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EXTERNAL FACTORS INFLUENCING RADICAL INNOVATION READINESS
TOWARDS ORGANISATIONAL PERFORMANCE

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Laporan ini dikemukakan sebagai
memenuhi sebahagian daripada syarat penganugerahan
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DEDICATION

This research is dedicated to my supportive people around me in completing my final year project especially my husband and family.

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ABSTRACT

The main purpose of this study is to identify the external factors which positively influence the radical innovation readiness of Small and Medium Enterprise (SME) in Information, Communication and Technology (ICT) sector. Besides that, the purpose of this study to analyse the relationship between the external factors positively influences the radical innovation readiness towards organization performance in ICT SMEs. Selection of these factors based on several reasons that can be extracted in this research. Lastly, this study were purposed a radical innovation readiness model for ICT SMEs. The research utilize designed a questionnaire approach based on market orientation, government support and technology capabilities. This study focused on ICT SMEs which are located in Klang Valley, Malaysia. The populations of this study are 260 companies till December 2014. Primary data were collected from 120 companies by disseminating 150 questionnaires to the key respondents which are SMEs companies in ICT sector. The findings indicate that there are positive relationship between market orientation, government support and technological capabilities with radical innovation readiness towards organizational performance. All hypotheses build was accepted based on data analysis conducted. The results of this research were illustrated that all external factors selected are positively influencing the radical innovation readiness in ICT SMEs towards organisational performance.

Keywords: Radical Innovation Readiness, Market Orientation, Government Support, Technology Capabilities, Organisational Performance, ICT SMEs

ABSTRAK

Tujuan utama kajian ini adalah untuk mengenal pasti faktor-faktor luaran yang positif mempengaruhi kesediaan inovasi radikal di Perindustriaan Kecil dan Sederhana (PKS) dalam sector Maklumat, Teknologi dan Komunikasi (ICT). Selain itu, tujuan kajian ini adalah untuk menganalisis hubungan antara faktor-faktor luaran yang positif mempengaruhi kesediaan inovasi radikal terhadap prestasi organisasi dalam PKS sektor ICT. Pemilihan faktor-faktor ini berdasarkan beberapa sebab-sebab yang boleh diperolehi dalam kajian ini. Akhir sekali, kajian ini telah mencadangkan satu model kesediaan inovasi radikal untuk PKS sektor ICT. Kajian ini membangunkan pendekatan soal selidik berdasarkan orientasi pasaran, sokongan kerajaan dan keupayaan teknologi. Kajian ini memberi tumpuan kepada PKS sector ICT yang terletak di Lembah Klang, Malaysia. Populasi kajian ini adalah 260 syarikat sehingga Disember 2014. Data primer yang dikumpulkan dari 120 syarikat daripada 150 soal selidik yang diedarkan kepada responden utama iaitu syarikat PKS dalam sektor ICT. Dapatan kajian menunjukkan bahawa terdapat hubungan positif antara orientasi pasaran, sokongan kerajaan dan keupayaan teknologi dengan kesediaan inovasi radikal ke arah prestasi organisasi. Semua hipotesis yang dibangunkan diterima berdasarkan analisis data dijalankan. Keputusan kajian ini telah menyatakan bahawa semua faktor-faktor luaran yang dipilih secara positif mempengaruhi kesediaan inovasi radikal dalam PKS sektor ICT ke arah prestasi organisasi

Kata kunci: Kesediaan Radikal Inovasi, Orientasi Pasaran, Sokongan Kerajaan, Teknologi, Prestasi Organisasi, Perindustrian Kecil dan Sederhana sektor ICT

CONTENTS

CHAPTER	TOPICS	PAGE
	DEDICATION	iv
	ACKNOWLEDGEMENT	v
	ABSTRACT	vi
	<i>ABSTRAK</i>	vii
	TABLE OF CONTENTS	viii
	LIST OF FIGURE	xii
	LIST OF TABLE	xiii
	LIST OF ABBREVIATION	xvi
	LIST OF APPENDICES	xvii
CHAPTER 1	INTRODUCTION	
	1.1 Background of Study	1
	1.2 Problem Statement and Research Question	3
	1.3 Research Objective	4
	1.4 Hypothesis	4
	1.5 Scope of Study	5
	1.6 Significant of Study	5
	1.7 Limitation	6
	1.8 Summary	7
CHAPTER 2	LITERATURE REVIEW	
	2.1 ICT Sector in Small and Medium Enterprise (SME)	8
	2.2 Market Orientation	10
	2.3 Government Support	12
	2.4 Technology Capabilities	13

