THE STRATEGIC LINKAGE BETWEEN ORGANIZATIONAL CONTEXT AND INFORMATION SYSTEMS SUCCESS: A STUDY ON THE MALAYSIAN MSC STATUS COMPANIES

ZAKARIYA BELKHAMZA

PERPUSTAKAAN
UNIVERSITI MALAYSIA SABAH
UMS
UNIVERSITI MALAYSIA SABAH

THESIS SUBMITTED IN FULFILLMENT FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

SCHOOL OF BUSINESS AND ECONOMICS
UNIVERSITI MALAYSIA SABAH

2011

UNIVERSITI MALAYSIA SABAH

BORANG PENGESAHAN STATUS TESIS

JUDUL: the strategic linkage between Org. Context and IS success

IJAZAH: Doctor of Philosophy (Ph.D)

SAYA: Zakariya Belkhamza **SESI PENGAJIAN:** _____

Mengaku membenarkan tesis *(LPSM/Sarjana/Doktor Falsafah) ini disimpan di Perpustakaan Universiti Malaysia Sabah dengan syarat-syarat kegunaan seperti berikut:-

1. Tesis adalah hakmilik Universiti Malaysia Sabah.
2. Perpustakaan Universiti Malaysia Sabah dibenarkan membuat salinan untuk tujuan pengajian sahaja.
3. Perpustakaan dibenarkan membuat salinan tesis ini sebagai bahan pertukaran antara institusi pengajian tinggi.
4. Sila tindakan (/)

☐ SULIT	(Mengandungi maklumat yang berdarjah keselamatan atau kepentingan Malaysia seperti yang termaktub di AKTA RAHSIA RASMI 1972)
☐ TERHAD	(Mengandungi maklumat TERHAD yang telah ditentukan oleh organisasi/badan di mana penyelidikan dijalankan)
☒ TIDAK TERHAD	

Disahkan Oleh:

(TANDATANGAN PENULIS)

(TANDATANGAN PUSTAKAWAN)

Prof. Dr. Syed Azizi Wafa
NAMA PENYELIA

Tarikh: 13/05/2011

Catatan:-
* Potong yang tidak berkenaan.
* Jika tesis ini SULIT atau TERHAD, sila lampirkan surat daripada pihak berkuasa/organisasi berkenaan dengan menyatakan sekali sebab dan tempoh tesis ini perlu dikelaskan sebagai SULIT dan TERHAD.
* Tesis dimaksudkan sebagai tesis bagi Ijazah Doktor Falsafah dan Sarjana secara penyelidikan atau disertasi bagi pengajian secara kerja kursus dan Laporan Projek Sarjana Muda (LPSM)

UMS
UNIVERSITI MALAYSIA SABAH

CERTIFICATION

NAME : **ZAKARIYA BELKHAMZA**

MATRIC NO : **PS2006-8671**

TITLE : **THE STRATEGIC LINKAGE BETWEEN ORGANIZATIONAL CONTEXT AND INFORMATION SYSTEMS SUCCESS: A STUDY ON THE MALAYSIAN MSC STATUS COMPANIES**

DEGREE : **DOCTOR OF PHILOSOPHY (MANAGEMENT)**

VIVA DATE : **8 DECEMBER 2010**

DECLARED BY

1. SUPERVISOR

Professor Dr. Syed Azizi Wafa Syed Khalid Wafa

UMS
UNIVERSITI MALAYSIA SABAH

DECLARATION

I hereby declare that the material in this thesis is my own except for quotations, excerpts, equations, summaries and references, which have been duly acknowledged.

08 December 2010

Zakariya Belkhamza
PS20068671

UMS
UNIVERSITI MALAYSIA SABAH

ACKNOWLEDGEMENT

By the grace and the blessing of Allah S.W.T, the completion of this study marks a milestone in my academic life, which is made possible with a great deal of hard work coupled with generous assistance of many individuals and organizations.

