

**Implementation of Open Source Information Systems for  
Cost Effectiveness and Productivity Enhancement by  
Knowledge Sharing among SME's in the Food Processing Industry  
in Penang, Malaysia**

A thesis submitted to the Faculty of Management  
in partial fulfillment of the requirements for the degree  
Master of Science (Management)  
Universiti Utara Malaysia

By

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2008**

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I declare that all the work described in this dissertation was undertaken by myself (unless otherwise acknowledged in the text) and that none of the work has been previously submitted for any academic degree. All sources of quoted information have been acknowledged through references.

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## ABSTRACT

This study was to find out whether there is relationship between utilization frequency, management and development, knowledge sharing and organizational performance. This study examined the relationship of organizational performance of SME's in Penang, Malaysia.

This study is designed to provide the benefit for practitioners, especially for employees and management position in SME's in Penang. The study found that there are positive direct significant relationship between utilization frequency, management and development, knowledge sharing and organizational performance of SME's in Penang, Malaysia..

*Keywords: Open Source Software, Utilization Frequency, Management and Development, Knowledge Sharing, SMS's Performance.*

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## TABLE OF CONTENTS

Cover	i
Declaration	ii
Permission to use	iii
Abstract	iv
Acknowledgement	v
Table of Content	vi
List of Table	viii
List of Figure	ix

### CHAPTER 1: INTRODUCTION

1.1	Introduction	1
1.2	Background of the Study	2
1.3	Problem Statement	4
1.4	Research Objectives	6
1.5	Research Questions	6
1.6	Significance of the Study	7
1.7	Definition of Key Terms	8
1.8	Organization of the Remaining Chapters	16

### CHAPTER 2: LITERATURE REVIEW

2.1	Reviews to the SME and MIS	17
2.2	Utilization Frequency	27
2.3	Management and Development	29
2.4	Knowledge Sharing	32
2.5	Theoretical Framework	38
2.6	Operational Definition of Variables	39
2.7	Hypotheses	41

### CHAPTER 3: RESEARCH METHODOLOGY

3.1	Introduction	42
3.2	Research Design	42
3.3	Measurement	44
3.4	Sampling Techniques	44
3.5	Data Collection Technique	44
3.6	Data Analysis Technique	45

## CHAPTER 4: FINDINGS & DATA ANALYSIS

4.1	Introduction	44
4.2	Profiles of Respondents	48
4.3	Reliability Test	50
4.3.1	Reliability of Organizational Performance	51
4.3.2	Reliability of Utilization Frequency	52
4.3.3	Reliability of Management and Development	53
4.3.4	Reliability of Knowledge Sharing	54
4.4	Relationship among Research Variables	55
4.5	Result of Hypotheses Testing	56
4.5.1	Regression between Utilization Frequency and Organizational Performance	56
4.5.2	Regression between Management and Development and Organizational Performance	57
4.5.3	Regression between Knowledge Sharing and Organizational Performance	58
4.5.4	The Multiple Regressions of all IV's (Utilization Frequency, Management and Development and Knowledge Sharing) to Organizational Performance	60
4.6	Summary	61

## CHAPTER 5: CONCLUSIONS AND RECOMENDATIONS

5.1	Conclusions	62
5.2	Implications of the Study	64
5.2.1	Implications to Academicals Perspectives	64
5.2.2	Implication to Practitioners	64
5.3	Limitations of the Study	65
5.4	Recommendations	66

## REFERENCES

## APPENDIX

## LIST OF TABLES

Table 4.1 Profiles of Respondents	48
Table 4.2 Reliability of Organizational Performance	51
Table 4.3 Item- Total Statistic of Organizational Performance	51
Table 4.4 Reliability of Utilization Frequency	52
Table 4.5 Item- Total Statistic of Utilization Frequency	52
Table 4.6 Reliability of Management and Development	53
Table 4.7 Item- Total Statistic of Management and Development	53
Table 4.8 Reliability of Knowledge Sharing	54
Table 4.9 Item- Total Statistic of Knowledge Sharing	54
Table 4.10 Summary of Reliability Test	55
Table 4.11 Correlations between variables	56
Table 4.12 Regression between Utilization Frequency and Organizational Performance	57
Table 4.13 Regression between Management and Development and Organizational Performance	58
Table 4.14 Regression between Knowledge Sharing and Organizational Performance	59
Table 4.15 Multiple Regressions between all IV's (Utilization Frequency, Management and Development and Knowledge Sharing) and Organizational Performance	60

## **LIST OF FIGURES**

Figure 2.1 Knowledge Sharing Model	34
Figure 2.2 Research Framework	38

# CHAPTER 1

## OVERVIEW OF THE RESEARCH

### 1.1 Introduction

In recent years, the concept of information system and its proper management has been a central in the strategic management field for the large as well as small firm's are concerned with competitive priorities in their strategies and planning. This refers to the big challenges and opportunities. The challenge of the 21<sup>st</sup> century for SME-s is global competitiveness. This means that customers need to be provided with constant and reliable products and services of a recognized quality, while the market environment is characterized by global competition.

Global competition creates a new threat for SMEs because they required competing with every single enterprise within and outside of the country. The new working environment creates opportunities and obstacles as well. This field of study is brand new. It had existed in the late 80's when globalization showed its power. It emerged everywhere on the world, regardless country, nation, territory, or geographical location. The main reason to study open source information system is that it can provide relatively low cost for SME while its usefulness is distinctly high. There is a basic assumption by Lee (2001) uses these words:

The contents of  
the thesis is for  
internal user  
only

The findings then, are not necessarily generalizable to the whole industry and care should be taken in any generalization since only three independent variables were examined to explore the organizational performance. Further research to examine the generalizability is required to enhance a better view of using the open source software in organization.

#### **5.4 Recommendations**

The research confirmed the relationship between utilization frequency, management and development and knowledge sharing of using open source software through SME's performance. Further research is needed to verify and refine the rules that are listed here.

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