2.5 Radical Innovation Readiness	14
2.6 Organisational Performance	16
2.7 Summary	18
CHAPTER 3 RESEARCH METHODOLOGY	
3.1 Introduction	19
3.2 Theoretical Framework	20
3.3 Hypothesis Development	20
3.4 Research Design	21
3.5 Research Strategies	22
3.5.1 Questionnaire Development	23
3.5.2 Radical Innovation Readiness	24
3.6 Data Sources	26
3.6.1 Primary Data	26
3.6.2 Secondary Data	27
3.7 Pilot Test	28
3.8 Sampling	28
3.9 Research Location	29
3.10 Data Analysis	30
3.10.1 Explanatory Analysis	30
3.10.2 Reliability Analysis	31
3.10.3 Correlation Analysis	31
3.10.4 Regression Analysis	32
3.11 Summary	33
CHAPTER 4 ANALYSIS AND DISCUSSION	
4.1 Introduction	34
4.2 Pilot Test	
4.2.1 Reliability	35
4.2.2 Validity Analysis of Each Question	36
4.3 Reliability Testing for Items in Variable	42
4.4 Descriptive Analysis of Respondents Background	43

4.4.1 Frequency analysis result (ICT related service)	44
4.4.2 Frequency analysis result (sales turnover)	45
4.4.3 Frequency analysis result (number of employees)	46
4.4.4 Frequency analysis result (frequency of innovation activity)	47
4.4.5 Frequency analysis result (market orientation)	48
4.4.6 Frequency analysis result (government support)	50
4.4.7 Frequency analysis result (technology capabilities)	52
4.4.8 Frequency analysis result (radical innovation readiness)	54
4.4.9 Frequency analysis result (organisational performance)	56
4.5 Relationship between external factors influencing radical innovation towards organizational performance (correlation)	57
4.6 Descriptive Analysis of Independent and Dependent Variables	60
4.7 Multiple Regression Analysis	61
4.8 Linear Regression Analysis	63
4.9 Summary	67
CHAPTER 5 CONCLUSION AND RECOMMENDATION	
5.1 Introduction	68
5.2 Discussion	69
5.3 Theoretical Implication	70

5.4 Practical Implication	72
5.5 Limitation	73
5.6 Recommendation	74
5.7 Conclusion	75
REFERENCES	76
APPENDICES	84

LIST OF FIGURES

FIGURE	TITLE	PAGE
Figure 1	Main Obstacles Facing for Innovation Activities	14
Figure 2	Theoretical Framework	20
Figure 3	Research strategy phases	23
Figure 4	ICT related service	44
Figure 5	Sales Turnover	45
Figure 6	Number of Employee	46
Figure 7	Frequency of innovation activity	47
Figure 8	Model of External Factors Influence Radical Innovation Readiness towards Organisational Performance	70

LIST OF TABLES

TABLES	TITTLE	PAGE
Table 2.2	Innovation Readiness Level	16
Table 4.2	Reliability Statistic	35
Table 4.3	Validity analysis for question in part of market orientation	38
Table 4.4	Validity analysis for question in part of government support	39
Table 4.5	Validity analysis for question in part of technology capabilities	40
Table 4.6	Validity analysis for question in part of radical innovation readiness	41
Table 4.7	Validity analysis for question in part of organizational performance	42
Table 4.8	Case Processing Summary	43
Table 4.9	Reliability Statistics	43
Table 4.10	Items Market Orientation positively influencing Radical Innovation Readiness	48
Table 4.11	Items Government Support positively influencing Radical Innovation Readiness	50

LIST OF TABLES

TABLES	TITLE	PAGE
Table 4.12	Items Technology Capabilities positively influencing Radical Innovation Readiness	52
Table 4.13	Items Radical Innovation Readiness positively influences Organisational Performance.	54
Table 4.14	Items of Organizational Performance	56
Table 4.15	Pearson product Moment Correlation (PPMC)	58
Table 4.16	Correlation between are Market Orientation, Government Support, Technology Capabilities and Radical Innovation Readiness	58
Table 4.17	Correlation between are Radical Innovation Readiness and Organizational Performance	60
Table 4.18	Descriptive analysis of Independent and Dependent Variable	61
Table 4.19	Multiple Regression Analysis	62
Table 4.20	ANOVA	62
Table 4.21	Coefficients	63
Table 4.22	Simple Linear Regression between Market Orientation and Radical Innovation Readiness	64