I am indebted to my supervisor, Prof. Dr. Syed Azizi Wafa who was always there for me when I needed assistance and advice. His patience, understanding and faith in me had made it possible for me to complete this study. The numerous discussions we had made it possible for me to improve and progress with the dissertation. I appreciate his willingness to taking time out from his busy schedules to meet me and discuss issues pertaining to the study.

Much appreciation goes to the wonderful staff of School of Business and Economics, headed by its dean, Assoc. Prof. Dr. Arsiah Bahron, who willingly shared knowledge and information with me. Their words of encouragement had inspired me throughout the duration of my studies.

A special thanks and appreciation should also be directed to our Universiti Malaysia Sabah's Registrar, Mr. Mej. (K) Abdullah Bin Haji Mohd Said, who was the honorable guest in my viva voce.

I acknowledge the support of the participating MSC status companies who were kind enough to grant me access to records and information needed to successfully complete this study.

Family and friends were pivotal in encouraging me to carry on with this research, even when the odds were against me. Words alone cannot describe how thankful and blessed I am to have their love, understanding and support for the entire duration of my study, starting by my father, Professor Dr. Noureddine Belkhamza, my mother, my sisters and my brother.

Finally, a very special thanks and appreciation is directed to my wife for her unconditional love and unfailing support.

UMS
UNIVERSITI MALAYSIA SABAH

ABSTRACT

THE STRATEGIC LINKAGE BETWEEN ORGANIZATIONAL CONTEXT AND INFORMATION SYSTEMS SUCCESS: A STUDY ON THE MALAYSIAN MSC STATUS COMPANIES

In the modern world, and because the organizational forms are changing, there is a need for a deeper investigation on the linkage between organization context and information system in the organization. The statement that the information system did not fit the organizational culture is often part of the explanation of why particular information system encountered unanticipated resistance and never met expectations. This study aims to provide a fundamental framework for a new concept of the linkage between organizational context and information systems success. This study explores the concept of organizational context dimensions suggested by Ghoshal and Bartlett (1994), stretch, trust, support and discipline, as the shapers of organizational culture, and relates them to the information systems research, focusing on the information systems success as represented by system performance, information effectiveness and service performance, particularly investigating the role of the managerial action affecting this linkage. To investigate this problem, the study first develops instrument to measure the organizational context constructs, validates them and then uses partial least squares (PLS) techniques to test the hypothesized model. Data used for this research was collected from a sample of 317 MSC status companies in Malaysia. The results show good support for the theorized model. Except trust, the organizational context is proven to be major factor for the success of information systems in the organization, especially when the organizational act ambidextrously within the information systems context. The study ends by introducing a four-stage socio-technical model coined as System Behavioral Success Model (SBS), which describes how the behavioral context of an IT organization led by their IT executives would lead to the success of the information systems function.

ABSTRAK

Dengan arus dunia yang kian moden serta perubahan dalam bentuk organisasi, kajian yang lebih mendalam perlu dilakukan terhadap hubungan antara budaya organisasi dengan sistem maklumat dalam organisasi. Pernyataan bahawa sistem maklumat tidak bersesuaian dengan budaya organisasi merupakan salah satu perjelasan kenapa sesetengah sistem maklumat menghadapi halangan diluar dugaan dan tidak pernah mencapai jangkaan. Kajian ini bertujuan untuk memberikan rangkakerja asas untuk konsep baru hubungan antara konteks organisasi dan keberkesanan sistem maklumat. Kajian ini menerokai konsep dimensi – dimensi konteks organisasi sepertimana yang dicadangkan oleh Ghosal dan Bartlett (1994) iaitu "stretch, trust, support dan discipline" sebagai pembentuk budaya organisasi seterusnya mengaitkan item – item tersebut dengan kajian sistem maklumat, keberkesanan maklumat dan pencapaian perkhidmatan, khususnya mengkaji peranan tindakan pengurusan yang memberi kesan kepada hubungan ini. Untuk mengkaji permasalahan ini, kajian ini dimulakan dengan memperkembangkan instrumen – instrumen untuk mengukur bentuk konteks organisasi, mengesahkan bentuk tersebut dan menggunakan teknik Partial Least Square (PLS) untuk menguji model hipotesis. Data – data yang digunakan dalam kajian ini diperolehi daripada sampel 317 syarikat yang berstatus MSC di Malaysia. Keputusan kajian menunjukkan teori model disokong. Konteks - konteks organisasi iaitu "stretch, support dan discipline", kecuali "trust", terbukti menjadi faktor besar kepada keberkesanan sistem maklumat dalam organisasi, terutamanya apabila organisasi sejajar dengan konteks sistem maklumat. Kajian ini berakhir dengan memperkenalkan 4 tahap model sosio-teknikal yang dinamakan sebagai System Behavioural Success Model (SBS) yang mengambarkan bagaimana konteks perilaku sesebuah organisasi IT yang dipimpin oleh eksekutif – eksekutif IT boleh mencapai matlamat dan kejayaan system maklumat organisasi tersebut.

