

**FACTORS INFLUENCING INTERNET BASED ICT ADOPTIONS  
INTENTION AMONG SMES IN MALAYSIA**

By

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## ABSTRACT

In Malaysia, SMEs play a vital role and important in Malaysian economy. It is considered to be the backbone of industrial development in the country. SMEs plays important role in generating employment, enhancing the quality of human resources, nurturing a culture of entrepreneurship, supporting the large scale industries and opening up new business opportunities. Currently Malaysian SMEs account for 59% of employments and their contribution to exports is at 19% , and this is expected to grow to 62% of employments with 25% exports contribution by 2020 (Borneo Post, 2012)

The emergence of information and communications technologies (ICTs) has affected many industries and organizations. It is undeniable that ICT are transforming the industries and fueling the growth of the global economy. In its effort to transform Malaysia economy from a commodity-based producing nation to being a manufacturer of industrial products and more recently knowledge based economy, the government is putting greater emphasis on ICT. Notwithstanding the many efforts undertaken by Malaysian governments to promote ICT adoption among SMEs across different types of industries, many of them failed to reap this benefit evenly. This problem is prevalent among the SMEs in the Asia Pacific region and Malaysia is no exception.

Realizing the prominence of SMEs as a main contributor to the country's GDP and employment as well as the ICT as an enabler to leapfrog Malaysia to achieve Vision 2020, this study sought to understand and identify the factor that influences the SMEs towards Internet-based ICT adoption in Malaysia. Therefore this study presents extended Technology Acceptance Model (TAM) that integrates Theory of Planned Behavior (TPB) into the research model to examine what determines Internet-based ICT adoption among Malaysian SMEs. The proposed model was empirically tested using data collected from a survey conducted. The study involved 103 SME businesses throughout the state in Malaysia using questionnaire survey instrument. The result of this study supports the theoretical framework as well as clarifies and extend it. The findings also includes some suggestion and recommendation to further promote Internet-based ICT adoption among the SMEs

**Keywords:** Information Communications and Technology (ICT), small and medium enterprises (SME), Malaysia.

## ABSTRAK

Industri Kecil dan Sederhana (IKS) memainkan peranan yang penting dalam ekonomi Malaysia. Ianya dianggap sebagai tunjang pembangunan sektor perindustrian di negara ini. Selain itu, IKS juga memainkan peranan yang penting dalam menjana peluang pekerjaan, meningkatkan kualiti sumber manusia, memupuk budaya keusahawanan dan menyokong industri berskala besar. Berdasarkan statistik semasa, industri IKS di Malaysia telah menyediakan 59% peluang perkerjaan dan menjana sumber eksport negara pada kadar 19%, dan statistik ini dijangka meningkat kepada 62% peluang pekerjaan dan sumbangan hasil eksport sebanyak 25% menjelang tahun 2020 (Borneo Post, 2012).

Evolusi teknologi maklumat dan komunikasi (*ICT*) telah memberi impak kepada industri dan organisasi. Tidak dapat dinafikan bahawa *ICT* telah memperbaiki industri dan pertumbuhan ekonomi global. Dalam usaha memajukan ekonomi Malaysia daripada sebuah negara yang berasaskan penghasilan komoditi ke arah menjadi sebuah negara pengeluar produk industri dan juga ekonomi berasaskan pengetahuan, kerajaan telah meletakkan penekanan yang lebih pada *ICT*. Walaupun telah banyak usaha yang diambil oleh kerajaan Malaysia untuk menggalakkan penggunaan *ICT* di kalangan IKS dalam pelbagai industri, masih ada di kalangan IKS yang masih gagal meraih manfaat dari inisiatif tersebut. Masalah ini adalah lazim di kalangan IKS di rantau Asia Pasifik dan Malaysia adalah tidak terkecuali.