LIST OF TABLES

TABLE	TITLE	PAGE
Table 4.23	Simple Linear Regression between Government Support and Radical Innovation Readiness	64
Table 4.24	Simple Linear Regression between Technology Capabilities and Radical Innovation Readiness	65
Table 4.25	Simple Liner Regression Radical Innovation Readiness and Organisational Performance	66

LIST OF ABBREVIATION

SYMBOL	DESCRIPTION
ICT	Information, Communication and Technology
SMEs	Small and Medium Enterprises
GDP	Gross Domestic Products

LIST OF APPENDICES

NO	TITLE	PAGE
1	Gantt Chart 1st Semester PSM 1	84
2	Gantt Chart 2nd Semester PSM 2	85
3	Research Project Survey	86

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Information, Communication and Technology (ICT) is a sector which is gaining attention among the SMEs development. The purpose of this study is to identify the external factors which influence radical innovation readiness towards the organization performance of ICT SMEs. ICT sector is the sector that has an impact on the economy, particularly in Malaysia. The knowledge economies provide fertile ground for the information and communications technology (ICT) sector to bloom. (Fararishah, 2012) Malaysia government has made large investments in building advanced and high tech infrastructure to meet the increasingly demand for higher speeds and advanced communication facilities. (Al-Madhagy, 2012). Through the 10th Malaysia Plan, government also announced that they will allocate RM1.3 billion to the Ministry of Science, Technology and Innovation for several programs, including enhancing innovative products, while offering funding for research and related there to.

In additional, this study also analyze the relationship between the external factors which are market, government and technology that influencing radical innovation readiness in ICT SMEs towards organization performance. Based on study of radical innovation from Schumpeter's in 1939, researcher used a wide variety of terms to describe innovations types, including "revolutionary", "disruptive", "discontinuous" or "breakthrough". (Garcia & Calantone, 2000; D. Rong & X. Ming, 2014) Radical innovation potentially offers huge profits and competitive advantage, but demand considerably higher risk level, company effort and resource engagement. (Zakic, Jovanavic and Stamatovic, 2008) From the previous research, they measured the external factors influencing the radical innovation of emerging transition economy in SME, which are innovation subsidies from a municipality, innovation subsidies from the government, collaboration with other organizations, link with universities or research institutes, national market and international market. (Radas, 2003)

Through the factors that have been examined in previous studies, the purpose of this study analyses the relationship between external factors of market, government, and technology influencing radical innovation readiness in ICT SMEs towards organization performance. Researchers use explanatory design as methodology design and quantitative as research method. This research develops a hypothesis to examine the relationship between the dependent and independent variables which are relationship among the external factors affecting radical innovation towards the performance of the organization with selected parameters in further deliberated. From this consideration, this study is divided into five sections in further discussions, which section one is research introduction, section two is problem statement or research question, section three is literature review, section four is research methodology and section five as the key assumption of the study.

1.2 Problem Statement and Research Question

Malaysian SMEs has been a major catalyst in the formation of the country's booming economy. Previously, Malaysia has transformed from a commodity-based producing nation to being a manufacturer of industrial products. SME exposure to the ICT sector has been rapid and extensive opportunities to make Malaysian SMEs ICT sector globally. According to Abdul Wahab, MIMOS Chief Executive Officer, four main problems the Malaysian ICT industry is the industry structure, marketing and a lack of technology and funding to be one of the major limiting factors of the development. (BHonline, 2013). This study will examine the market, government and technology as a factor that influences the radical innovation readiness toward organization performance among SME ICT sector. Through the SME master plan 2010-2020 states that, there are six challenges facing the of SME which are implementation innovation and technology, access to financing, legal and regulatory external conditions, the development of human capital, access to markets and infrastructure. Based on SME master plan, researcher was decided to select market, government and technology as factors of challenge facing by SME. Most of the research focusing on growth nation economy, researcher will analyze the affecting of market and external support which are government and Technology toward the organization performance. According to G. Groenewegen & F. Langen (2012), they have been identified shortlist of the problem when dealing with radical innovations; Largely organization unknown size of market and customer needs; Non existing distribution channel; Non existing „enabling“ technologies and supporting products; and high costs of R&D and long payback period; There are also lack of access to better technology, and ICT hinders efficient and productive business operations among Malaysian SMEs. SMEs in Malaysia often face difficulty in obtaining funds from financial institutions and the government. Malaysian SMEs in ICT sector substantial orientation towards the domestic market and lack of human capital supply is the most significant challenge for Malaysian SMEs. It is often too expensive for Malaysian SMEs to employ a professional and competent workforce in ICT sector. (Saleh & Ndubisi, 2006; Sethela & Rosli, 2011) Through this issue, the following research questions were constructed to guide the study:

1. Which external factors positively influence radical innovation readiness of ICT SMEs?
2. How far those external factors positively influence radical innovation readiness towards organization performance in ICT SMEs?
3. What is the suitable radical innovation readiness model focusing external factor for ICT SMEs?

