

## **SUPERVISOR'S APPROVAL**

‘I hereby declare that I have checked this project and in my opinion, this project is adequate in terms of scope and quality for the award of degree of Bachelor of Technopreneurship With Honours’.

Signature : .....

Supervisor Name : DR. NORHIDAYAH BINTI MOHAMAD

Date : .....

Signature : .....

Panel Name : ENCIK AMIR BIN ARIS

Date : .....

THE IMPACT OF GREEN PRODUCT ON CONSUMER BUYING BEHAVIOUR

NORZA SYAJHEHA BINTI ZAMRI

Report submitted

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## DECLARATION

‘I hereby declare that this project entitled “The Impact of Green Product on Consumer Buying Behaviour” is mine except for quotation and summarize that have been duly acknowledge’.

Signature : .....

Name : NORZA SYAJHEHA BINTI ZAMRI

Date : .....

## **DEDICATION**

To my beloved family especially my husband Mohd Rahimi, my children Aeesya and Farhan, Mama, Abah, Abg Chaq, Kak Ain, Ct and to all my family members. Thank you for giving me strength, advice, support, and assist me during completing my Final Year Project

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## ABSTRACT

Product manufacturing process may caused positive or negative affect and changes to the environment. While enjoying various product with advance technology provided, people should have responsibility in preserve and protect the environment. Hence, the purpose of this study is to examine the impact factor that influence consumers behaviour in purchasing. The study aims to understanding the influence factors in purchasing. The survey data was collected from 350 Melaka citizens in Malaysia through distribution of questionnaire. The gathered data were analysed by using the Statistical Package for Social Science (SPSS) version 23.0 software for normality test, non-parametric test, descriptive analysis, and regression analysis. The results of the analysis show that partially demographic factors have significant difference with the impacts of the green product and the consumer buying behaviour. On the other hand, green product factor do not have significant relationship with the consumer buying behaviour. While for the personal factors and psychological factors have a significant relationship with the consumer buying behaviour. This research also gives implications to knowledge and practical contribution. Limitations and recommendation also proposed for the future research.

## ABSTRAK

*Proses pembuatan produk boleh menyebabkan kesan positif atau negatif dan perubahan kepada alam sekitar. Ketika menggunakan pelbagai produk yang mempunyai teknologi tinggi yang disediakan, pengguna harus bertanggungjawab memelihara dan melindungi alam sekitar. Oleh itu, tujuan kajian ini adalah untuk mengkaji faktor kesan yang mempengaruhi kelakuan pengguna dalam pembelian. Kajian ini bertujuan untuk memahami faktor pengaruh dalam pembelian. Data kajian telah diambil dari 350 penduduk Melaka di Malaysia melalui pengedaran borang soal selidik. Data yang dikumpul dianalisis dengan menggunakan Pakej Statistik untuk Sains Sosial (SPSS) versi 23.0 untuk ujian normal, ujian bukan parametrik, analisis deskriptif, dan analisis regresi. Hasil analisa menunjukkan bahawa faktor demografi sebahagian besar mempunyai perbezaan yang signifikan dengan kesan produk hijau dan tingkah laku belian pengguna. Sebaliknya, faktor produk hijau tidak mempunyai hubungan yang signifikan dengan tingkah laku belian pengguna. Manakala untuk faktor peribadi dan faktor psikologi mempunyai hubungan yang signifikan dengan tingkah laku beli pengguna. Kajian ini juga memberikan implikasi kepada pengetahuan dan sumbangan praktikal. Had dan cadangan juga dicadangkan untuk penyelidikan masa depan.*

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**LIST OF ABBREVIATION & SYMBOL**

CO <sup>2</sup>	Carbon Dioxide
GDP	Gross Domestic Product
TPB	Theory of Planned Behaviour
TSR	Theory of Self-Regulation
ANOVA	Analysis of Variance

## CHAPTER 1

### INTRODUCTION

This chapter explain about the introduction of the research. In this research, the elements such as background of study, research problem, research questions, research objectives, scope of the study, limitation of the study, and important of the study have been discussed.

#### 1.1 Background of study

Nowadays, environmental issues of surrounding have become so important due to the bad condition of the environment. Said et al., (2003) pointed that environmental problem can be happened whether in directly or indirectly by the patterns of production from the industries, patterns by the consumption and also from the behaviour of the consumers. This is caused by the manufacturing and development of products, recycling of used products, and also because of open burning, garbage disposal, deforestation, soil erosion, chemical waste removal from factory to river and sea.

When manufacturer start the process or develop a product, there are contain so many chemical and toxic waste from the manufacturing process. The non-organic product is not save due to the higher chemical involved during the manufacturing and also the raw material used for the product is basically from chemicals.



Hassan, (2017) from *Persatuan Pengguna Islam Malaysia* (PPIM) mentioned that a few company producing flour was found contain benzoyl peroxide (chemical) which is can cause cancer. According to Ministry of Health (MOH), food regulation 1985 under food act 1983 allow benzoyl peroxide as food preservative in food additives for not exceed than 50mg/kg. Joint FAO/WHO Expert Committee on Food Additives (JECFA) said benzoyl peroxide have been evaluated and verified safely to used in food in a certain amount.

