour of consumer.

This present study will like to focus on green marketing tools such as eco-label, eco-brand and environmental advertisement base on theory of planned behaviour (TPB) that influence green purchase behaviour. The vision is improving green marketing tools that no detriment to environment in the future. Mission is explaining whether consumer attitudes, subjective norm and perceived behaviour control towards those green marketing tools can affect their purchase behaviour.

## 1.2 Problem Statement

Previous studies stated that the powerful of green marketing tools (eco-label, eco-brand and green advertisement) had significant influence green purchase behaviour. The green marketing tools increase awareness of green products attributes and characteristics as well as make positive perception. Extend of green marketing tools needed to be analysed and examined periodically to show positive responds from consumer. However, there arise problems of what theory used in measure the green marketing tools to green purchase behaviour. Limited studies showed the theory of green marketing tools' effects on green purchase behaviour but focus on environment feeling context. Those studies more on perception and feeling towards green products like organic food, sport wear product, energy efficiency appliances and skin care products.

Furthermore, it was important to understand the reason why customers tended to prefer green products rather than convenience products because the information important for business vendors or marketers to develop and implement strategies efficiently to achieve objectives. The relationship of attitudes, subjective norm and perceived behavioural control that applied in TPB to test the consumers' purchase intention and behaviour introduce by Ajzen are vary in certain studies shows weak but positive perspective of consumer attitudes and intention transfer into green purchase behaviour. Consumer attitude – behaviour gap is significant factors that are inconsistent and need to be investigated on time (Joshi and Rahman, 2015). The theory of planned behaviour (TPB) become underlying theory to explain the determinants of consumer purchase behaviour towards green marketing tools (Chin, Chin, and Wong, 2017). Whereas, there is limited literature support that Malaysia culture of green purchase behaviour. This study aim to fill in gap to investigate the factors that affect consumer purchase behaviour through influence of green marketing tools based on TPB framework in order to give a new impetus to green marketing implement and development.

### **1.3 Research Questions**

The major research questions arise in this study specific to the following:

- (a) What are the factors that affect consumer purchase behaviour through green marketing tools?
- (b) What is the relationship between the factors that affects consumer purchase behaviour from influence of green marketing tools?
- (c) What is the most significant factor that affect consumer purchase behaviour through green marketing tools?

### **1.4 Research Objectives**

The research objectives developed to give a clear direction to solve the problems as showed:

- (a) To analyse the factors that affect consumer purchase behaviour through green marketing tools.
- (b) To what extend the relationship of green marketing tools and consumer purchase behaviour based on theory of planned behaviour (TPB).
- (c) To validate the most significant factor that affect consumer purchase behaviour through green marketing tools.

### **1.5 Scope and Limitation of Study**

#### **1.5.1 Scope**

Scope of this study focus on Theory of Planned Behaviour (TPB) of consumer towards the influence of green marketing tools (green advertisement, eco-label, eco-brand and green product) on consumer purchase behaviour. The factors affecting

consumer purchase decision have environment attitude towards green product, subjective norm of green advertisement, perceived behavioural control towards eco-brand and perception for eco-label. This research targeted in central of Melaka citizen as case study because Melaka is ‘Green Technology City’ and lots of shopping complex that attract consumer to make a purchase. The respondents should post the characteristics of green behaviour so that they can answer the questionnaire correctly and achieve research objectives too.

### **1.5.2 Limitation**

This study focus on the previous tools eco-label, eco-brand and green advertisement that affect green purchase behaviour and other tools like green product can be suggested to improve this study. This study conducted only in city central of Melaka and the samples sizes may not represent the overall picture of Melaka. One of the constraint is 24 weeks are limited conducted time. Next, research assumed that respondents will provide honest and justifiable answer and have adequate knowledge about green marketing.

### **1.6 Significant of Study**

This study would assist business vendors and marketers to better understanding the most significant impact of green marketing tools that encourage the customers to purchase the green products. It focus on green initiatives to eliminate environment pollution by realising on factors that influence green purchase behaviour in Melaka, Malaysia. As a result, Malaysians can establish an appropriate strategic plan based on what factors that affect consumer purchase behaviour through green marketing tools. Analysis of these factors provide comprehensive information about current go green trend and interpret this opportunities to improve green product values as well as enhance competitive advantage to increase brand image.

