

KNOWLEDGE INTEGRATION MECHANISM AS MEDIATOR BETWEEN
LEADERSHIP STYLES AND ENTERPRISE SYSTEMS SUCCESS

RAZATULSHIMA BINTI GHAZALI

UNIVERSITI TEKNOLOGI MALAYSIA

KNOWLEDGE INTEGRATION MECHANISM AS MEDIATOR BETWEEN
LEADERSHIP STYLES AND ENTERPRISE SYSTEMS SUCCESS

RAZATULSHIMA BINTI GHAZALI

A thesis submitted in fulfilment of the
requirements for the award of the degree of
Doctor of Philosophy (Information Systems)

Faculty of Computing
Universiti Teknologi Malaysia

SEPTEMBER 2015

Dedicated to:

My parents Haji Ghazali bin Haji Kasim and Hajah Zaiton binti Haji Muda

My parents-in-law Haji Alias bin Said and Hajah Anang binti Jusoh

My husband Sabaahul Ahmad bin Haji Alias

My sons and daughter:

Ammar Syafiq, Aiman Syakir, Amir Safwan and Aleesya Maisarah.

Thank you for your prayers, understanding, unconditional love and support!

ACKNOWLEDGEMENT

Bismillah ir-Rahman ir-Rahim...

First of all, Alhamdulillah, in the name of Allah the All Mighty, the Most Compassionate, the Most Merciful, Knowledgeable and Worthy of all praises. I am most thankful to Him for His blessings in the completion of this thesis.

I would like to thank Dr. Mohammad Nazir Ahmad, my main supervisor; and Dr. Nor Hidayati Zakaria, my co-supervisor; for their commitment, valuable guidance, and comments in assisting me to complete this thesis. Without their guidance, this study would not have been possible.

I also acknowledge Prof. Ramayah Thurasamy and sincere appreciation to all my fellow Information & Service Systems Innovation Research Group members, Associate Professor Dr. Azizah Abdul Rahman, Dr. Noorminshah Lahad, Dr. Ramesh Zaidi Rozan and Dr. Mahadi Bahari for all their support. I would also like to thank Cik Rabiatal Eladwiyah Abd. Rahim, Pn. Rashidah Mokhtar, Pn. Yuzi Mahmud and Pn. Aina Md. Nor for being very understanding friends.

I am also indebted to Public Service Department of Malaysia for funding my Ph.D study and the organisations' representatives who were very co-operative throughout my data collection, especially to Pn. Norhaya Zainol Abidin, Tn. Syed Shaharum Syed Dabal, Pn. Syamilah Mansor, Pn. Maizura Ibrahim. Pn. Siti Hasnah Abu Hasan Shaari, Pn. Rosnita Kahar, Pn. Nurul Farahdiana Jaafar and Pn. Norazwana Yusop.

Finally, I would like to express my deepest gratitude and love for my family, especially my parents, husband, children, brothers, sisters and in-laws. Their patience, understanding, and encouragement gave me strength and were a source of inspiration throughout this battle. May Allah bless all of you. Thank you.

ABSTRACT

Many organisations in developing countries invest huge amounts of capital in Enterprise Systems (ES), with the intention to gain all the benefits offered by such systems. Unfortunately, the failure rate of ES implementation in developing countries is high. According to a systematic literature review of research on ES critical success factors, 100 percent of these failures occur due to the lack of management or leadership support and commitment, particularly in the ES post-implementation phase. Many studies in the literature also report the power of Knowledge Management (KM) to assist organisational superiors in ES post-implementation phase. These studies highlight the capability of one of the most neglected KM processes, namely, Knowledge Integration (KI), and explore the crucial involvement of organisational superiors with different leadership styles (such as transformational and transactional) in the ES post-implementation phase through the employment of quantitative research methods. The present study commenced with an intensive literature review, and a series of interviews with company experts in order to identify the research gap and confirm the validity and reliability of the constructs in the developed survey. A total of 508 valid survey responses were analysed using the Partial Least Squares-Structural Equation Modelling (PLS-SEM) approach. Mediating effect tests were performed using bootstrapping procedures to test the role of KI mechanisms as a mediator. The results indicate that KI mechanisms fully mediate the relationship between transactional leadership style and ES success. Conversely, KI mechanisms partially mediate the relationship of transformational leadership style and ES success. The results expose the importance of the both leadership styles and superiors' adoption of KI mechanisms when managing the ES in the post-implementation phase and highlighted the leadership practices and the mechanisms of KI that should be prioritised during the ES post-implementation phase.

