

UNIVERSITI TEKNOLOGI MARA

**FACTORS INFLUENCING
ADOPTION OF ENVIRONMENT
MANAGEMENT PRACTICES
AMONG MALAYSIAN LOGISTICS
COMPANIES**

IRWAN BIN IBRAHIM

Thesis submitted in fulfilment
of the requirements for the degree of
Doctor of Philosophy

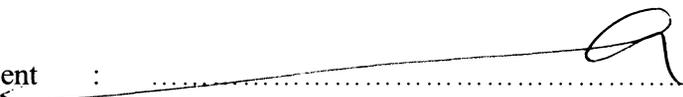
Malaysia Institute of Transportation

September 2017

AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

Name of Student : Irwan bin Ibrahim
Student I.D. No. : 2010361687
Programme : Doctor of Philosophy (Transport and Logistics) –
LT990
Faculty : Malaysia Institute of Transportation
Thesis Title : Factors Influencing Adoption of Environment
Management Practices Among Malaysian Logistics
Companies
Signature of Student : 
Date : September 2017

ABSTRACT

With increasing awareness of environmental issues among business owner, there has been rising demand for developing environmentally responsible and friendly business operations. However, it has been reported that despite business owner aware of the negative impacts towards the environment from their business operations, the level of implementation of environmental-friendly practices is low. Thus, this research seeks to examine the adoption of an environmental management practices (EMP) in Malaysia logistics industry and identify the key factors that contribute to successful adoption. Using the extended theory of Technological-Organizational-Environmental framework, data were collected through questionnaire survey conducted among Malaysia logistic service providers, and 205 samples were analyzed. The data was input into SPSS and analyzed used Structural Equation Modeling to test the research hypotheses and the model that has high reliability and validity is developed. Amos results indicate that technological and environmental factors have significantly positive influences on environmental management practices adoption. However, the influences of environmental factors is not significant on environmental management practices adoption. The findings are based on a single-country and single-industry study, so the current research may be limited in its generalizability. The findings of this paper are original, as no other similar empirical study in analyzing the adoption of EMP in the logistics industry, especially for Malaysia's logistics industry. Owing to the lack of empirical research on the adoption of EMP in Malaysia, this research provides an empirical study on the factors influencing the adoption of EMP by logistics service providers in Malaysia. This research results can help Malaysia's logistics companies develop better strategies to adopt EMP, and can make them become environmentally responsible and friendly logistics service providers.

ACKNOWLEDGEMENT

I wish to thank Allah S.W.T. for giving me the opportunity to embark on my PhD and for completing this long and challenging journey successfully

Firstly, I would like to express my gratitude to the MARA University of Technology, Malaysia and Public Service Department, Government of Malaysia for awarding me a full scholarship to complete this research.

My gratitude and appreciation goes to my supervisor Dr. Harlina Suzana Binti Jaafar. Thank you for the support, patience and ideas in assisting me with this study. Her assistance, comment, knowledge and wisdom spent on the discussions and reviews have led me to continues improvement on the quality of the study, produced 5 publications and most importantly the production of this thesis. She provided invaluable support and guidance throughout the completion of this research. I had the chance to learn from her broad range of experience, and I particularly appreciated her enthusiasm and communicative interest in research. I also appreciated the trust and freedom she gave me. Dr. Harlina Suzanna encouraged me to explore my own ideas, so that I could benefit from each new experience. Finally, I will always remember the entertaining open discussions that we shared and that often lead us very far from the actual topic of this work. I enjoyed these greatly, and I am grateful for all the time she dedicated to me. I would like to convey my sincere thanks to my co-supervisor, Prof. Ir. Ruslan bin Hassan, for his constructive comments and valuable ideas in every panel assessment

My warmest gratitude to the staff of the Malaysia Institute for Transport, for providing the facilities, knowledge and assistance throughout my research journey. I also would like to express my gratitude to Dr. Nasruddin bin Faizol for his detailed comment and suggestion aimed improving the analysis. Without these support, my progress would not have gone this far. In addition, I would like to thank my colleagues for the great atmosphere they create at our institute. My sincere appreciation goes to the Federation of Malaysian Freight Forwarders who provided the facilities and assistance during sampling.

My parents also deserve special thanks for their love and encouragement. They raised me with the curiosity to learn and the willingness to undertake challenges, qualities that made this journey possible. I am grateful to them and to their continuous support in all I ever undertook. This thesis is also dedicated to the loving memory of my very dear late father for the vision and determination to educate me. To my mother, thank you very much for her patience in my absence and encouragement all the way through the duration.

Last, but by no means least, I would like to give my deepest thanks to my wife Shamsiah, and my dearest children Iris Iman, Ilham Iskandar, Ilyse Indah, Ilmi Imran and Ilyas Isaac. They spent all this time next to me, and I can't remember a day without their love and encouragement. I appreciate their support above all else.

Alhamdulillah.

TABLE OF CONTENTS

	Page
CONFIRMATION BY PANEL OF EXAMINERS	ii
AUTHOR'S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xii
LIST OF ABBREVIATIONS	xiii
CHAPTER ONE: INTRODUCTION	14
1.1 Introduction	14
1.2 Background of the study	14
1.3 Overview of EMP implementation in Malaysia	16
1.4 Problem Statement	18
1.5 Scope of Study	20
1.6 Conceptual Framework	21
1.7 Research Questions	25
1.8 Research Objectives	26
1.9 Research Hypothesis	27
1.10 Significance of the study	28
1.11 Operational Definitions	30
1.12 Overview of the Thesis	31
CHAPTER TWO: LITERATURE REVIEW	34
2.1 Introduction	34
2.2 Background	35
2.3 Environment management practices as an innovation tools	37
2.4 Environment management practices	38
2.5 EMP implementation in small and medium size businesses	60