CONSUMERS WILLINGNESS TO PAY FOR ECO-FRIENDLY PRODUCT IN MELAKA

MIRA SHAFIQA BINTI SAMSURI

A report submitted

In fulfilment of the requirements-for the degree of

Bachelor of Technopreneurship

Faculty of Technology Management and Technopreneurship
Universiti Teknikal Malaysia Melaka

JUNE 2018

DECLARATION

I declare that this research entitle "Consumer willingness to pay for eco-friendly product in Malaysia" is the result of my own research except as cited in the references. The research has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

Signature	:	
Name	:	
Date	:	

DEDICATION

I would like to dedicate my work to my family, friends and not forget to my supervisor for the guidance and helped me prepared this work.

ACKNOWLEDGEMENT

I would like to take this opportunity to express my gratitude to my supervisor Dr Norbaya Binti Yahaya who provided me the materials, advice and coordinate my research until the report completed. A special gratitude to my parents for continues support, motivation and support in order to complete this report.

This appreciation goes to all those people who participated directly or indirectly helping me so that my undergraduate research can be accomplished on stipulated time. Hopefully in future this research will be references and direction to other students.

ABSTRACT

Sustainability has become a major element of environmental stability in which it affects the situation of future generations in Malaysia. Today going green concept is one of the main goals in Malaysia. Many initiatives have been undertaken by governments, organizations, hypermarkets as well as by their own users to demonstrate awareness and responsibility for the environment. Melaka is one of the states in Malaysia that is now one of the green technology cities and many campaigns have been made to inform customers about the benefits of choosing eco-friendly products. Not only does the state support green issues, this issue has received a positive response from Perak, Kedah and Johor (Utusan Online, 2016). Unfortunately, there is still a gap between an environmentally friendly deal and a consumer decision to buy eco-friendly products. This study is conducted to identify the consumer factors that purchase product-friendly products in Melaka. There are 384 respondents involved in this study distributed to all consumer levels who is employed in Melaka using structured questionnaires to investigate the relationship factors that influence the decisionmaking of eco-friendly products in Melaka. In addition, from identifying the relationship factors that influence consumers are buying decision-making products in Melaka, organizations and marketers could generate other ideas to attract and convince consumers to buy eco-friendly products. The results are available with descriptive research. This study encompasses the relationship between consumer-friendly product buying decisions and these factors; demographic factors, economic factors and awareness and knowledge factors.

ABSTRAK

Kemampanan telah menjadi elemen utama untuk kestabilan alam sekitar dimana ia memberi kesan keadaan generasi masa depan di Malaysia. Oleh itu konsep "hijau" adalah salah satu matlamat utama di Malaysia. Banyak inisiatif telah dilaksanakan oleh kerajaan, organisasi, pasar raya besar dan oleh pengguna mereka sendiri untuk menunjukkan kesedaran dan tanggungjawab terhadap alam sekitar. Melaka merupakan salah satu daripada negeri di Malaysia yang kini menjadi salah satu bandar teknologi hijau dan banyak kempen telah dibuat untuk memberitahu pelanggan tentang manfaat memilih produk mesra alam. Bukan sahaja isu sokongan hijau negeri, isu ini mendapat sambutan positif dari Perak, Kedah dan Johor (Utusan Online, 2016). Malangnya, masih ada jurang antara perjanjian mesra alam dan keputusan pengguna untuk membeli produk mesra alam. Kajian ini dijalankan untuk mengenal pasti faktor pengguna yang membeli produk mesra produk di Melaka. Terdapat 384 responden yang terlibat dalam kajian ini yang diedarkan kepada semua peringkat pengguna di Melaka menggunakan soal selidik berstruktur untuk menyiasat faktor-faktor hubungan yang mempengaruhi pengambilan keputusan produk mesra alam di Melaka. Di samping itu, dari mengenal pasti faktor-faktor hubungan yang mempengaruhi pengguna membeli produk membuat keputusan di Melaka, organisasi dan pemasar boleh menghasilkan idea lain untuk menarik dan meyakinkan pengguna untuk membeli produk mesra alam. Hasilnya boleh didapati dengan penyelidikan deskriptif. Kajian ini merangkumi hubungan antara keputusan membeli produk mesra pengguna dan faktor-faktor ini; faktor demografi, faktor ekonomi dan faktor kesedaran dan pengetahuan.

