

THE SUCCESS FACTORS INFLUENCING ENVIRONMENTAL PERFORMANCE:
EMPIRICAL ANALYSIS OF ISO 14001 (EMS) COMPANIES IN MALAYSIA

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APPROVAL

I/ We hereby declare that I/ we have read this dissertation/report and in my opinion, this dissertation/report is sufficient in terms of scope and quality as a partial fulfilment the requirements for the award of Bachelor of Technopreneurship with Honours

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DECLARATION OF ORIGINAL WORK

I hereby declared that this report entitled
“THE SUCCESS FACTORS INFLUENCING ENVIRONMENTAL PERFORMANCE:
EMPIRICAL ANALYSIS OF ISO 14001 (EMS) COMPANIES IN MALAYSIA”
is the result of my own research except as cited in the references. The report has not
been accepted for any degree and is not concurrently submitted in the candidature of any
other degree.

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Date :

DEDICATION

I would like to dedicate the appreciation to my beloved family especially my parent, Mr. Mohd Yahaya bin Othman and Noryati binti Bachok who supported and encouraged me with good advices in order to complete my final year project and also in term of spiritual and financial. I also appreciate beloved supervisor and panel who guided me throughout this research and course mates that assisted me through the journey of research. I also want to dedicate the appreciation to my beloved friends especially my housemate, Syera, Siti, Hani, Sofia, Fazira, Fasrina, and Eizzah who give me the encouragement and always support me in order to complete my final year project.

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ABSTRACT

Environmental Management System (EMS) also known as International Organization for Standardization (ISO) 14001 standard. It was introduced globally in order to overcome the issues from the environment degradation. The EMS actually is the framework that the firm can use in addressing the effects from their practices to the environment by providing the template that can give the positive environmental administration. The purpose of the research is the success factors influencing environmental performance: empirical analysis of ISO 14001 (EMS) companies in Malaysia. The result of this research would be able to show that whether environmental performance to the organization comes when the organization has implemented the ISO 14001 (EMS) into their systems. In this study include four independent variables, namely motivation, awareness, responsibility and cooperation to measure the environmental performance towards the ISO 14001 (EMS) companies. The secondary data was used for the literature review to get more information and knowledge from the previous research. The primary data was collected 135 questionnaires survey by using sampling technique and answered by the employee in the manufacturing companies. The findings of this research are awareness and cooperation factors (independent variables) have been accepted while the motivation and responsibility (independent variables) have been rejected with the environmental performance (dependent variable) of ISO 14001 (EMS) companies in Malaysia.

Keyword – *Environmental Management System (EMS), ISO 14001, environmental performance, manufacturing, motivation, awareness, responsibility, cooperation*

ABSTRAK

Sistem Pengurusan Alam Sekitar (EMS) juga dikenali sebagai piawaian Pertubuhan Standardisasi Antarabangsa (ISO) 14001. Ia diperkenalkan di seluruh dunia untuk mengatasi isu-isu dari kemusnahan alam sekitar. EMS sebenarnya adalah kerangka yang boleh digunakan oleh firma dalam menangani kesan dari amalan mereka ke alam sekitar dengan menyediakan templat yang dapat memberikan pentadbiran alam sekitar yang positif. Tujuan penyelidikan adalah faktor kejayaan yang mempengaruhi prestasi alam sekitar: analisis empirikal ISO 14001 (EMS) di Malaysia. Hasil penyelidikan ini dapat menunjukkan sama ada prestasi alam sekitar terhadap organisasi datang apabila organisasi telah melaksanakan ISO 14001 (EMS) ke dalam sistem mereka. Dalam kajian ini, terdapat empat pembolehubah bebas iaitu motivasi, kesedaran, tanggungjawab dan kerjasama untuk mengukur prestasi alam sekitar terhadap syarikat ISO 14001 (EMS). Data sekunder digunakan untuk semakan kesusasteraan untuk mendapatkan lebih banyak maklumat dan pengetahuan dari penyelidikan terdahulu. Data primer dikumpulkan 135 kaji selidik soalan dengan menggunakan teknik pensampelan dan jawapan oleh pekerja di syarikat pembuatan. Dapatan kajian ini adalah kesedaran dan faktor kerjasama (pembolehubah bebas) telah diterima manakala motivasi dan tanggungjawab (pembolehubah bebas) telah ditolak dengan prestasi alam sekitar (pembolehubah bergantung) syarikat ISO 14001 (EMS) di Malaysia.