ABSTRAK

Kebanyakan organisasi di negara membangun melabur sejumlah besar modal dalam Sistem Perusahaan (ES) bagi mendapatkan segala manfaat yang ditawarkan oleh sistem ini. Malangnya, kadar kegagalan pelaksanaan ES di negara membangun adalah tinggi. Menurut sorotan kajian sistematik tentang penyelidikan faktor kejayaan kritikal ES, 100 peratus daripada kegagalan berlaku akibat kekurangan sokongan dan komitmen pengurusan atau kepimpinan, terutamanya dalam fasa pasca pelaksanaan. Banyak kajian turut mengemukakan kuasa Pengurusan Pengetahuan (KM) bagi membantu pihak atasan organisasi dalam fasa pasca pelaksanaan ES. Kajian ini mengenengahkan keupayaan salah satu proses KM yang sering diabaikan, iaitu Integrasi Pengetahuan (KI), dan penglibatan penting pihak atasan organisasi dengan pelbagai gaya kepimpinan (seperti transformasi dan transaksi) dalam fasa pasca pelaksanaan ES melalui kaedah penyelidikan kuantitatif. Kajian ini dimulakan dengan sorotan kajian intensif, dan siri temu bual bersama pakar syarikat bagi mengenalpasti jurang penyelidikan serta memastikan kesahan dan kebolehpercayaan konstruk. Sejumlah 508 maklumbalas kajian dianalisis dengan menggunakan pendekatan Kuasa Dua Terkecil Separat-Model Persamaan Berstruktur (PLS-SEM). Ujian kesan perantaraan dijalankan menggunakan prosedur butstrap untuk menguji peranan mekanisme KI sebagai perantara. Keputusan menunjukkan mekanisme KI mengantara sepenuhnya hubungan gaya kepimpinan transaksi dengan kejayaan ES. Sebaliknya, mekanisme KI tidak mengantara sepenuhnya hubungan gaya kepimpinan transformasi dengan kejayaan ES. Keputusan tersebut mendedahkan kepentingan kedua-dua gaya ini dan penerimaan pihak atasan terhadap mekanisme KI semasa menguruskan ES dalam pasca pelaksanaan ES.

TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xiv
	LIST OF FIGURES	xvii
	LIST OF SYMBOLS	xx
	LIST OF ABBREVIATIONS	xxi
	LIST OF APPENDICES	xxii
1	INTRODUCTION	1
	1.1 Overview	1
	1.2 Key Definitions	2
	1.3 Research Motivation	4
	1.4 Problem Statement Development	7
	1.4.1 Step 1 and Step 2 – Identify and Define the Problem	8

1.4.2	Step 3 – Select the Research Design	8
1.4.3	Step 4 – Determining Relevance	9
1.4.4	Step 5 – Cite Research	9
1.4.5	Step 6 – Share the Checklist	9
1.4.6	Research Problem Statement	11
1.5	Research Questions	11
1.6	Research Objectives	12
1.7	Research Significance	13
1.8	Research Scope	14
1.9	The Thesis Outline	16
2	LITERATURE REVIEW	18
2.1	Overview	18
2.2	Introduction	20
2.3	Information Systems Success	21
2.4	Enterprise Systems’ Critical Success Factors	21
2.5	Enterprise System Problems in Post- Implementation Phase	24
2.6	Knowledge Management in Enterprise Systems	27
2.6.1	Mediating Role of Knowledge Management In Enterprise Systems	28
2.7	Knowledge Management and Knowledge Integration	32
2.7.1	Knowledge Integration	32
2.7.2	Knowledge Integration Studies in Enterprise Systems	34

2.7.3	Knowledge Integration Mechanism	37
2.7.4	Knowledge and Leadership	42
2.8	Leadership and Enterprise Systems Success	44
2.8.1	Leadership Styles	46
2.8.2	Leadership Styles –Transformational and Transactional Leadership	49
2.9	Enterprise Systems Related Knowledge	56
2.9.1	Organisational Knowledge	58
2.10	Management, Managers, Leaders and Leadership	59
2.11	Research Paradigm	61
2.11.1	Positivist Paradigm	63
2.12	Statistical Analysis	65
2.12.1	Statistical Method	65
2.13	Review of Theory	68
2.13.1	Enterprise Systems Success Dimensions	68
2.13.2	The Knowledge-Based Theory of the Firm	71
2.13.3	Mediator	72
2.14	Literature Map Diagram	74
2.15	Chapter Summary	76
3	RESEARCH METHODOLOGY	77
3.1	Overview	77
3.2	Research Strategy Diagram	78
3.3	Statistical Instrument	80
3.3.1	SmartPLS	81
3.3.2	Statistical Package for the Social Science	82