TABLE OF CONTENTS

7	TITLE	PAGE
DI AC AI AI TA LI LI	ECLARATION EDICATION CKNOWLEDGEMENTS BSTRACT BSTRAK ABLE OF CONTENTS ST OF TABLES ST OF FIGURES ST OF APPENDICES	i ii iii iv v vi ix xi xi
CHAPTER 1 IN	TRODUCTION	
	0 Introduction	1
1.	1 Background Research	1
	2 Research Problem	3 3
	3 Research Questions	3
	4 Research Objectives	4
	5 Scope of the Research	4 5 5
	6 Limitation of the Research	5
	7 Significant of the Research	
1.5	8 Summary	6
CHAPTER 2 LI	TERATURE REVIEW	
) Introduction	7
	Eco-friendly Product	7
	2 Willing to Pay (WTP)	8
	3 Factors Affecting Consumer Buying Decision	10
	3.1 Demographic Factors	10
	3.2 Economic Factors	11
	3.2 Knowledge and Awareness Factors	12
	Consumer Buying Decision	14
	Research Framework	16
	6 Research Hypotheses	17
2.7	7 Summary	18

CHAPTER 3 MATERIALS AND METHOD/METHODOLOG	Y
3.1 Introduction	19
3.2 Research Design	19
3.2.1 Descriptive Analysis	20
3.2.2 Methodology Choice	20
3.2.3 Quantitative Method	20
3.3 Data Sources	21
3.4 Data Collection Techniques	21
3.5 Issues of Reliability and Validity	22
3.6 Sampling Technique	23
3.7 Data Analysis and Interpretation	24
3.8 Pretest or Pilot Test	24
3.9 Research Flow	25
3.10 Summary	25
CHAPTER 4 DATA ANALYSIS AND RESULTS	
4.0 Introduction	26
4.1 Pilot test	27
4.1.1 Reliability	27
4.1.1.1 Demographic	27
4.1.1.2 Economic	28
4.1.1.3 Knowledge and Awareness	28
4.1.1.4 Consumer Buying Decision	29
4.1.1.5 Reliability of Total Variable for Pilot Test	30
4.1.2. Validity	31
4.2 Descriptive Statistic on Respondent Profile	32
4.2.1 Gender	33
4.2.2 Age	34
4.2.3 Marital Status	35
4.2.4 Total Children in Family	36
4.2.5 Number of Household	37
4.2.6 Living Location	38
4.2.7 Income Level	39
4.2.8 Education Level	40
4.2.9 Self-Suffered from Chronic Illness	41
4.3 Test Reliability	42
4.2 Descriptive Static on Collected Data	43
4.4.1 Independent Variable 1: Demographic Factor	44
4.4.2 Independent Variable 2: Economic Factor	46
4.4.3 Independent Variable 3: Knowledge and Aware Factor	eness 48
4.4.4 Dependent Variable: Consumer Buying Decision	
4.5 Simple Linear Regression Analysis	52
4.5.1 Hypothesis Testing 1	52
4.5.2 Hypothesis Testing 2	54
4.5.3 Hypothesis Testing 3	56
4.6 Pearson's Correlation Analysis	59

		viii
4.6.1 Correlations	Independent Variable and	
Dependent V	1	59
4.7 Multiple Linear		61
4.8 Summary	Č	65
CHAPTER 5 CONCLUSION		
5.0 Introduction		66
5.1 Research Object	ctive Summary	66
5.1.1 Objective 1		67
5.1.2 Objective 2		67
5.1.3 Objective 3		68
5.2 Research Contr	ribution	68
5.2.1 Theoretical C	Contribution	68
5.2.1 Practical Con	tribution	70
5.3 Research Limit	ation	70
5.4 Recommendati	on	71
5.4.1 Future Resea	rchers	71
5.4.2 Consumers		71
5.4.3 Local Manufa	acturers	72
5.4.3 Conclusion		73
REFERENCES		74