This situations can go to the pollution to the earth. The open burning was give the air pollution, chemical waste or liquid removal from factory to river or sea was contributed to water pollution while garbage disposal and deforestation was impact to soil pollution. The other effect from the pollution is change in the climate pattern which is can lead to the loss of ecosystems. Pollution also caused the environment to degradation, which is increase in air or water pollution. The increasing in the amount of CO<sup>2</sup> in the atmosphere that can prevent sunlight from reaching the earth due to the exceed leads of smog also the effect of the pollution to the earth.

Other than the above affects, gases like sulfur dioxide and nitrogen oxide also can cause the acid rain. Water pollution such as oil spills can also lead to the death of several species of wildlife. Actually, we may not be able to see the effects of pollution clearly with the naked eye, but it has been contaminated and abused continuously and we can not calculate how much damage it has incurred.

People today are being conscious about environmental issues. This lead to a positive impact on their attitude towards the green products and company. The industry for manufacturing and producing green products is estimated at over \$200 billions in 2006, (Gupta & Ogden, 2009). Consumers, business, and government play an important roles to make the green technology is succeed. Government initiatives toward green technology is such as creating alternatives to personal vehicle transportation which is government implement new Mass Rapid Transit (MRT) lines and Light Rail Transit (LRT) to limit the Greenhouse Gas (GHG).

Green technology or green product has a significant part in Malaysia economy which is contributed about RM7.9 billions or 0.8% to GDP in 2013 (Michankow, 2015). This country aim to contributing RM60 billions to the GDP by 2030. Consumer has an awareness toward green product due to the benefits of the products that give a good impact toward environment and health. Then, consumers and firms have a bigger challenges which is need to protect and preserve of earth's resources, (Posri, 2014).

Green product can be explained in many ways that can support to a particular message or point of view of the green product. Green product is a product that easily reused, made using natural or renewable resources, can be recycled, biodegradable, does not contain high toxic compounds, energy efficient, and durable with low maintenance requirements, (The University of Pennsylvania, 2017). According to Pantsios, (2014) in the Table 1.1, the top 10 greenest countries based on performance firstly are Sweden followed by Norway, Costa Rica, Germany, Denmark, Switzerland, Austria, Finland, Iceland, and Spain.

Table 1.1: The Top 10 Greenest Countries based on Performance Involved in Green Product in 2014

<b>PERFORMANCE RANK</b>	<b>COUNTRY</b>	<b>SCORE</b>
01	Sweden	68.1
02	Norway	65.9
03	Costa Rica	64.2
04	Germany	63.6
05	Denmark	63.2
06	Switzerland	63.1
07	Austria	63.0
08	Finland	62.9
09	Iceland	62.6
10	Spain	59.2

Businesses or firm see the awareness of the consumer on buying green product as a chance of strategy for them to create somethings new to consumers and market. Entrepreneur will find out new strategy to implement green product to consumer. The strategy that entrepreneur can use to establish their product is using green marketing approach that focus on 4P's which is price, promotion, place and product. At initial, an entrepreneur must doing a survey or questionnaire to ensure whether the consumer aware about green product or not and also to know about the need and want of the consumer toward green product. After all of this, the entrepreneur can implement the product to fulfill the need of consumer and ask them feedback about the product.

In present, consumer buying behaviour toward green product show the significant number of increase. Factors that affect the customer to buy green product are personal, psychology, and also about the benefits of the green product are need to focuses in this research. Green product also give a huge impact to consumer in healthy condition and a big impact to earth that can save an environment. According to Donikini (2013), the price of the green products can be said to be a premium price, the price is more expensive than the price of non-green products. Some of consumer do not take the price issue into a series matter because they see the benefits that organic product give to them, but some of the consumer take this issue as a series issue to think before buy a organic product. This is refer to the level of income of consumers that can affect the consumer buying behaviour of green product.

## **1.2 Research Problem**

Recently, the manufacturing and engineering industry has been surrounded by producing products that contains chemicals and then will produce toxic compound waste. This waste was contributed to pollution to the earth. The raw material used in the product is exactly from chemicals and to destroy or recycle the product also can give a pollution to the earth. This chemicals and toxic compound waste will end up influence the condition of human health and harmful the environment.

For example are water pollution, soil pollution, and air pollution. Removal of chemicals or toxic compound waste in a river or sea, exceed smog during production and manufacturing, open burning of waste are the causes of the pollution. Due to the problems, consumers are concern and aware about the environment today's. Many of the consumers prefer to go on the green product and green technology in their daily life (Brooks, 2010).

The green brand has been mentioned in early 1960 because on that time people are concern about the pesticide which is chemical in vegetables that may effect the environmental, health and safety issues (Meyer, 2010). Liu et al., (2014) also pointed that the production of non-organic product in excessive use of nitrogen fertilizers (chemical) in vegetable cultivation results in soil becoming acidic and effect the human health when eating the vegetable. It is mean that people actually know about the green technology or green brand since over the last few decade but how far their concern about the green brand is still lacking in research.

