

**FACTORS INFLUENCING GREEN INITIATIVES ADOPTION IN
MANUFACTURING COMPANY AT MELAKA**

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree.

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DEDICATION

I would like to dedicate this work to my lovely parents who have given me various supports such as financial and moral support. They also encouraged me to accomplish the task even it is tough and taught me to done it one step at a time. It is also dedicated to my friends who have always encouraged and support me throughout the process of completing this study.

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Thanks You.

ABSTRACT

Green initiatives in manufacturing company is one of the important drivers of the country and economy has underlined the important task of acting in the development and care of the environment. This study aimed to analyze the factors that influencing green initiatives adoption in manufacturing companies at Melaka, Malaysia. This study will be conducted for the manufacturing companies and understand the concept of this green initiative. It was created to help manufacturing companies to determine which factors influence the use of green initiatives within manufacturing companies. The study also focused on the environment and society as a result of the effects of pollution caused by the manufacturing industry. Questionnaires were chosen in this method because it is easier because the data obtained directly from respondents. Finally, the researchers hope that the study can help manufacturing companies in their implementing green technologies. In addition, it also can give the organization to fix the old system to the existing system to a new, more environmentally friendly. The future research may investigate the result of this study throughout a large-scale within and cross cases research method. This may also focus on the different geographical region in Malaysia or developing countries that want to use green initiative.

Abstrak

Inisiatif hijau dalam pembuatan merupakan satu daripada pemacu penting utama negara dan ekonomi yang telah menggariskan tugas penting yang bertindak dalam pembangunan dan penjagaan persekitaran. Kajian ini bertujuan untuk menganalisis faktor pengaruh inisiatif penggunaan hijau dalam syarikat-syarikat pembuatan di Melaka. Kajian ini akan dapat dilaksanakan untuk syarikat-syarikat pembuatan serta memahami lagi konsep inisiatif hijau ini. Kajian ini juga dicipta untuk membantu syarikat-syarikat pembuatan untuk menentukan pengaruh faktor inisiatif penggunaan hijau dalam syarikat-syarikat pembuatan. Kajian ini juga menitik beratkan persekitaran dan masyarakat akibat daripada kesan pencemaran yang disebabkan industri pembuatan. Kaedah soal selidik telah memilih dalam kaedah ini kerana ia adalah lebih mudah kerana data yang mendapat terus daripada responden. Akhir sekali, penyelidik berharap kajian yang dibuat boleh membantu syarikat-syarikat pembuatan dalam mereka melaksanakan teknologi hijau. Selain itu, ini juga boleh memberikan kepada organisasi itu sendiri untuk memperbaiki sistem lama ke sistem baru yang lebih kepada mesra alam. Kajian masa depan boleh menyiasat hasil kajian ini secara besar-besaran dan kaedah penyelidikan kes silang. Ini juga boleh memberi tumpuan kepada kawasan geografi yang berbeza di Malaysia ataupun dalam negara-negara membangun yang lain yang ingin menggunakan konsep inisiatif hijau ini.

TABLE CONTENT

CHAPTER	CONTENT	PAGE
	SUPERVISOR DECLARATION	ii
	STUDENT'S DECLARATION	iv
	DEDICATION	v
	ACKNOWLEDGEMENT	vi
	ABSTRACT	vii
	<i>ABSTRAK</i>	vii
	TABLE CONTENT	xii
	LIST OF TABLE	xiv
	LIST OF FIGURES	xv
	LIST OF APPENDIX	xvi
CHAPTER 1	INTRODUCTION	
	1.1 Background Study	1
	1.2 Problem Statement	3
	1.3 Research Objective	4
	1.4 Research Questions	4
	1.5 Significance study	5
	1.6 Scope of research	5
	1.7 Limitation	6
	1.7 Summary	7
CHAPTER 2	LITERATURE REVIEW	
	2.1 Introduction	8
	2.2 Green manufacturing	9
	2.3 Green initiative and green technology	10
	2.4 Benefits of Adopting green initiative green technology	11

2.5	ISO 14001	12
2.6	Four element independent variable in adoption green initiatives in manufacturing company	13
2.6.1	Top Management Support	13
2.6.2	Customer Pressures	14
2.6.3	Act & Regulations	14
2.6.4	New technologies	15
2.7	Theoretical Framework	16
2.7.1	Hypothesis development	19
2.8	Summary	20

CHAPTER 3 RESEARCH METHODOLOGY

3.1	Introduction	21
3.2	Research Design	22
3.3	Explanatory studies	23
3.4	Methodological Choices	23
3.4.1	Quantitative Research	23
3.5	Data Source	24
3.5.1	Primary data sources	24
3.5.2	Secondary Data Sources	24
3.6	Location of research	25
3.7	Research strategy	25
3.7.1	Questionnaire Method	25
3.7.2	Questionnaire Design	26
3.7.3	Data Collection	26
3.8	Sampling Techniques	37
3.9	Targeted Population and Sampling Size	28
3.10	Time Horizon	28
3.10.1	Cross Sectional Studies	28
3.11	Data Analysis	32
3.11.1	Descriptive analysis	29
3.11.2	Simple Regression	30