APPENDIXES

79

LIST OF TABLES

TABLE	TITLE	PAGES
1	The rule of thumb Cronbach's Alpha Coefficient	22
2	Research Flow	25
3	Case Processing Summary of Demographic	27
4	Reliability Statistics of Demographic	27
5	Case Processing Summary of Economic	28
6	Reliability Statistics of Economic	28
7	Case Processing Summary of Knowledge	28
8	Reliability Statistics of Knowledge	28
9	Case Processing Summary of Consumer Buying	29
	Decission	
10	Reliability Statistics of Consumer Buying Decission	29
11	Case Processing Summary of Total Variables	30
12	Reliability Statistics of Total Variables	30
13	Descriptive Statistics	30
14	Correlation of variables	31
15	Gender of Respondents	33
16	Age of Respondents	34
17	Marital Status of Respondents	35
18	Total Children in Family of Respondents	36
19	Number of Household of Respondents	37
20	Living Location of Respondents	38

21	Income Level of Respondents	39
22	Education Level of Respondents	40
23	Self Suffered from Chronic Illness of Respondents	41
24	Reliability Statistics	42
25	Descriptive Statistics of Demographic	44
26	Descriptive Statistics of Economic Factor	45
27	Descriptive Statistics of Knowledge and Awareness	46
	Factor	
28	Descriptive Statistics	48
29	Model Summary	49
30	ANOVAa	50
31	Coefficient	50
32	Model Summary	51
33	ANOVAa	52
34	Coefficients	52
35	Model Summary	53
36	ANOVAa	54
37	Coefficients	54
38	Interpretation of Correlation Coefficient	56
39	Correlations of Independent Variables and Dependent	57
	Variable	
40	Model Summary	59
41	ANOVAa	60
42	Coefficients	60

LIST OF FIGURES

FIGURES	TITLE	PAGES
1	The statistic of product buying decision.	9
2	Malaysian consumers' concerns in 2016	12
3	Malaysian consumers' concerns in 2017	12
4	Linear progression models to understand PEB	14
5	Model of ecological behaviour	14
6	Malaysian versus global consumers' top	15
	sustainability purchasing drivers	
7	Consumer Decision Making Process	16
8	Framework of factors which affecting on	17
	eco-friendly consumer buying decision	
9	Gender of Respondents	33
10	Age of Respondents	34
11	Marital Status of Respondents	35
12	Total Children in Family of Respondents	36
13	Number of Household of Respondents	37
14	Living Location of Respondents	38
15	Income Level of Respondents	39
16	Education Level of Respondents	40
17	Self Suffered from Chronic Illness of Respondents	41
	sustainability purchasing drivers	
18	New framework	69

LIST OF APPENDICES

APPENDIX	TITLE	PAGES
1	Grant Chart PSM 1	79
2	Grant Chart PSM 2	80
3	Questionnaires	81

CHAPTER 1

INTRODUCTION

1.0 Introduction

The first chapter bring out the topic of the research. This chapter includes the description of the background, problem statement, research questions, research objectives and the scope of study. Other than that, in this chapter also discuss about the limitation and significance of study of this research.

1.1 Background Research

As Malaysian known as developing country which there are many sector are rising up although the flow of economic growth slowly increasing. Based on Malaysian Institute of Economic Research the Malaysian (MIER *n.d.*) economy performed better than expected in the first half of 2017 (1H2017). Real GDP grew by 5.6%, year-on-year basis (y-o-y) in the first quarter and further expanded to 5.8% in the second quarter. Although contributed a lot of benefit to country and people but yet still brought the negative impact. Environmental problem affect ecosystems and all

living beings in Malaysia is one of the bad result from the growth economy. Concerns to environment in this era has strongly attracts researcher to study the impact of over consumption of natural resources.