### **1.7 Contribution of Study**

This study may provide valuable information about consumer environmental beliefs in green marketing tools based on TPB and transfer to purchase behaviour. The perception towards eco-label includes in this study to examine the green purchase behaviour provide new perspective of current go green trend in Malaysia. Business vendors or marketers can use this information to develop and implement strategies more effectively and efficiently to achieve sustainable development. They also can utilize the strengths of this green marketing tools and transform weakness into strengths. The green marketing implementation should developed incrementally to sustain the environment for future generations.

### **1.8 Summary**

This chapter discuss foundation of the research and highlight problem statement in preliminary stage. The research questions and objectives provide clear and coherent direction to further proceed this study. Scope and limitation encountered, signification of study and contribution of study provide valuable information about this research. The next chapter provide a review on previous literature and discuss the independent variables and dependent variables in order to design a theoretical framework for this research.

## CHAPTER 2

### LITERATURE REVIEW

This chapter review several past studies related to this research studies. There are cover of independent variables and dependent variables such as green marketing strategies, green marketing tools, theory of planned behaviour (TPB), and consumer purchase behaviour. From the information obtained, researcher developed a research framework from the theoretical framework utilised and test the hypothesis. These studies can let researcher more understanding the scope and area of research title.

#### 2.1 Overview

Green marketing was also known as terms ‘eco-marketing’, ‘environmental marketing’, ‘sustainable marketing’ or ‘marketing of green product’ involves firm, customers and environment with designed to meet consumer demand through innovative products that have the least impact on the environment (Babita Saini, 2013; K. Anota Ahma, 2013; Nguyen and Nguyen, 2016).

Three stages of green marketing were undergo since 1960s newly initiation of industries concern, to consumer positive attitude towards environment marketing such as tourism, to new momentum with advanced technology that enable sustainable green marketing through global environmental awareness (Lee, 2011; Rahbar and Wahid,

2011; Devi Juwaheer and Pudaruth, 2012; Delafrooz et al., 2014; Ahmadi et al., 2015; Dwi, Kumadji, and Yulianto, 2015). It can be concluded that the efficiency of cognitive persuasion strategies and believes of growing of environmental knowledge with increasing demands and expectations of people as well as strict government rules, the sustainable green marketing development had made a great impact on the economy. One of the significant example of sustainable development can be seem in Toyota that introduced environmental technology with electrics – combustion hybrids cars. The unique product line of cars currently made a great market share in this particular industry (Delafrooz et al., 2014).

According to Polonsky in Zuhairah and Noor Azman Ali (2014), green marketing includes a variety of activities that had least impact to environment such as product modification, process innovation, changes in packaging and change in mode of advertisement in a profitable and sustainable way. Businesses also look for ways to address environmental challenges through marketing strategies to develop advanced technologies that minimize environmental impact and remain competitive in the marketplace. Green marketing strategies in 4Ps' like product, prices, distribution and promotion should be implement well in developing countries in a research of Evelyne Chebet Maiywa (2013).

According to Mayank Bhatia and Amit Jain (2013), companies are beginning to seize the green opportunities for implementing marketing strategies. Philips uses a green and energy-saving approach to selling its own lighting products. Dell focuses on green IT products and green innovation. Its motto is "Go Green with Dell." Nokia recycle cell phones to save on natural resources. IBM launches Big Green Initiative to improve IT Efficiency, optimize data center resources and reduce energy consumption and costs, manufacturers produce energy label rating products, and shopping centers launch recyclable bags instead of plastic bags. Malaysia also promulgated the Environmental Protection Law and the Environmental Audit Law to protect the environment and promote 'No Plastic Bag' at every Saturday. Melaka government also promote no plastic bag every day to save the planet.

Several studies proved that consumers' attitudes for green products is different in different market segments and cultures due to lack of attention and inadequate green