Department of Statistics Malaysia (2015), The Compendium of Environment Statistics (CES) 2015 stated that the statistic of air pollution from industrial in 2014 is 101.9 tonnes decreased by 12.0 per cent as compared to 2010 which is 113.9 tonnes. While for the percentage of clean river is increased from 47.6% in 2010 to 70.7% in 2014. This statistic shown that people nowadays are start concern about environment condition.

Thus, this research examined what are the factors that influence consumer in buying and purchasing the green product.

### 1.3 Research Questions

The research questions addresses in this research are the following :

- a) What is the differences between the impacts of green product and consumer buying behaviour toward green product based on demographic factors?
- b) What are the level of factors that influence the consumer in buying green product?
- c) What are the main factor that influence consumer buying behaviour of green product in Melaka state?
- d) What is the relationship between the impacts of green product with the consumer buying behaviour?

### 1.4 Research Objectives

Based on this research, there are few objectives designed to achieve to solve the research questions as mention above. Those research objectives of this research are :

- a. To determine the difference between the impacts of green product and consumer buying behaviour toward green product based on demographic factors.
- b. To identify the level of factors that influence the consumer to buying the green product.
- c. To identify the main factor that influence the consumer buying behavior.
- d. To investigate the relationship between the impacts of green product toward consumer buying behaviour.

## 1.5 Hypothesis

To achieve the above objectives of this study, the hypothesis has come out, there are:

a) Hypothesis 1:

H<sub>O</sub>: There are no significant difference between the impacts of green product and consumer buying behaviour toward green product based on demographic factors.

H<sub>A</sub>: There are significant difference between the impacts of green product and consumer buying behaviour toward green product based on demographic factors.

b) Hypothesis 2:

H<sub>O</sub>: There are no significant relationship between the benefits of green product factors and the consumer buying behaviour in buying green product.

H<sub>A</sub>: There are significant relationship between the benefits of green product factors and the consumer buying behaviour in buying green product.

c) Hypothesis 3:

H<sub>O</sub>: There are no significant relationship between personal factors and the consumer buying behaviour toward green product.

H<sub>a</sub>: There are significant relationship between personal factors and consumer buying behaviour toward green product.

d) Hypothesis 4:

H<sub>0</sub>: There are no significant relationship between psychological factors and the consumer buying behaviour on green product.

H<sub>A</sub>: There are significant relationship between psychological factors and the consumer buying behaviour on green product.

## **1.6 Scope of the Study**

In this research, the researcher focuses on the impacts of green product toward consumer buying behaviour. This study focuses on all type of organic foods and green product. The aspects looked into this research is green product factor, personal factor, and psychology factor. Factors of green product are whether the product is save environment, can be recycle, and healthy to consumer. While for personal factor are demographic factor such as age, gender, level of income. Psychology factor are perception, knowledge, and ability.

The scope of this research is more focused on consumers in Melaka that go to AEON and MYDIN hypermarket in Melaka state. AEON has two outlet in Melaka which is at Bandar Hilir and Ayer Keroh while Mydin cover at three outlet only which is at Ayer Keroh, Jasin, and at Melaka Central. This is because this hypermarket is one of the hypermarket that was provided the organic foods and the hypermarket that support 'Go Green Campaign'.

## **1.7 Limitation of the Study**

First limitation of this research is time constraint. The time limit to finish this research is take about one year only. However, time is needed to be manage properly in order to get the valid data from consumer regarding to the research topic. Cross sectional studies is the best technique to do this research. Cross sectional studies is a type of time horizon that study on the specific phenomena at specific time (Saunders, Lewis, & Thornhill, 2016).

Saunders, Lewis, and Thornhill (2016), said that because they recognised usually limitation for research academic are necessarily time constraint. Usually quantitative method used the cross sectional studies because it is simple and flexible but qualitative method also can be used in this studies.

The second limitation is the respondents of the study. The 384 targeted respondents is limited to people that going to AEON and MYDIN hypermarket only. It is not cover to another hypermarket in Melaka state. People from other contexts such as who are going to other hypermarket, market and just shopping online may be affected to the data analysis. However, the survey also conduct through a web based which is by Google Form that distribute to citizen among Melaka state.

### **1.8 Important of the Study**

This research be a significant endeavor and beneficial to entrepreneur or firm to know the consumer buying behaviour toward purchasing green product. Entrepreneur or firm have a chance to create a new products or services regarding to green that can meet the need and want of consumers. This study will also be advantageous to the students for the learning purpose and for their future reference if want to make a research. Then, this research also can give awareness and concerns to consumer about the important of good environment and healthy in life when consume green product in daily life.

### **1.9 Key Assumption**

In general, green product is a product that do not contain any chemicals in the raw material and during the production of the product. The characteristics of green product such as free from chemicals and toxic compounds, energy efficient, and low maintenance requirement. Green product give benefits to consumer's health and save the environment of the earth. Consumer buying behaviour can be best described as a decision or attitude of consumers when purchasing a product to meet their needs and wants.