This phenomena makes people think about the future and condition of their next generation. Therefore environmental awareness by consumer are rise up and they started talk about going green. Next numerous organization in Malaysia are started thinking for bring out eco-friendly product to market. Where the worries regarding the natural environment in general have made companies as well as consumers to try to reduce the damages imposed to the natural environment (Hamzaoui Essoussi & Linton, 2010). Since consumer are already alert about environmental awareness, some companies which socioeconomics need to include eco-friendly element towards their product because consumer and environment just already engage. This is one of ways marketing communication toward consumer. The companies need to develop new mentality of business despite not only think about the profit, but they must meet the consumers' need and want which solve the social problems where this direct consumer behaviour (Boztepel, 2012).

Reciprocally exist the consumer acceptance toward eco-friendly product from the awareness of environment. The implemented that eco-friendly product is the product where developed in absence of non-poisonous chemicals or are capable of being used again, capable of being decomposed by or featuring eco-friendly packaging and with minimal damaging environmental affect at all levels of its developments with the long term goal of saving the natural environment (OECD, 2009). Eco-friendly product performance need to be functional same as conventional one. Hence, consumer perceive equal the costs and benefit (Meyer 2001). Same as conventional product, eco-friendly product also express lot of benefit. This influence to consumer buying behaviour where consumer willing to pay for eco-friendly product. Based on (Meyer 2001) the higher cost-benefit per product, the higher rate of consumer will pay for eco-friendly product.

1.2 Research Problem

Nowadays people start aware about eco-friendly product yet still few of consumer are still consider to buy eco-friendly product as they are more preferable to have the conventional one where easily to get and more affordable to buy. Even though lot of researcher on green marketing established, the consumer behaviour to buy eco-friendly product still not deeply understood enough. From the past research consumers still lack of real understanding mainly when eco-friendly product at high price (Matthews 2017). Consumers do express firmly worries and aware about environment, but their behaviour resulted as not get the hang of the issue. Consumer behaviour gap between the rates of actual purchasing behaviour exist as lack of information about eco-friendly product which cause preventing movement of market share of eco-friendly product (Ohtomo & Hirose, 2007). Although consumer acknowledge about benefit of eco-friendly product towards surrounding and future yet still not all willing to pay for eco-friendly product because certain eco-freindly product are more likely high in prices and hard to get in nearest store.

1.3 Research Question

The research questions for this research:

- 1. What are the factors of consumer buying decision towards eco-friendly products?
- 2. What is the relationship between factor of consumer buying decision and willingness to pay for eco-friendly products?
- 3. What is the most significant factor consumer buying decision towards ecofriendly products?

1.4 Research Objective

The research objective for this research:

- 1. To identify the factors of consumer buying decision towards eco-friendly products.
- 2. To analyse the relationship between factors of consumer buying decision towards willingness to pay for eco-friendly products.
- 3. To investigate the most significant factor consumer buying decision towards eco-friendly products.

1.5 Scope of study

This research tittle is "Consumer Willingness to Pay for Eco-Friendly Product in Melaka" which bring real aims of this study to give information and findings on factors affecting toward consumer buying decision on eco-friendly product. In this research encounters all respondent from various level of education, age, gender and occupation. There is no specification of industry. Generally this study only on eco-friendly products that available in Melaka. The purpose of this research is to identify the factors of consumer buying decision towards eco-friendly products. Therefore base on this research discovered the factors of consumer buying decision towards eco-friendly products are demographic factor, economic factor and knowledge and awareness factor.

1.6 Limitation of Study

Among the implications of these findings is the idea that communications and actions must be relevant to respondent concerns by educating respondent, increasing convenience to participate in eco-friendly programs, and increasing perceptions of eco-friendly product. Management time for study and research not manageable, to collect data among respondent who are working and to approach the respondent is difficult. Next limitation from this research is scope of study which the study only focus on factors of consumer buying decision to purchase the eco-friendly product which there is no specification of type of product where in this study just do in general. Then the research may not be apply at another locations because different in demographic factors and the different of perspective on eco-friendly products.