Kata Kunci – *Sistem pengurusan alam sekitar, ISO 14001, prestasi alam sekitar, pembuatan, motivasi, kesedaran, tanggungjawab, kerjasama*

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LIST OF ABBREVIATIONS

ABBREVIATION	MEANING
EMS	Environmental Management System
DASN	National on the Environment
DOE	Department of the Environmental
EQC	Environmental Quality Council
EiMAS	Environmental Institute of Malaysia
MITI	Ministry of International Trade and Industry
SPSS	Statistical Package for the Social Sciences
M	Motivation
A	Awareness
R	Responsibility
C	Cooperation
E	Environment

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CHAPTER 1

INTRODUCTION

1.0 Introduction

In this chapter, the researcher provides a brief information background of this study. In this chapter, the researcher will be discussing the success factors influencing environmental performance: an empirical analysis of ISO 14001 (EMS) companies in Malaysia. Next, discuss the significant issue that will impact the environmental performance of the company. This is followed by research objective, research question, and scope of the study. It also will be discussing the significance and limitation of the study.

1.1 Research Background

A developed or developing country is a country that emphasizes all aspects involved. Where a country gives its attention in terms of how they market the product. From there, when Malaysia wants to become a trading nation, Malaysia need has a strong emphasis on the growth of their products. Whereby Malaysia's government constantly monitor's the development of their country's products. Especially the processes involved as long as the product is produced. Malaysia actually is a country that rich in natural resources such as minerals, marine and forest resources. From there many industries have been created, such as the mining, pharmaceuticals, logging, and forestry industry.

Circulation and time change, making the manufacturing industry one of the industries that are a turning point for the industry in Malaysia. With the development of the manufacturing sector, it helps the country to become an industrialized nation. The manufacturing sector has undergone many evolution processes and is continuous. It is in terms of the production line, labor force and also the use of machines and robotic. The change continues to grow to this day which is better known as industry 4.0. Which the evolution of manufacturing sector, it will affect the technologies that have been involving and also the efficiency in the utilities itself and to the employee itself.

Sustainability from the sustaining word's which means preserving the natural resources and the environment performance. It is to offset human action or activity from the occurrence of environmental degradation. Sustainability is very important as the guidelines to the industry because it can help to take care of the natural resources that are very important to the ecosystem. According to (Duque Ciceri, 2009) sustainability is more to preserve, to keep and also to maintain things in the right place. Which it means that sustainability is a complex word and it was used to sustain something or to keep something to be saved. But according to (Baud, 2008) sustainability is more to the quality to keep the environment in the good condition. It also defined sustainability into three categories which are environmental, social and economic. It also defines that sustainability is actually to improve people life and it also to save it for the next generation.

Environment sustainability has been affecting the manufacturing trend also. This is because of the manufacturing industries already aware to take care of the environment. Because of that the manufacturing basically already changes towards sustainability. This is because when some sustainability was implemented into the manufacturing, it can help to a positive contribution. From there, it can reduce environmental reduction activity like carbon reduction, pollution, and waste. By having sustainable it will increase the environmental performance because of awareness, responsibility, cooperation, and motivation. It will give a good effect like it will increase job efficiency, safety and health and also the production.

1.1.1 EMS in Malaysia

Currently, the number of companies in Malaysia itself that appliance the Environmental Management System (EMS) already increases. This is because the company can gain a positive impact on their internal and external when implement the Environmental Management System (EMS). When the company implements the Environmental Management System (EMS) it can help to set the organizational responsibilities, the process and also the productions. By implementing this system; it can help the company's awareness of the environmental sustainability. In Malaysia itself, the number is always increasing. Based on Malaysia Standard online in 2018, most sectors have implemented the ISO 14001 Environment Management System (EMS).