3.11.3	Multiple Regression Analysis (MRA)	30
3.11.4	Correlation Analysis	31
3.12	Research Instrument	32
3.12.1	Reliability	32
3.12.2	Pilot test	32
3.12.3	Validity	33
3.13	Summary	33

CHAPTER 4 DATA ANALYSIS

4.0	Introduction	34
4.1	Pilot Test	35
4.1.1	Reliability Analysis	35
4.1.2	Validity Analysis of Each Question	36
4.2	Demographic Analysis	38
Part A		
4.2.1	Age	38
4.2.2	Gender	39
4.2.3	Race	40
4.2.4	Academic qualification	41
Part B		
4.2.5	Your position in the organization	42
4.2.6	In which manufacturing industry that your company involved	43
4.2.7	How long have your company been in operation	45
4.2.8	Does your company have certification of ISO 14001	46 47
4.2.9	What is the factors influencing green initiative adoption in your company	48
4.2.10	How your company received the information regarding this green initiative	49
4.3	Descriptive Analysis	49
4.3.1	Top management	50

4.3.2	Customer pressure	51
4.3.3	Act & regulation	52
4.3.4	New technology	53
4.3.5	Adoption green initiative (DV)	54
4.4	Result of Measurement	54
4.4.1	Reliability Test	56
4.5	Correlation Analysis	57
4.5.1	Hypothesis Testing	57
4.5.2	Simple Regression Analysis	57
4.5.2.1	Top management	59
4.5.2.2	Customer pressure	61
4.5.2.3	Act & regulation	63
4.5.2.4	New technology	65
4.5.3	Multiple Regression Analysis	68
4.6	Summary	69

CHAPTER 5 CONCLUSION AND RECOMMENDATIONS

5.0	Introduction	69
5.1	Frequency Analysis	69
5.2	Discussion of Objective and Hypothesis Testing	71
5.2.1	Top management	71
5.2.2	Customer pressure	71
5.2.3	Act & regulation	72
5.2.4	New technology	72
5.3	Implication of the research	74
5.4	Limitation of the research	75
5.5	Recommendation for Future Research	76
5.6	Conclusion	77

REFERENCE	78
-----------	----

APPENDIX	81
----------	----

A Questionnaire	81
-----------------	----

B Gantt chart	90
---------------	----

LIST OF TABLE

TABLE	TITLE	PAGE
3.1	The Determining Sample Size from a Given Population	28
3.3	Rules of Thumb about Correlation Coefficient	31
3.4	Cronbach's Alpha Coefficient Size	32
4.1	Reliability Statistics	35
4.2	Cronbach's Alpha for Pilot Test	35
4.3	Validity for 20 respondents for pilot test	37
4.4	Respondent's Age	39
4.5	Respondent's Gender	40
4.6	Respondent's Race	41
4.7	Respondent's Academic qualification	42
4.8	Your position in the organization	43
4.9	In which manufacturing industry that your company involved	44
4.10	How long have your company been in operation	45
4.11	Does your company have certification of ISO 14001	46
4.12	What is the factors influencing green initiative adoption in your	47
4.13	How your company received the information regarding this green	48
4.14	Statistics of top management	49
4.15	Statistics of customer pressure	50
4.16	Statistics of Act & regulation	51
4.17	Statistics of New technology	52
4.18	Statistics of adoption green initiative	53
4.19	Reliability statistic for 217 respondents	55

4.20	The result of correlation analysis for all variables	56
4.21	Model Summary of Top management	58
4.22	Coefficients of top management	58
4.23	ANOVA of Top management	59
4.24	Model Summary of customer pressure	60
4.25	ANOVA of customer pressure	60
4.26	Coefficients of customer pressure	60
4.27	Model Summary of Act & regulation	61
4.28	ANOVA of Act & regulation	62
4.29	Coefficients of Act & regulation	62
4.30	Model Summary of New technology	63
4.31	ANOVA of New technology	64
4.32	Coefficients of New technology	64
4.33	Model Summary of multiple regressions	65
4.34	Table of coefficient	66

LIST OF FIGURES

FIGURES	TITLE	PAGE
2.1	stakeholder's model	16
2.2	theoretical framework	18
4.1	Percentage of Age	38
4.2	Percentage of Gender	39
4.3	Percentage of Race	40
4.4	Percentage of Academic Qualification	41
4.5	Percentage of position in the organization	42
4.6	Percentage of which manufacturing industry that company involved	43
4.7	Percentage of how long have your company been in operation	45
4.8	Percentage of company have certification of ISO 14001	46
4.9	percentage factors influencing green initiative adoption in company	47
4.10	Percentage of company received the information regarding this green initiative	48