UNIVERSITI MALAYSIA SABAH

TABLE OF CONTENTS

		Page
TITLE		**i**
DECLARATION		**ii**
ACKNOWLDGEMENT		**iii**
ABSTRACT		**iv**
ABSTRAK		**v**
LIST OF CONTENTS		**vi**
LIST OF TABLES		**xi**
LIST OF FIGURES		**xiv**
CHAPTER 1: INTRODUCTION		
1.1	General Background and Motivation	1
1.2	Research Problems	2
1.3	Research Questions	3
1.4	Research Objectives	4
1.5	Significance of the Study	5
1.6	Definitions of Variables 1.6.1 Organizational Context Dimensions 1.6.2 Ambidexterity 1.6.3 Information Systems Success	6
1.7	Research Approach	9
1.8	Scope of the Study	10
1.9	Thesis Outline	11
CHAPTER 2: ORGANIZATIONAL CONTEXT DIMENSIONS		
2.1	Introduction	12
2.2	The Concept of Action Theory	12

UMS UNIVERSITI MALAYSIA SABAH

2.3	Managerial Theory Based on Action	16
2.4	Bartlett and Ghoshal's Organizational Context Model	20
2.5	Organizational Culture and Context	24
	2.5.1 Definition of Culture	
	2.5.2 Definition of Organizational Culture	
	2.5.3 The Difference between Culture, Context and Climate	
	2.5.4 The Dimensions of Organizational Climate	
2.6	Organizational Context and Organizational Performance	35
2.7	The Antecedent of Ambidexterity	39
2.8	Organizational Context Dimensions From IS Perspective	42
	2.8.1 Information Systems Context	
	2.8.2 Stretch	
	2.8.3 Discipline	
	2.8.4 Trust	
	2.8.5 Support	
2.9	Summary	48

CHAPTER 3 : INFORMATION SYSTEMS IMPLEMENTATION AND INFORMATION SYSTEMS SUCCESS

3.1	Introduction	50
3.2	Definition of Information Systems	50
3.3	Definition of Information Systems Implementation	55
3.4	The Effect of IS on the Organizational Change	56
	3.4.1 Information Systems Implementation as A Process of Technical Innovation	
	3.4.2 Information Systems Implementation as A Process of Organizational Maturity	
3.5	Approaches of Information Systems Implementation	65
	3.6.1 The Technological Approach	
	3.5.2 The Organizational Approach	
	3.5.3 The Socio-Technical Approach	
3.6	Information Systems Effectiveness	73
	3.6.1 Definition of Information Systems Success	
	3.6.2 DeLone And Mclean's Model	
	3.6.3 Seddon's IS Model	

UMS
UNIVERSITI MALAYSIA SABAH

3.6.4 The IS Functional Performance

3.7 Summary 90

CHAPTER 4 : RESEARCH FRAMEWORK AND METHODOLOGY

4.1 Introduction 93

4.2 Conceptual Development and Hypotheses Building 93
4.2.1 Information Systems Success
4.2.2 Organizational Context
4.2.3 Ambidexterity and Organizational Performance