3.4	The Relationship between the Construct and the Measure	83
3.4.1	Reflective Measurement Model	84
3.4.2	Formative Measurement Model	85
3.5	Research Design	85
3.5.1	Literature Survey	88
3.5.2	Definition of the Research Problem	88
3.5.2.1	Preliminary Study	89
3.5.3	Theoretical Model and Research Hypotheses	90
3.5.4	Conducting of the Survey	91
3.5.4.1	Survey Instrument Development	91
3.5.4.2	Population and Sample-The Generalisation	108
3.5.4.3	Sampling Technique	109
3.5.4.4	Sampling Design	110
3.5.4.5	Common Methods Bias and Common Method Variance	113
3.5.4.6	Research Assumptions	114
3.5.4.7	Control Variables	115
3.5.4.8	Pre-Test	116
3.5.4.9	Pilot Study	117
3.5.5	Data Analysis and Interpretation of Findings	128
3.5.5.1	Goodness-of-fit Index	131
3.5.6	Communicate the Contributions	131
3.6	Chapter Summary	131

4	RESEARCH MODEL DEVELOPMENT	133
4.1	Overview	133
4.2	Research Hypotheses of Leadership towards Enterprise Systems Success	134
4.2.1	Transformational Leader in Enterprise Systems Success	134
4.2.2	Transactional Leadership Enterprise Systems Success	135
4.3	Leadership Model Diagram	137
4.4	Research Hypotheses Knowledge Integration Mechanisms as a Mediator	138
4.4.1	Transformational Leadership and Knowledge Integration in Enterprise Systems Success	138
4.4.2	Transactional Leadership and Knowledge Integration in Enterprise Systems Success	139
4.4.3	Mediating the Effect of Knowledge Integration Adoption	140
4.5	Research Model Diagram	141
4.6	Chapter Summary	142
5	ANALYSIS, RESULTS AND DISCUSSION	143
5.1	Overview	143
5.2	The Company Profile Overview	144
5.3	Actual Study	146
5.4	Actual Study Data Analysis	148

5.4.1	Descriptive Analysis-Skewness, Kurtosis, Mean and Standard Deviation	148
5.4.2	Analysis of Reliability and Validity	149
5.4.3	Structural Measurement Model	155
5.4.3.1	Step 1: Collinearity Issues	155
5.4.3.2	Step 2: Structural Model Path Coefficient	156
5.4.3.3	Step 3: Coefficient of Determination, R^2	163
5.4.3.4	Step 4: Effect Size, f^2	165
5.5	Hypotheses Analysis	167
5.5.1	H1:Transformational Leadership is Not Positively Related to ES Success Dimensions	167
5.5.2	H2:Transactional Leadership is Not Positively Related to ES Success Dimensions	168
5.5.3	H3:Transformational Leadership is Positively Related to KI Mechanism	169
5.5.4	H4:Transactional Leadership is Positively Related to KI Mechanism	170
5.5.5	H5: KI Mechanism Mediates the Relationship between Two Leadership Styles and ES Success	171
5.5.6	Analysis of KI Mechanism Construct	172
5.5.7	Summary of Hypotheses Analysis	175
5.6	Additional Findings	176
5.6.1	Frequency Analysis of Exogenous Construct	176

5.6.2	Outer Weight	184
5.6.3	Frequency Analysis of the Cohort	185
5.7	Future Research	190
5.8	Chapter Summary	191
6	CONCLUSION AND RESEARCH CONTRIBUTION	192
6.1	Overview	192
6.2	Contribution of the Research	193
6.2.1	Contribution to Theory	195
6.2.2	Contribution to Managerial Practise	198
6.3	Conclusion	201
6.4	Chapter Summary	202
	REFERENCES	203
	Appendices A-E	229-278

LIST OF TABLES

TABLE NO.	TITLE	PAGE
1.1	Organisation of Chapter 1	2
1.2	Problem statement checklist development (Blum and Preiss, 2005)	10
1.3	Research questions	12
2.1	Organisation of Chapter 2	19
2.2	Critical success factors literature	22
2.3	ES post-implementation activities studied from 2006 to 2013	26
2.4	Mediating role of KM in ES literature	30
2.5	Knowledge integration studies in enterprise systems	37
2.6	Leadership styles in ES success literature, 2011–2014	48
2.7	Intellectual stimulation types (Bass, 1985)	52
2.8	Two types of contingent reward (Bass, 1985)	54
2.9	Studies of organisational knowledge, 1994–2014	59
2.10	Definitions of management, managers, leaders, and leadership	61
2.11	Overview of the positivist, critical and interpretive paradigms	63
2.12	Organisation of multivariate methods (Hair et al., 2013, p. 2)	66
2.13	Rules of thumb for choosing between PLS-SEM and CB-SEM	67
3.1	Organisation of Chapter 3	77