1.7 Significant of Study

The significant of this research will be beneficial to consumers, manufacturers and marketers who have engagement in this field. The awareness and knowledge of consumer toward eco-friendly product will booster and rise up the consumers appealing toward eco-friendly product in market. Over the past decade, there are many eco-friendly products in market yet the number of consumer purchasing the eco-friendly product still not encouraging. This research intentions to identify the factors of consumer buying decision toward eco-friendly product so therefore retailers, manufacturers or seller of eco-friendly products can fill the gap that existed all this time and serve as wake-up call to them. Result of this study, marketers can structure and organise new planning of marketing on eco-friendly in Malaysia and apply to potential consumer. The data and result get may beneficial for other people in future.

1.8 Summary

This study set out to identify the factors of consumer buying decision towards eco-friendly products in Melaka. Furthermore, the examiner want to analyse the relationship between factors consumer buying decision and consumers' willingness to pay for eco-friendly products. The next chapter will elaborate more about terms and variables use in this research. Moreover will explain about the study of literature.

CHAPTER 2

LITERATURE REVIEW

2.0 INTRODUCTION

In this literature review, there will be further discussion and analysing about the topic from finding from other researcher based on variables that will be used in this research study. There are many of sources had being using in journey to conduct this study such as journals, newspaper, books, reports and theses. Lot of secondary could be obtained by exploring the sources provided by Universiti Teknikal Malaysia Melaka Library and internet. The aim to carry on literature review is to improve understanding between consumer behaviour towards eco-friendly product in Melaka.

2.1 ECO-FRIENDLY PRODUCT

Eco-friendly product also can be refer as nature-friendly product, green product or environmental friendly product. The sustainability term also referring as products, services or practices that preserving ecosystem and environment during developing of economic. In other word a product that engineered and manufactured in such ways as to minimize or reduced the over consumption of environment which included it its process of production, distribution and consumption. The eco-friendly product also known as one of less causing harm to level of consumer health than the conventional product. The eco-friendly products they have their own attributes.

Effective without wasting time, effort or expense which also capable of withstanding wear for a long period. Second are no ozone consuming chemicals, free from non-organic compounds and do not results toxic by producing products. Third are applying recycling, renewable and sustainable materials in designing and manufacturing product.

There are couple of ways when searching for eco-friendly products which can be identify between the original and imitation, but it will can be a little bit tough. In market have many product labelled as eco-friendly and many designated words will easily influence consumer to buy, even though consumer may be duped by the fake. A better guideline to purchase eco-label product is looking the certification labelling. According to Ecolabel Index (2017) there are several of eco-label available in Malaysia such as Audubon International, Global Organic Textile Standard, and SIRIM Certified. Next, consumer also can easily searching on MyHijau website or smartphone application, where the MyHijau is the medium exposing the sourcing and purchasing of green products and services specifically in Malaysia.

On the whole consumers already understand the common subject related with eco-friendly issue but large number of them tend not to empathize the complexities and rightness's of eco-friendly buying behaviour. Consumer acknowledge about the important about eco-friendly product but still low in numbers who willing to pay for it. Often result in a behaviour gap between consumer awareness and the actual buying behaviour because of lack of knowledge which preventing the movement of eco-friendly industry take place nowadays in market (Ohtomo & Hirose, 2007). From observation by previous researcher in Melaka, the number of eco-friendly products take place in market still low rather than the low price of conventional products where not eco-label (Azreen, 2013).

2.2 WILLING TO PAY (WTP)

Nowadays consumer in developed economies are willing to pay for product which give benefit to them on short or long term. Many studies present that willing to



pay is the willingness a consumer to expend for their own goods in specific services or goods of a certain product (Biswas, 2016). Past researcher proved the higher number of consumer to pay the uttermost price for alternative product with environmental certificate (Laroche, Bergeron, & Barbaro-Forleo, 2001). Other than that have some factors that influence consumer willing to pay more of eco-friendly product, there are where consumer terribly concern about environment problem and perception of ecological importance (Baker, Davis, & Weaver, 2014). The amount of consumers WTP will rise up with the higher reliability provided by product (Biswas, 2016). Hence this require accelerator for eco-friendly product debut with better functioning and affordable price. Base on the discussion can conclude that consumer willing to pay for product which reliable and effective with economical price which bring benefit to them.