4.3 Development and Assessment of Instruments 105
4.3.1 Organizational Context Instrument
4.3.2 Ambidexterity Instrument
4.3.3 Information Systems Success Instrument

4.4 Research Design and Sampling 110
4.4.1 Unit Of Analysis
4.4.2 Population And Sampling Method
4.4.3 Questionnaire Design

4.5 Data Collection Methods 118

4.6 Procedures Of Analysis 120

4.7 Statistical Analysis 122

4.8 Summary 122

CHAPTER 5 : DEVELOPMENT AND VALIDATION OF ORGANIZATIONAL CONTEXT INSTRUMENT

5.1 Introduction 123

5.2 Instrument Development 125
5.2.1 Construct Validity
5.2.2 Content Validity
5.2.3 Face Validity

5.3 Data Purification 132
5.3.1 Data Refinement
5.3.2 Results of Data Refinement

5.4 Scale Validity of Organizational Context Instrument 137
5.4.1 Convergent Validity
5.4.2 Construct Validity

UMS
UNIVERSITI MALAYSIA SABAH

5.5 Reliability of Organizational Context Instrument 148

5.6 Summary 150

CHAPTER 6 : HYPOTHESES TESTING AND STUDY RESULTS 151

6.1 Introduction 151

6.2 Profile of Respondents 151

6.3 Descriptive Statistics 151

6.4 Statistical Procedures 153

6.5 The Measurement Model 154
- 6.5.1 Reliability of Organizational Context Constructs
- 6.5.2 Reliability of Ambidexterity Constructs
- 6.5.3 Reliability of IS Success Constructs

6.6 Construct Validity 156
- 6.6.1 Construct Validity of OC Constructs
- 6.6.2 Construct Validity of Ambidexterity Constructs
- 6.6.3 Construct Validity of IS Success Constructs

6.7 The Structural Model 158

6.8 Hypotheses Tests 160
- 6.8.3 The Overall Model Fit
- 6.8.2 Results of the Linkage Between Organizational Context and Information Systems Success
- 6.8.3 Results of the Mediating Effect of Ambidexterity

6.9 Summary 166

CHAPTER 7 : DISCUSSION AND CONCLUSION

7.1 Introduction 168

7.2 Recapitulations of The Study 168

7.3 Discussions of the Results 169
- 7.3.1 Discussion of the Validation of Instrument
- 7.3.2 Discussion of the Linkage Between OC and Information Systems Success
- 7.3.3 Discussion of the Mediating Effect of Ambidexterity

UMS
UNIVERSITI MALAYSIA SABAH

7.4 Implications 176
7.4.1 Theoretical Implications
7.4.2 Managerial Implications
7.4.3 Empirical Implications

7.5 Limitations 178

7.6 Conclusion 179

REFERENCES **180**

APPENDIX A **206**

APPENDIX B **221**

APPENDIX C **237**

APPENDIX D **257**

UMS
UNIVERSITI MALAYSIA SABAH

LIST OF TABLES

		Page
Table 2.1	Bartlett and Ghoshal's (1993) Model and other Models	17
Table 2.2	A Comparison of several Organizational Climate Dimensions	34
Table 2.3	Tradeoffs of Ambidexterity in the Literature	39
Table 2.4	Organizational Context Dimensions of three Major Works	47
Table 3.1	Alternative Definitions of Information System	52
Table 3.2	Definitions of Various Approaches of IS Implementation	67
Table 3.3	Different Definitions IS Success From the Literature	75
Table 3.4	Comparison of three Studies: Shannon & Weaver (1949), Mason (1978), and DeLone and McLean (1992)	76
Table 3.5	Implementation of Cameron and Whetton's (1983) Guidelines	88
Table 3.6	Sub-constructs of the ISFS Model	90
Table 4.1	Implementation of Cameron and Whetton's (1983) Guidelines	98
Table 4.2	Measurement of the Construct of Alignment	106
Table 4.3	Measurement of the Construct of Adaptability	106
Table 4.4	Sub-constructs of IS Success from Q-sort	108
Table 4.5	Measurement of the Construct of System Performance	109
Table 4.6	Measurement of the Construct of Information Effectiveness	109
Table 4.7	Measurement of the Construct of Service Performance	110
Table 4.8	Number of MSC-status Companies in Technology Clusters	115
Table 4.9	The Distribution of drawn Sample from each Stratum	115
Table 4.10	Organizational Context Dimensions and Number of Items	116
Table 4.11	Ambidexterity Constructs and Number of Items	117
Table 4.12	IS Success Constructs and Number of Items	117
Table 5.1	Face Validity Experts	126