3.2	Data considerations when applying PLS-SEM (Hair et al., 2013)	81
3.3	Steps 2 and 3 of survey instrument development process	100
3.4	Guidelines for choosing the measurement model mode	101
3.5	Systematic evaluation of PLS-SEM results – Stage 5	102
3.6	Rules of thumb for evaluating reflective measurement model	102
3.7	Rules of thumb for evaluating formative measurement models	103
3.8	Rating scale for leadership style constructs	106
3.9	Rating scale for KI mechanisms construct	106
3.10	Rating scale for ES success construct	107
3.11	Pilot study survey dissemination	118
3.12	Fornell–Larcker criterion	123
3.13	Assessment of collinearity issues and significance and relevance	127
4.1	Organisation of Chapter 4	134
5.1	Organisation of Chapter 5	144
5.2	Sample size (based on Bartlett et al. (2001))	148
5.3	Fornell–Larcker criterion	152
5.4	Assessment of collinearity issues and significance and relevance	154
5.5	Collinearity issue assessment	155
5.6	Significance testing results of the structural model path coefficient	156
5.7	Significance testing results of the total effect	157
5.8	Significance analysis of path coefficients without mediator	159
5.9	Assessment of R^2 value	164
5.10	Summary of f^2 results	166
5.11	Frequency and percentage of respondents' ratings for rules and directives	172

5.12	Frequency and percentage of respondents' ratings for routine	173
5.13	Indicators' outer loading of KI mechanism construct	175
5.14	Frequency and percentage of respondents' rating for transformational leadership style	177
5.15	Frequency and percentage of respondents' ratings for transactional leadership style	178
5.16	Frequency and percentage of respondents' ratings for individu impact	179
5.17	Frequency and percentage of respondents' ratings for organisational impact	180
5.18	Frequency and percentage of respondents' ratings for information quality	181
5.19	Frequency and percentage of respondents' ratings for IS quality	182
5.20	Indicators' outer weight and outer loading of exogenous Construct	185
5.21	Frequency and percentage of respondents' positions	186
5.22	Frequency and percentage of respondents' departmental environment	187
5.23	Frequency and percentage of respondents' experience using an ES	188
5.24	Frequency and percentage of respondents' education level	189
5.25	Tools/applications/procedures used in the analysis	191
6.1	Organisation of Chapter 6	192
6.2	Practical guidelines for KI practise in ES post-implementation phase	199

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
2.1	Knowledge silos as a result of no KI (Group, 2006)	33
2.2	Four categories of knowledge assets (Nonaka et al., 2000)	43
2.3	Types of ES-related knowledge (Chan and Rosemann, 2001)	57
2.4	IS impact measurement model (Gable, 2008)	69
2.5	Prior model of Gable's IS impact measurement model	70
2.6	General mediator model (Hair et al., 2013, p. 220)	73
2.7	Literature map diagram	75
3.1	Research strategy diagram (Ahmad , 2009 and Geerts, 2011)	79
3.2	The present study design diagram adapted from Yin (2003)	87
3.3	Literature review sources and output	88
3.4	The present study development of theoretical model and hypotheses	91
3.5	Scale development procedure (Mackenzie et al., (2011) and PLS-SEM (Hair et al., 2013, p. 47)	95
3.6	Survey instrument development design diagram	96
3.7	Development of construct conceptual definition (McKenzie et al., 2011)	97
3.8	Assessment of reliability and validity for reflective measurement model	104