Menyedari kepentingan IKS sebagai penyumbang utama kepada Keluaran Dalam Negara Kasar (KDNK) dan juga sumber pekerjaan serta Teknologi Maklumat and Komunikasi (*ICT*) sebagai pemangkin bagi melonjakkan Malaysia ke arah Wawasan 2020, kajian ini membentangkan *Technology Acceptance Model* (TAM) yang diintegrasikan bersama *Theory of Planned Behavior* (TPB) sebagai model penyelidikan untuk mengkaji secara mendalam faktor-faktor yang mempengaruhi penggunaan Teknologi Maklumat and Komunikasi yang berasaskan Internet di kalangan Industri Kecil dan Sederhana (IKS) di seluruh Malaysia. Model kajian ini dianalisa menggunakan data yang dikumpul melalui proses kaji selidik melibatkan 103 perniagaan IKS di seluruh Malaysia. Hasil kajian ini didapati telah menyokong teori rangka kerja kajian ini. Kajian ini juga disertakan bersama cadangan dan syor dalam usaha penggalakan penggunaan *ICT* berasaskan internet di kalang IKS di negara ini.

**Kata Kunci:** Teknologi Maklumat dan Komunikasi (*ICT*), Industri Kecil dan Sederhana (IKS), Malaysia.

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## TABLE OF CONTENT

PERMISSION TO USE .....	iii
ABSTRACT .....	iv
ABSTRAK .....	v
ACKNOWLEDGEMENTS .....	vi
TABLE OF CONTENT .....	vii
LIST OF TABLES .....	x
LIST OF FIGURES .....	xi
CHAPTER 1 : INTRODUCTION .....	1
1.1 Background of the Study .....	2
1.2 Malaysian SMEs.....	3
1.3 Malaysian ICT Development .....	6
1.4 Problem Statement .....	9
1.5 Research Questions .....	12
1.6 Research Objectives .....	13
1.7 Significance of the Study .....	14
1.8 Scope and Limitations of the Study .....	15
1.9 Organization of the Thesis .....	17
1.10 ICT Terminologies .....	18
1.10.1 Internet .....	19
1.10.2 Internet-based ICT .....	19
1.10.3 E-Commerce .....	20
1.11 Definition of SME .....	21
CHAPTER 2 : LITERATURE REVIEW .....	22
2.1 Introduction .....	22
2.2 Internet Development .....	24
2.3 Small and Medium Enterprises (SMEs) .....	26
2.4 Malaysian SMEs and Internet Usage. ....	27
2.5 Malaysian ICT & SMEs .....	29
2.6 Grants and Incentives .....	30
2.7 Local and International Studies about Internet-based ICT Adoption.....	30
2.8 Theoretical Foundation.....	31
2.8.1 Theory of Reasoned Action (TRA).....	31
2.8.2 Technology Acceptance Model (TAM).....	33
2.8.3 Theory of Planned Behavior (TPB) .....	36
2.8.4 Unified Theory of Acceptance and Use of Technology (UTAT) .....	37
2.9 Research Model Justification .....	39

CHAPTER 3 : RESEARCH METHODOLOGY .....	40
3.1 Introduction .....	40
3.2 Hypotheses .....	40
3.2.1 Perceived Ease of Use and Intention to Adopt.....	41
3.2.2 Perceived Usefulness and Intention to Adopt .....	42
3.2.3 Behavior Control and Intention to Adopt. ....	43
3.2.4 Subjective Norms and Intention to Adopt.....	44
3.3 Research Design .....	44
3.4 Operational Definition.....	46
3.5 Instrumentation.....	49
3.6 Subjects .....	52
3.7 Sampling.....	53
3.8 Data Collection Procedures .....	54
3.9 Technique of Data Analysis .....	55
CHAPTER 4 : RESULT AND DISCUSSION .....	57
4.1 Introduction .....	57
4.2 Respondents' Profile .....	57
4.2.1 Type of Industry .....	59
4.2.2 Type of Company Ownership .....	60
4.2.3 Company Annual Turnover Sale.....	61
4.2.4 Number of Employees.....	62
4.2.5 Years of the Business Start-Up .....	63
4.2.6 Years of Using Internet for Business Purposes.....	64
4.2.7 Reason for using Internet .....	65
4.2.8 Reason for Not Using Internet .....	66
4.3 Reliability and validity of the constructs.....	67
4.4 Data Screening and Pre-Analysis .....	68
4.5 Multicollinearity diagnostic .....	69
4.6 Descriptive Statistics .....	70
4.7 Multiple regression.....	72
4.8 Direct Effect on Intention to Adopt.....	73
4.8.1 Perceived ease of use and Intention to adopt .....	75
4.8.2 Perceived usefulness and Intention to adopt .....	75
4.8.3 Behavioral control and Intention to adopt.....	76
4.8.4 Subjective norms and Intention to adopt.....	76
4.9 Analysis Summary .....	77
CHAPTER 5 : CONCLUSION AND RECOMMENDATION .....	78
5.1 Introduction .....	78
5.2 Summary .....	78
5.2.1 Purpose of the study .....	78
5.2.2 Assessment of Research Objectives.....	78
5.3 Theoretical and practical implication .....	84
5.4 Suggestion for future research.....	86
5.5 Conclusion and Recommendation.....	87