Table 1.1: Malaysia Company Implement EMS by sectors

No.	Sectors	EMS
1	Foods products, beverage & tobacco	143
2	Rubber & plastic products	158
3	Chemicals, chemical products & fibre's	99
4	Basic metals & fabricated metal products	174
5	Electrical & optical equipment	194
6	Construction	109
7	Engineering services	109
8	Agriculture, fishing	5
9	Mining & quarrying	17
10	Textiles & textile products	8
11	Leather & leather products	0
12	Wood & wood products	12
13	Pulp, paper & paper products	33
14	Publishing companies	0
15	Printing companies	20
16	Manufacturer coke & refined petroleum products	15
17	Nuclear fuel	0

20	Pharmaceuticals	4
21	Non-metallic minerals products	15
22	Concrete, cement, lime, plaster, etc	34
23	Machinery & equipment	30
24	Shipbuilding	2
25	Aerospace	2
26	Other transport equipment	26
27	Manufacturing not elsewhere classified	11
28	Recycling	25
29	Electricity supply	29
30	Gas supply	4
31	Water supply	9
32	Electricity supply	29
33	Other services	43
34	Public administration	12
35	Wholesale & retail trade, repair of motor vehicles, motorcycles & personal & household goods	59
36	Hotels & restaurants	14
37	Transport, storage & communication	55
38	Financial intermediation, real estate, renting	10
39	Information technology	2
40	Education	7
41	Other social services	27
42	Health & social work	12
Total		1,557

The table shows the number of sectors that have implemented the Environmental Management System (EMS) from 42 sectors. From there, it shows that the number of the company that already aware of the environmental system getting better. And it not possible in the future, the number is getting higher because of the awareness to take care of the environment for the next generations. This is because of the responsibility to increase the quality of life to stay healthy with a good environment.

From the implementation of the Environmental Management System (EMS) into the organization, an especially manufacturing company, it can help the company to improve its environmental performance. If from the perspective of internal of the organization or the companies, it can help the organization to manage the environmental problem that can help the organization to reduce or decrease the number of the liability and incident in the workplace (Petroni A. , 2000). Especially to the employees when the organization adopts the Environmental Management system (EMS), it can help to increase the awareness, motivation, responsibility and cooperation factors in the companies.

1.1.2 EMS Policy in Malaysia

National Policy on the Environment (DASN) recognized for the enhancement and the progress in the economic and social continuous that for the quality of life of Malaysia. Which is they are more focus on environmental resources and sustainable development. This is because of the awareness to take care of the environmental issues for a longer period. DASN has three main objectives the focus to achieve. The first objectives of DASN are to come to be a clean, safe, healthy and productive environment for present and future generations. The second objective of DASN is to become conservative of country's that are have the uniqueness and diverse cultural and also natural heritage with an effective contribution by all sectors of civilization and the last objective is to increase the lifestyles and forms of consumption and production.

The National Policy on the Environment (DASN) aimed to enhance development activities into all processes and activities involved when making all relevant decisions. It is to upgrade for long-term economic growth and increases the human lifestyle or human development. It is to advance or increase in terms of importance to take care of and protect the environment to society. By this policy, it can help to enhance the environmental dimension towards the national policies, such as forestry and industry. From here it can help to increase the concern on the global level and at the same time at the national level itself. Malaysia always cares about the environmental system, this is because of they are aware that the next generation needs to live in a healthy environment and also they want to sustain what we had right now can be have until the future.

1.1.3 Environmental Policy in Malaysia

Before this, Malaysia still doesn't have the exact or focus on the policy that only for the environment. Until the second outline perspective plan comes in, it was the first time Malaysia's country start to introduce an environmental policy which it is recognized by the society like the National Policy on the Environment. It is used as guidance for the environment and also for natural resources management. Malaysia itself is the country that rich which their natural resources environment. From time to time, the environment has faced problems or issues such as air pollution, water pollution, exploitation, and others. Because of government already aware of these issues, the government of Malaysia has provided the environmental laws and policies such as the Environmental Quality Act 1974 and its Regulations 1989, the Environmental Quality Order 1989 and other policies.