UMS UNIVERSITI MALAYSIA SABAH

Table 5.2	Final Version of items of the Construct of Discipline	128
Table 5.3	Final version of items of the Construct of Support	129
Table 5.4	Final Version of items of the Construct of Trust	130
Table 5.5	Final Version of items of the Construct of Stretch	131
Table 5.6	Code of each item of the Organizational Context Constructs	132
Table 5.7	Code of each item of the Ambidexterity Constructs	134
Table 5.8	Code of each item of the IS Success Constructs	134
Table 5.9	New Codes of each item of the Organizational Context, Ambidexterity and IS Success Constructs	136
Table 5.10	Correlation Matrix for The Construct Discipline	137
Table 5.11	Correlation Matrix for The Construct Support	138
Table 5.12	Correlation Matrix for The Construct Trust	138
Table 5.13	Correlation Matrix for The Construct Stretch	139
Table 5.14	KMO and Bartlett's Test for Discipline Items	142
Table 5.15	KMO and Bartlett's Test for Support Items	142
Table 5.16	KMO and Bartlett's Test for Trust Items	142
Table 5.17	KMO and Bartlett's Test for Stretch Items	143
Table 5.18	KMO and Bartlett's Test for all items of the four Constructs	143
Table 5.19	Total Variance Explained for Discipline Items	144
Table 5.20	Factor Loadings for Discipline Items	144
Table 5.21	Total Variance Explained for Support Items	145
Table 5.22	Factor Loadings for Support Items	145
Table 5.23	Total Variance Explained for Trust Items	146
Table 5.24	Factor Loadings for Trust Items	146
Table 5.25	Constrained single Factor Loading for Trust Items	147
Table 5.26	Total Variance Explained for Stretch Items	147

UMS
UNIVERSITI MALAYSIA SABAH

Table 5.27	Factor Loading for Stretch Items	148
Table 5.28	Reliability Analyses of the Constructs	149
Table 6.1	Descriptive Statistics for Organizational Context Instrument	152
Table 6.2	Descriptive Statistics for Ambidexterity Instrument	152
Table 6.3	Descriptive Statistics for IS Success Instrument	152
Table 6.4	Reliability Test for Organizational Contexts Constructs	155
Table 6.5	Reliability Test for Ambidexterity Construct	156
Table 6.6	Reliability test for IS Success Constructs	156
Table 6.7	Factor Loadings for Organizational Context Items	157
Table 6.8	Factor Loadings for Ambidexterity Items	158
Table 6.9	Factor Loadings for IS Success Items	158
Table 6.10	Structural Equation Modelling Results	166

UMS
UNIVERSITI MALAYSIA SABAH

LIST OF FIGURES

		Page
Figure 2.1	Ghoshal and Bartlett's (1994) Model of Organization Context	22
Figure 2.2	Action Theory as an Antecedent of Managerial Action	23
Figure 2.3	Schein's Levels of Organizational Culture (Schein, 2004)	28
Figure 2.4	Relationship of between the Antecedent and the Outcome of Ambidexterity	38
Figure 3.1	Information Systems Implementation' Model	57
Figure 3.2	Nolan's Six Stage of Evolution Theory (Nolan, 1979)	62
Figure 3.3	DeLone and McLean IS Success Model (1992)	77
Figure 3.4	The Updated DeLone and McLean IS Success Model (2003)	82
Figure 3.5	Seddon's IS Success Model (1997)	84
Figure 4.1	Conceptual Paradigm of the Study	94
Figure 4.2	Theoretical Framework	102
Figure 4.3	Procedure for Developing Measures (Churchill, 1979)	121
Figure 6.5	PLS Results of Stage one Analysis	161
Figure 6.6	PLS Results of Stage two Analysis	162
Figure 7.1	Systematic Process of the Newly Developed Model (System Behavioural Success Model)	175