REFERENCES.....	90
APPENDIX A.....	101
APPENDIX B.....	107



## LIST OF TABLES

Table 1.1 SMI Definition Before 2005 (Source SMIDEC)	3
Table 1.2 SME Definition Based on Annual Turnover (Source: NSDC, 2005)	4
Table 1.3 SME Definition Based on Number of Employees (Source: NSDC, 2005)	4
Table 1.4 SME Definition Based on Annual Turnover	5
Table 1.5 SME Definition Based on Number of Employees	5
Table 3.1 Operationalization of Variables	47
Table 3.2 Questionnaire Sources	50
Table 3.3 Analysis Technique Summary	56
Table 4.1 Respondents' Gender	58
Table 4.2 Respondents' Age	58
Table 4.3 Respondents' Gender & Industry Type	59
Table 4.4 Respondents' position in the organization and gender	59
Table 4.5 Type of Company Ownership and Company Type	61
Table 4.6 Year of the Business Start-Up	64
Table 4.7 Reliability Measurement	68
Table 4.8 Test of Collinearity	70
Table 4.9 Descriptive Statistics	71
Table 4.10 Regression Analysis: Model Summary	73
Table 4.11 Regression Analysis: Coefficients <sup>a</sup>	74
Table 4.12 Summary of research findings	77

## LIST OF FIGURES

Figure 1.1 National IT Agenda (the NITA Triangle)	8
Figure 1.2 Total MSC Malaysia Status Awarded	9
Figure 2.1 Internet Users in the World Distribution by World Regions - 2012 Q2	25
Figure 2.2 Asian Top Internet Countries – June 30, 2012	25
Figure 2.3 Malaysian Income Migration Towards 2020	29
Figure 2.4 Theory of Reasoned Action (TRA)	32
Figure 2.5 Technology Acceptance Model (TAM)	34
Figure 2.6 Refined Technology Acceptance Model (Refined TAM)	35
Figure 2.7 Theory of Planned Behavior (TPB)	36
Figure 2.8 Unified Theory of Acceptance and Use of Technology (UTAUT)	38
Figure 3.1 Research Framework	41
Figure 4.1 Industry Type	60
Figure 4.2 Type of Respondents' Company Ownership	60
Figure 4.3 Company Annual Turnover Sale - Manufacturing,	61
Figure 4.4 Company Annual Turnover Sale - Services, Primary Agriculture or Information & Communication Technology (ICT)	62
Figure 4.5 Number of Full Time Employee - Manufacturing,	63
Figure 4.6 Number of Full Time Employee - Services,	63
Figure 4.7 Years of using internet for business purposes	65
Figure 4.8 Reason for using internet	66
Figure 4.9 Reason for not using internet	67
Figure 4.10 Histogram of Normal P-P Plot of Regression Standardized Residual	69



# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

Small and medium enterprises (SMEs) are considered to be the backbone of industrial development in the country (Saleh & Ndubisi, 2006) and it plays a vital role in the Malaysian economy development.

There appears to be a general consensus that Internet-based Information and Communication Technology (ICT) practices and adoption can bring significant values to the current and future development and growth of the small and medium enterprise (SMEs). ICT is no longer considered merely a tool in the organization, but as an enabler for any organization to be competitive and effective. The advantages not limited but includes supporting business transformation, enhance efficiency and productivity, closer relationship among value chain partners and customers, greater and wider access to the market and knowledge information and more importantly the ability to reach new clients from either locally, regionally or globally.

Based on statistical information collected by SME Corporation Malaysia ([www.smecorp.gov.my](http://www.smecorp.gov.my)), census 2011 indicated that there are 645,136 of SMEs in five main key economic sectors in Malaysia which are services, manufacturing, agriculture, construction, mining and quarrying. Currently Malaysian SMEs account for 59% of employments and their contribution to exports is at 19% , and this is

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