3.9	Assessment of validity and collinearity for formative measurement model	105
3.10	Composite reliability result	120
3.11	Indicators' outer loading of the reflective construct	121
3.12	Average variance extracted	121
3.13	Indicators' cross-loading values	122
3.14	Redundancy analysis of transformational leadership constructs	124
3.15	Redundancy analysis of transactional leadership construct	124
3.16	Redundancy analysis of ES success construct	125
3.17	Steps in structural model assessment procedure (Hair et al., 2013)	129
4.1	Leadership styles model towards ES success	137
4.2	KI as Mediator between Leadership Styles toward ES Success	142
5.1	Composite reliability result	149
5.2	Indicator outer loading of reflective construct	150
5.3	Average variance extracted (AVE)	150
5.4	Indicators' cross-loading values	151
5.5	Redundancy analysis of transformational leadership construct	152
5.6	Redundancy analysis of transactional leadership construct	153
5.7	Redundancy analysis of ES success construct	153
5.8	Results of the hypotheses significance testing	156
5.9	Mediator analysis procedures in PLS-SEM (Hair et al., 2013, p. 224)	158
5.10	Direct effect	159
5.11	Indirect effect	160
5.12	Standard deviation calculation using MS Excel spreadsheet	161

5.13	PLS path model with R ² value and path coefficient	164
5.14	Frequency bar chart of the respondents' ratings for rules and directives	172
5.15	Frequency bar chart of the respondents' ratings for organisation routine	173
5.16	Frequency bar chart of the respondents' ratings for transformational leadership	177
5.17	Frequency bar chart of the respondents' ratings for transactional leadership	178
5.18	Frequency bar chart of the respondents' ratings for individu impact	180
5.19	Frequency bar chart of the respondents' ratings for organisational impact	181
5.20	Frequency bar chart of the respondents' ratings for information quality	182
5.21	Frequency bar chart of the respondents' ratings for IS quality	183
5.22	Frequency bar chart of the respondents' positions	186
5.23	Frequency bar chart of the respondents' departmental environment	187
5.24	Frequency bar chart of the respondents' experience using an ES	188
5.25	Frequency bar chart of the respondents' education level	189

LIST OF SYMBOLS

α	-	Probability of Type I error
R^2	-	Coefficient of Determination
f^2	-	Effect Size

LIST OF ABBREVIATIONS

CSFs	-	Critical Success Factors
ES	-	Enterprise Systems
GoF	-	Goodness-of fit index
KBT	-	Knowledge Based Theory
KI	-	Knowledge Integration
KM	-	Knowledge Management
IS	-	Information Systems
IT	-	Information Technology
PLS	-	Path modelling
SEM	-	Structural Equation Modelling
SD	-	Standard Deviation
SLR	-	Systematic Literature Review
VIF	-	Variance Inflation Factor
VAF	-	Variance Accounted For

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
A	Expert Review	229
B	Pilot Test Result of the Descriptive Statistics	264
C	Actual Test Result of the Descriptive Statistics	268
D	Questionnaires	272
E	Publications	278

CHAPTER 1

INTRODUCTION

1.1 Overview

This research empirically shows the involvement of knowledge integration (KI) as a mechanism to mediate between leadership styles and enterprise systems (ES) success. This chapter gives an overall overview of the research. The relevant issues briefly described in order to explain the motivation for the research (Section 1.3). From this background, the problem statement derived and articulates the research questions (Section 1.5). Next, the study's objectives are stated (Section 1.6) and point out its significance (Section 1.7). The scope of the research is outlined (Section 1.8) and illustrate the research strategy. Finally, the entire chapter is concluded with a brief summary (Section 1.9). Table 1.1 illustrates the overview of this chapter.

Table 1.1: Organisation of Chapter 1

1.1 Overview	This section introduces the chapter and gives the overall view of this chapter.
1.2 Key Definition	This section defines the key terms used in this study.
1.3 Research Motivation	This section introduces the background and motivation of the research.
1.4 Problem Statement Development	This section describes the establishment of the problem statement
1.5 Research Question	This section answers "Why is this research important?"
1.6 Research Objectives	This section identifies the need for this research and its possible application and utilisation.
1.7 Research Significance	This section identifies the significance of this research.
1.8 Research Scope	This section defines and delimits the scope of this research.
1.9 Thesis Outline	This section illustrates the structure of the research.

1.2 Key Definition

In this section, the definitions of important terms for the thesis are defined as below:

ES

Integrated, meticulous real-time application-software that organisations use to handle more than one task, in order to facilitate its daily operations and management reporting.

ES post-implementation phase

The production phase of ES usage in an organisation's daily operation. This phase involves the organisation of processes for adapting and re-aligning process, structure and culture, in order to utilise the ES environment and manage the knowledge ES produces.

Leader

A person with special qualities, and who is capable of leading, controlling and influencing people towards the achievement of goals.

Leadership

The distinctive characteristics or qualities that a leader or a superior should have.

Manager

A person who responsible for administering an organisation's affairs, and has the authority to control the people under his or her supervision.