UNIVERSITI MALAYSIA SABAH

CHAPTER 1

INTRODUCTION

1.1 General Background and Motivation

One of the top ten issues in management information systems discipline is measuring and improving organizational information systems effectiveness (Earl, 1989; Chang and King, 2005; DeLone and McLean, 2003; Seddon *et al.*, 1999). Furthermore, measuring information systems effectiveness is consistently reported in the top 20 on the list of most important issues that concern the information systems executives and managers (Myers, 1997). That is because the role of information system in organizational performance can be difficult to differentiate from other factors (Nolan and McFarlan, 2005). Empirical research suggest that poor performance of the information system is a serious inhibitor to good organizational performance. On the contrary, these research also show that high information systems effectiveness is associated with high organizational performance (Carlson and McNurlin, 1992; Chang and King, 2005).

UMS
UNIVERSITI MALAYSIA SABAH

However, assessing information systems success in the organization remains inclusive and not well defined. Although research in assessing the information systems success from the perspective of organizational structure and design is well maintained (Ein-Dor and Segev, 1982; Raymond, 1990; Bradley *et al.*, 2006), the assessment of the information systems success from the contextual perspective of the organization still needs investigation. Issues related to organizational culture and climate often appear in the discussions of information systems success (Alter and Shaw, 2004; Watts and Henderson, 2006). Furthermore, measurement framework for assessing this organizational context from the perspective of the information system managers has not been established. This study investigates this problem by proposing measurements of organization context dimensions and tests these measurements on the possible establishment of a linkage between organizational context and information systems success.

1.2 Research Problems

The claim that the information system did not fit the organizational culture is often part of the explanation of why particular information system encountered unanticipated resistance and never met expectations (Alter, 2003). While the world of business and organization is synergizing with increasingly faster velocities, organizational forms are changing and there is a need to have a deeper investigation on the linkage between organization culture and information system in the organization, which lead to organizational business success. In this regard, three major problems are highlighted:

1. The first problem is that there is a lack in the integration of information systems discipline and the organizational context. There is a mismatch between information systems and the culture of the organization (Alter and Shaw, 2004). Literatures suggest that a gap exists between information systems success when assessed from organizational context and assessing information systems success in the organization remains inclusive (Segar and Grover, 1998; Bradley *et al.*, 2006). The evaluation process is a subjective undertaking which cannot be separated from human intellect, culture and social organization. Although research in assessing the information systems success from the perspective of organizational structure and design is well maintained (Ein-Dor and Segev, 1982; Raymond, 1990; Bradley *et al.*, 2006), the assessment of the information systems success from a contextual perspective of the organization still needs investigation.

2. The second problem is that organizational context measurement has suffered over the years from conflicting definitions and inconsistencies in operationalization. The dominant approach conceptualizes climate as employees' shared perceptions of organizational events, practices, and procedures. These perceptions are often considered to be primarily descriptive rather than affective (Shneider and Reishers, 1983; Patterson *et al.*, 2005). However, the lack of a theoretical basis for many climate instruments has led to many variations in organizational climate and context dimensions employed in different measures. Although the model of Ghoshal and Bartlett (1994) provides

UMS
UNIVERSITI MALAYSIA SABAH

a starting point for assessing the organizational effectiveness from contextual viewpoint, no instruments have been developed to measure the organizational context dimensions of Ghoshal and Bartlett (1994). The need to have questionnaire instruments of the model will rather enhance its excellent precedence (Barnard, 1938; Bower, 1970; Burgelman, 1983), and validate its well-argued justification (Mintzberg, 1979). There is a great need for measured, testable instruments in order to facilitate the empirical evaluation by the modern organization, including information systems business units. Since its introduction in 1994, no remarkable response was given for refinement, modification and elaboration of the Ghoshal and Bartlet's model through both conceptual and empirical work.