1.3 Research Objective

1. To identify the external factors which positively influence radical innovation readiness in ICT SMEs
2. To analyze the relationship between the external factors positively influences radical innovation readiness in ICT SMEs towards organization performance.
3. To propose a radical innovation readiness model for ICT SMEs

1.4 Hypothesis

H1: Market Orientation positively influences radical innovation readiness.

H2: Government Support positively influences radical innovation readiness.

H3: Technology Capabilities positively influences radical innovation readiness.

H4: Radical innovation readiness positively influences the Organizational Performance.

1.5 Scope of study

Based on this study, the scope will focus on SME ICT companies in Malaysia because of some strong intention. Researchers identified that ICT SMEs in Malaysia have contributed 9.8% of Gross Domestic Product (GDP) in 2010 to 17% in 2020 (Economy Report, 2012-2013). This increasing of GDP will encouraging researcher to identify factors driving radical innovation in Malaysia SME ICT sector. According to MDeC Chief Executive Officer Datuk Badlisham Ghazali in SME Magazine, the agency would focus more on driving the local ICT sector such as enhancing the quality of Malaysian content development, increase market access targeted at key emerging Southeast Asian market through 'stacking' approach, funding ecosystem and attract investment in the fields of KPO, big data and e-publishing (SME Magazine, May 2013). Researchers plan to make MDec planning as a core in this study by focusing increasing market access ICT sector.

Furthermore, various programs and government initiatives have been developed to assist and give support to SMEs especially in the ICT sector. Researcher focus on SMEs in the ICT companies Klang Valley, Malaysia. This area is the focus on the infrastructure, particularly the complete physical infrastructure, regulatory and information. Out of 260 populations of ICT SMEs in Klang Valley, researcher will be select 150 companies randomly by using simple random sampling.

1.6 Significance of study

This study will be a significant to SME in ICT sector in Malaysia use for an organizational performance improvement plan. The future planning organizations in implementing radical innovation can be done properly by the results of this study.

Organization can know the level of readiness required in implementing this radical innovation, especially the impact of external factors in Malaysia. Specialization can be done by identifying the factors that affecting the radical innovation readiness toward performance of the organization through the study.

This study will also be beneficial to use by government to improve support for SMEs, particularly in the ICT sector in line with Malaysia's plan. Besides being able to anticipate the development of the ICT sector in the country globally and improve the activities and services provided.

Furthermore, this research will be helpful SME ICT sector in Malaysia by seizing the opportunities provided as well as preliminary planning in readiness radical innovation towards organizational performance. Moreover, it will also serve as a future reference for researchers on the subject to improve and as reference of accurate materials.

1.7 Limitation

The time factor is also the constraints faced by researchers because researchers are only given time during the 12 months to complete the study, the researchers had to face the problem of lack of time in preparing the questionnaire and find adequate information because this requires a long time. Moreover, time is also needed to identify suitable companies as respondents, and obtain information through a variety of characteristics of the company makes it difficult to study.

Financial factor is one of the factors that constraint in the study. This research facing the problem high cost of collecting information and distributing the questionnaire to respondent. Financial constraint also includes the cost of transportation used during the study and documentation costs. In addition, researchers face the problem of information. Constraint to obtain appropriate information regarding radical innovation in Malaysia, particularly the ICT sector is high. This is because, more focused on the overall sector in the Malaysian SMEs.

Distance of respondent location is also a constraint study, where appropriate respondents are concentrated in the Klang Valley. This area is a priority based on the completed infrastructure. From the information obtained, the formation of SMEs in the ICT sector is very rapid.

1.8 Summary

This chapter will summarize the research focuses on the availability of ICT SMEs in implementing radical innovation. This research will provide a model that can be adopted by ICT SMEs as guide organizations readiness towards radical innovation. In Chapter 2 will describe in detail the literature review for each variable for this research and proposed a theoretical frameworks.