According to Stefanie Van Durme (2012) in How Cool Brand Stay Hot, the youth in Malaysia are more willing to pay for eco-friendly product as long as the product are reliable. The statistic has shown in figure 3 described the functions and costs of the product are the main consideration when purchase a product (53%), followed by the trustworthiness express by the product brands and the outlook and design. Next 57% from the respondent showed they are set environmental friendliness as the minor consideration need to take care.

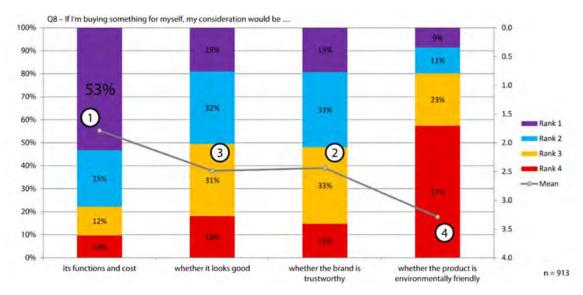


Figure 1: The statistic of product buying decision.

Source: (Stefanie Van Durme, 2012)

2.3 FACTORS AFFECTING CONSUMER BUYING DECISION:

2.3.1 DEMOGRAPHIC FACTORS

Kotler and Armstrong (2014) define demography is the study of human population in terms of location, age, gender, race and other statistics. An amount of previous research have examined relationship between demographic variables and ecologically awareness consumers. There are many variables has been identify by the researcher. These attributes are age, occupation, education level, material status and living location. Conversely, there are research there has no correlation between age and environmental behaviour (Finisterra Do Paço, Barata Raposo, & Filho, 2009). Nevertheless have study result where large in numbers of women linked toward environment and women also show as more favourable toward environment issues (Aysel Boztepel 2012). Not being left behind married couples also concern environment crisis. Aysel Boztepel (2012) clarifies from his research that maritial status is the factor on consumer buying decision on eco-friendly product which result of his research show that only unmarried consumers affected on green promotion while for married couple who's either have children or not, they only affected on green price of eco-friendly product.

From his research also explores that consumers range age between 16 to 35 are more affected to purchase eco-friendly product. From previous research Gilg et al. (2005) mean age consumer who committed on eco-friendly issues are higher and the gender significantly more men in nin-environmentalist group. This supported by Haws et al. (2013) which said the age does affect consumer to spend on eco-friendly product. Based on Meyer (2001) surprisingly eldest also has interest towards purchasing eco-friendly products. Laroche et al. (2001) proved in the past research that only 57 percent women from his respondent would pay more for eco-friendly product meanwhile the 40 percent for males. The other result get from Laroche et al. (2001) research are married person and have a child more willing to pay for eco-friendly product. Mohamed et al. (2014) observed that the age and marital status contribute important roles on affecting consumer to pay for eco-friendly product. From this discussion the demographic factors will affect the decision making especially eco-friendly product purchases. Baker et al. (2014) suggested for future research on differences in

demographic as in his research, researcher did not find differences in demographic variables on WTP.

2.3.2 ECONOMIC FACTORS

From the past research, one of the factors that affect consumers' response about eco-friendly products is its price and quality of the product which might have strong influence and prediction sustainable the consumption behaviour Biswas et al. (2014). From Baker et al. (2014) studies, he found that cost cutting affecting on consumer busying decision where significantly affecting intention to stay and willingness to pay more for a eco-friendly product. Biswas et al. (2014) reminds alert on individual's price sensitivity offered on eco-friendly products. The reminder is important because this affect the eco-friendly product adoption. However the result research from Aysel Boztepel (2012) strongly oppose with Biswas et al. (2014) reminder because from Aysel Boztepel research show that price difference in eco-freindly products has vanished as to be a negative factor to consumer buying decision.

In figure below according past research from The (Nielsen Company United States, 2017) toward Malaysian internet resulted decreases percentage of consumers' concerns about decreasing food prices from 25% in Q4 2016 (figure 2) to 18% in 2017 (figure 3). This result show that consumers' concern on increasing food prices are decreases which bring the result where Malaysian consumer nowadays more seeking for quality of food rather than prices as the number of literacy are increases.