3. The third problem associated with this study concerns the aspect of information systems success. Different researchers have addressed different aspects of success, making comparisons difficult and the prospect of building a cumulative tradition for information systems research similarly elusive. In fact, effectiveness of the information systems function has proven practically impossible to define and measure. One important reason for this is that the role of the information systems function in organizational performance and effectiveness can be subtle and difficult to differentiate from other factors. Some organizations define information systems effectiveness in a way that the true value of it is hidden. Some depend on mostly qualitative rather than quantitative measures. Within the organizational context, many studies suggest that the efficacy of information system deployment has a great value to the organization (Magalhaes, 2006).

1.3 Research Questions

From the above issues raised, four research questions are imposed that this research intends to provide an answer. These research questions are:

1. Is there any instrument to measure organizational context which is shaped by the managerial action?

UNIVERSITI MALAYSIA SABAH

2. Which instrument can best measure organizational context that recognize the multidimensionality of the constructs as shaped by stretch, discipline, trust and support ?

3. What is the relationship between the organizational context dimensions: stretch, discipline, trust, and support and information systems success in the organization?

4. Does ambidexterity mediates the relationship between the organizational context and information systems success?

1.4 Research Objectives

This study aims to provide fundamental framework for a new concept of the linkage between organizational context and information systems success. This study further argues for perspective of the success of the information systems within the context of organizational climate, in which it affects the performance of the organization. This study explores the concept of organizational context dimensions suggested by Ghoshal and Bartlett (1994) as the shapers of organizational culture, and relates them to the information systems research, focusing on the information systems success, particularly investigating the role of the strategic managerial action affecting this linkage. This study therefore has the following objectives:

1. To develop and validate instruments to measure organizational context that recognize the multidimensionality of the construct as shaped by stretch, discipline, trust and support, using statistical techniques, which could be used across a variety of contexts.

2. To investigate the relationship between the organizational context dimensions: stretch, discipline, trust, and support and information systems success in the organization.

3. To investigate the mediating role of ambidexterity on the relationship between the organizational context and information systems success.

UNIVERSITI MALAYSIA SABAH

4. To theorize a priori model of linkage between the organizational context and information systems success, and test its applicability on theory and practice.

1.5 Significance of the Study

It is believed that this study will undertake an important issue in the relationship between organizational context and information systems success from a contextual perspective of the organization, which is not widely approached, in position to the technical approaches, which have dominated the discipline so far. Checkland and Holwell (1998) argue that the whole process of information systems implementation is in fact a process of organizational change. From this, it follows that information systems implementation could be constructed to be a process of change where a key criterion of information system and organizational context is integrated, which lead to a successful outcome of information system in the organization.

As new information systems applications find their ways into organizations, which are used by increasing number of staff for various organizational tasks, the structure of the technology are infused into the social structure of the organization (Orlikowski, 1992; DeSantics and Poole, 1994). However, information systems implementation must not be taken to mean the organizational effect of information systems just through the use of information systems applications. Information systems process of infusion and diffusion goes beyond use, where it is concerned with IT related planning, selecting, purchasing and evaluating, which involve the human factor. Such activities, in turn, affect the routines, practices, beliefs and values of IT managers and executives throughout the organization. This concept of information systems has not been investigated.

This study however, is implementing a new approach which seems to be more appropriate for the assessment of the information systems in the organizational context. This approach is based on the organizational information system manager's perception, as a user of the performance for all of the aspects of the information function experienced within the organization (Chang and King,

2005). This is important because information systems function includes all information systems groups and departments within organization. The information systems functions use resources to produce information systems performance, which in turn influences business process effectiveness and organizational performance.