LIST OF APPENDIX

APPENDIX TITLE	PAGE
A Sample Questionnaire	81
B Gantt chart	90

CHAPTER 1

INTRODUCTION

1.1 Background study

Nowadays, green technology is environmentally friendly technology developed and used in ways that protect the environment and preserve natural resources. Some of the branches of renewable energy technology, environmental movement, the importance of green technology cannot be ignored. We came to a point where we need to pause and think about the importance of green technology is growing and why it will be important for mankind. Green technology is the first step of the government to make efforts to accelerate the improvement of the national economy and promote sustainable development. So there are some core strategies to strengthen the institutional framework and encouraging the industry to use the concept of green technology in the field of manufacturing, such as providing a conducive environment for, empowerment of green technology development human capital, increase research, improve the system, and improve product quality and innovation in green technology, promotion and awareness of the environment. (Abd.malik, 2013).

There are a variety of reasons the industry has chosen to use green initiatives, which is to protect the environment because of environmental problems such as climate change, global warming, ozone depletion, solid waste, air pollution and noise, reduction of natural resources, irreparable loss biodiversity and congestion of the main concerns of the world today. This caused a lot of human impact on the environment and industry, environmental issues have become more powerful and widespread.

Environmental issues, if left untreated, has the potential to lead to the extinction of humans and the environment (Shishi Piaralal Kumar, 2015).

This is consistent with the government for the implementation of green initiatives to maintain a healthy lifestyle and be able to take care of the environment in the long term and can reduce costs in the manufacturing industry. Green Supplier Monitoring is defined as the acquisition of knowledge about the strengths and weaknesses of each supplier in the context of green business process management to improve the system and the resulting product and can reduce the rate of impairment loss (Mudiarasan Kuppusamy et al, 2015). Therefore, the management should be more efficient and careful with this issue so as not to adversely affect the company's further exacerbate the company's good name. Suppliers Green Cooperation refers to any systematic effort, and instead choose a good supplier to develop at the base of the supplier's ability to create and maintain a competent supplier base in line with the practice green business process management so that no problems will be faced by the industry later (Hahn et al., 1990). Supplier selection also plays a role as any goods taken must be quality and environmentally friendly as well as user friendly.

According to Ki-Hoon Lee (2009), the organizational units took the first step in the environmental impact analysis over the products and production lines in order to measure and quantify the environmental impacts because contamination can cause adverse to nature environment and society. Instead of heavy pollution produced by the manufacturing industry, effective management of business processes of manufacturing companies, following green practices not widely debated in the literature (except Carter & Jennings, 2002; Srivastava, 2007). Therefore, all industries must comply with and concerned about the effects of pollution and to take seriously the recommendations of the government to take care of the earth and free from contamination.

Finally, the creation of technology that are either used for conventional processes work to make it more environmentally friendly or to replace an existing process is driven forward in the developed countries. Companies existing Steady-decided to adopt the practice green initiative to supplement or complement their production techniques for both goods and services.

1.2 Problem statement

According to Abhijeet K. Digalwar, (2013), green manufacturing differs from traditional manufacturing. Green manufacturing usage by manufacturing industry may be limited by many factors, including a lack of incentives sufficient private, long-cycle replacement of equipment, and lack of information about green alternative as most industry is more concerned with profit. Nowadays, more and more companies have become increasingly aware of the responsibility to develop green products, services and processes. In general, large companies are more compelled to follow the green initiative than small companies because not being able to spend large amounts for the following green initiatives because machines and technology are used is high cost. (Raja Raja Ariffin Ghazilla et al, 2015)

The execution of buildings, vehicles and electronics has developed among major developed countries nowadays. It can encourage and enable people's awareness of their green technology industry to increase production. It is different from the developed countries economies like Malaysia, the big challenge when implementing green technologies. However, it is not necessarily that green technology involves high expenditure. Green technology is not necessarily high tech. It can be a simple technology but still save energy or for environmental impact is very small and can easily be used by all companies and do not negatively impact on society and the environment as well as to increase the profitability of the industry (Singh, 2010).