From an industrial perspective, the contribution of information systems-based assets to organizational performance provides a benchmark from which the many processes of the information systems function, including business information system, can be evaluated and refined. Without the benefit of these measures, information systems assets may be undervalued by users and top executives resulting in shortened budget allocations and lower managerial profiles for top information systems executives. In other instances, the absence of reliable performance metrics may cause users and top managers to overvalue information systems assets. Users and strategic planners may therefore be unaware of innovations adopted by competing organizations that are enhancing and changing their patterns of work and competition. The lack of validated and complete performance criteria in either of the two instances can result in misguided decisions regarding the acquisition, design, and delivery of information systems.

UMS
UNIVERSITI MALAYSIA SABAH

1.6 Definitions of Variables

Although some variables need more detailed explanation, the following are the basic definitions of the variables addressed within this research, A more detailed discussion and explanation is provided in the literature review.

1.6.1 Organizational Context Dimensions

Ghoshal and Bartlett (1994) studies are considered among the most conceptualized theories in the area of organizational culture and strategic management. In their theory building, they give great emphasis to managerial values. They defend the notion that improved organizational performance depends primarily on the organizational context that managers are able to build in fulfilling their managerial roles and processes. They state that an organization can create and embed in its context a work ethic that would induce rational and yet value-oriented actions on

the part of its members furthering the interests of the organization as an end in itself, not just means to an end. As the outcome of their research into the successful companies, Bartlett and Ghoshal (1993) have identified a number of value-oriented characteristics of managerial action, which they claim are the key dimensions for quality management, which induces the creation of a favorable or supportive organizational context for improved organizational performance. Such characteristics have been grouped into four key dimensions: stretch, discipline, trust and support, which the authors defined as follows:

1. **Discipline**

   The attribute of an organization's context that induces its members to voluntarily strive for meeting all expectations generated by their explicit and implicit commitments (e.g. the establishment of clear standards of performance or the consistency in the application of sanctions)

2. **Stretch**

   The attribute of an organization's context that induces its members to voluntarily strive for more rather then less ambitious objectives (e.g. the development of a collective identity or the establishment of a shared ambition)

3. **Trust**

   The attribute of an organization's context that induces its members to rely on the commitment of each other (e.g. the involvement of individuals in decisions and activities affecting them)

4. **Support**

   The attribute of an organization's context that induces its members to lend assistance and countenance to others (e.g. freedom of initiative at lower levels or personal orientation from senior staff)

Ghoshal and Bartlett (1994) have conceptualized their model and explained how the interaction of these four key dimensions will result in an organizational

UMS
UNIVERSITI MALAYSIA SABAH

context which leads to initiative and creativity, collaboration and learning, and therefore to an improved organizational performance. This research will integrate these key dimensions with the information systems context in order to modify their structure to fit within the business information systems aspect. It is believed that the contextual climate of the organizations shaped by managerial action is likely to influence the information systems success of the organization.

1.6.2 Ambidexterity

Ambidexterity a terms used to describe organizations aligned and efficient in their management of today's business demands, while also adaptive enough to changes in the environment that they will still be around tomorrow (Duncan, 1976; Tushman and O'Reilly, 1996). Gibson and Birkinshaw (2004) have defined ambidexterity as the behavioral capacity to simultaneously demonstrate alignment and adaptability across the organization. Alignment refers to coherence among all the patterns of activities in the organizations, while adaptability refers to the capacity to reconfigure activities in organization quickly to meet changing demands in the task environment (Gibson and Birkinshaw, 2004, Simsek *et al.*, 2009). Ambidexterity is all the more conductive to sustainable performance, as alignment activities are geared toward improving performance in the short term, while adaptability activities are geared toward improving performance in the long term.

1.6.3 Information Systems Success

Since this study focuses on the information systems success as an output of the organizations performance, it is believed that information quality is an important attribute of information systems. Thus, based on the categorization suggested by Pitt *et al.* (1995) and DeLone and McLean (2003), three constructs of information system success are suggested:

1. **Systems Performance**

   Assesses the quality aspects of a system such as reliability, response time, ease of use, as well as the various impacts that system have on the user's work. Systems encompass all applications that user regularly use (Chang and King, 2005).