Environmental problems such as climate change, global warming, ozone depletion, solid waste, air pollution and noise, reduction of natural resources, loss of biodiversity and congestion irreparable main concerns of the world today as there are many types of industries around the world and a variety of technologies used. In addition, there are also the effects of pollution caused by industry are taking selfish attitude towards the environment and society, among the reasons for the pollution caused by burning of fossil fuels by the transport sector is a key component of the logistics industry and GHG emissions such as carbon dioxide (CO₂) can negatively impact a huge environmental and public health can be harmful to humans and the environment. (Shishi Piaralal Kumar, 2015)

The issue of ecosystem disturbance and pollution caused by the manufacturing company fails to comply with standards and environmental guidelines, resulting in the creation of a company known as one of the causes of environmental pollution is highest through supply chain activities for each product contains a distinctive chemical and can cause pollution, with the implementation of the initiative, this green can reduce pollution and protect natural environment and society (Eltayeb et al, 2011). Therefore, the researchers also wanted to find out the factors that influence the use of green initiatives within manufacturing companies at Melaka.

1.3 Research Objective

From the green initiative concept, the objective of this study was to investigate factors influencing green initiative adoption in manufacturing company at Melaka, Malaysia.

The objectives of this study are as follows:

- I. To investigate the factors influencing (top management, customer pressure, new technologies, and acts & regulation) the adoption of green initiatives in manufacturing company at Melaka.
- II. To investigate the extent of green initiatives adopted in manufacturing company at Melaka.

1.4 Research Questions

The research question is related to the problems that facing by adoption green initiatives to manufacturing company at Melaka. There are several research questions as below:

- I. Do (top management, customer pressure, new technology, and act & regulation) positively influence the green initiative adoption in manufacturing company at Melaka?

- II. To investigate what the extent is green initiatives adopted in manufacturing company at Melaka?

1.5 Significance study

This research is relevant to adoption green initiative in companies especially manufacturing company at Melaka because the finding may reveal the important aspects in green initiative about the factors influencing green initiative adoption in manufacturing companies. This research is expected to be valuable to the other researcher for future research and also the manufacturing company in Malaysia to adoption green initiative. This study hopefully can contribute to manufacturing company who want to adopt green initiative by doing the right plan in term of green initiative.

1.6 Scope of Research

In this study, the focus is identifying issues of adoption of green initiatives among manufacturing industries at Melaka. This is because the green technology will require significant capital to implement but can make a good impression on the industry itself. Besides, this study also care about the environment when an industry is using green initiatives, because nowadays there are various types of pollution that occurs as a result of negligence industry. This will also have an impact on society as an example in terms of health. In addition, this study will also look at the performance of a company's green initiatives to implement itself and the factors that make an industry that received green initiative itself.

The methods used in this study is a quantitative to a survey questionnaire weeks to collect data, a questionnaire survey will be distributed in each manufacturing companies that used green technology in the state of Melake. To complete the collection of data for this study, about 217 respondents was targeted to answer the

questionnaire. Researchers assume respondents honest in answering the questionnaire and can get cooperation from respondents.

1.7 Limitation

Limitations of this study are the internal and external barriers to green innovation initiatives among manufacturing industries in Melaka. The results of this study indicate that the barriers to green products, processes, and system innovation is different. The issue of environmental resources, attitudes and perceptions, business practices, government support, and customer demand is available obstacles to product innovation in green, while the attitudes and perceptions, business practices, sharing external weakness, insufficient information, lack of customer demand, and the commercial benefits the environment has been identified as factors that negatively affect the process of green innovation. With regard to the system of green innovation, environmental resources, attitudes and perceptions, business practices, technical barriers, government support, and environmental and commercial benefits presented themselves as internal and external obstacles that need to be addressed. The decision has important implications for managers manufacturers have plans to promote green products, process and system innovation.

1.8 Summary

There are several factors that must be followed by the industry to implement green initiatives within their organization, including order of his, top management, customer pressure, new technologies and act & regulation. The green initiative is an effective measure of an industry particularly manufacturing industry. This is because each of the green initiatives undertaken have been the benefits of environment, consumers, society, and the industry itself. In addition, be able to have a positive impact on the industry in terms of image or product. But it can reduce environmental damage and help make Malaysia a par with developed countries.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

According to Boote, D.N. & Beile, P. (2005), literature reviews involves a lot of activities such as the study on the current issue, analyse journal or article that related with the project and other. A literature review is an evaluative report of studies found in the literature related to selected area. The review should describe, summarize, evaluate and clarify this literature. It should give a theoretical basis for the research and help to determine the nature of research.

The research examines factors influencing green initiative adoption in manufacturing companies. This study seek the four element of factors influencing green initiative adoption in manufacturing companies at Melaka (top management, new technologies, act & regulation and environment). This literature review demonstrate the adoption of green initiatives in this era. The information from literature review are used to identify the factor of factors influencing green initiative adoption in manufacturing companies at Melaka.

Moreover, the literature reviews in this chapter discuss about the overview, keyword research, theory and factor adoption of green technologies in manufacturing company at Melaka. This green initiative could give a positive impact on the manufacturing industry itself when they to implement it. Therefore, the adoption of green initiatives is very instrumental for the creation of an industry that followed.