Superior

A person in an organisation who holds a dominant or higher rank of position within its field than another, and who has authority to control people under his or her supervision. In this study, the term 'superior' is used to refer to senior managers, managers and supervisors. The 'superior' is the subject investigated in this study.

Transformational leadership

A type of leadership style where the superior is charged with identifying a needed change, creating a vision to guide the change through inspiration, and executing the change with committed workers. The superior is generally energetic, enthusiastic, and passionate. He or she is responsible for and participates in the activity, and is focused on helping his or her workers to succeed as well.

Transactional leadership

A type of leadership style where the superior focuses on the roles of supervision, organisation, and group performance. The superior promotes the compliance of his or her workers through both rewards and punishments.

KI

The process of transferring, sharing, combining and synthesising individuals' knowledge to create meaningful knowledge for other individuals or groups, which can benefit the organisation.

KI mechanism

A process, technique or system use to integrate knowledge, which may involve a particular strategy or approach to its accomplishment, for instance group discussions, training, and/or brainstorming sessions.

1.3 Research Motivation

Many contemporary organisations are struggling to maintain their ES in the post-implementation phase (Chou et al., 2014; Ahmad and Cuenca, 2013). As postulated by many studies, the complex characteristics of the ES mean that a powerful tool is required to manage the ES post-implementation phase. This phase involves a number of critical and ongoing tasks such as conducting maintenance activities, aligning business processes with the newly installed system, streamlining the decision-making process and training workers. Therefore, researchers have stated that the implementation of knowledge management (KM) along with the ES is essential (Vandaie, 2008; Tsai et al., 2011; Kumar and Gupta, 2012a; Teittinen et al., 2013; Yeh and Xu, 2013; Chou et al., 2014). KM has been used in brainstorming

sessions, meetings and training and also in solving problems in maintenance activities. Implementing KM in daily tasks also could save organisations money, as all the crucial tasks are able to be handled internally by experienced workers (Grant, 1996a, 1996b; Sedera and Gable, 2010; Yuena et al., 2012).

ES are complex application systems which are mingled with various processes, modules and fields of expertise. The KM process, including knowledge sharing, knowledge transfer, knowledge creation and KI, must be nurtured in organisations in order to produce knowledgeable workers so that managing the complexity of the ES is not a barrier. In addition, the positive effect of nurturing KM in the organisation could ensure the ES business process operates as scheduled, and that the maintenance worker can handle the problems easily without any delay to the main process. KM practices can also help to reduce training costs as the KM processes are already used by leaders in their daily tasks (e.g. brainstorming sessions, training, intellectual symposiums) (Grant, 1996a; Haddad, 2008; Enberg, 2012; Vie, 2012). KI consist the processes of transferring, sharing, combining and synthesising individual's knowledge in order to create a beneficial or meaningful knowledge to others. The lack of KM practices, particularly KI, in an organisation could cause set-backs in ES implementation, especially in the ES post-implementation phase (Enberg, 2012).

The leader or superior—as the person responsible for ensuring that the organisation's goals and objectives are achievable—should take an active role in ES survival (Zhu et al., 2010). However, superiors need special mechanisms to pursue the organisational goals, especially while managing the chaos of the ES post-implementation phase which usually involves aligning the new system with the business process, carrying out maintenance activities, educating and training workers, forecasting, decision-making and managing risks (Newell et al., 2004; Haddad, 2008; Lopez and Esteves, 2009; Pries-Heje and Dittrich, 2009). By failing to pay proper attention to the ES post-implementation phase, and especially by disregarding KI mechanism, the superiors can cause a great loss to the organisation (Grant, 1996a). KI mechanism involves the process or the techniques or the system that use to integrate knowledge which may need a particular strategy or approach to accomplish.

The consequences of not nurturing KI practices among ES workers can cause a range of problems in the ES post-implementation phase such as operational delays, cost overruns, a mismatch with the business process (e.g. the ES does not support a newly-added business process due to insufficient knowledge of the ES modules or programming), lack of motivation to use the ES, untrained ES workers, and misjudgements by management. The organisation could experience a great loss due to no well-trained workers to operate certain module because the migration of skilful workers from the organisation (i.e. cause of 'brain drain'-loss of skill and well-trained workers). Nevertheless, leadership with a variety of management styles can contribute to ES success by effectively managing the complexity of ES knowledge in the ES post-implementation phase (Cho et al., 2011).

Although there are some studies in the literature that emphasise the crucial need for superiors to nurture and use KI mechanism to manage the ES post-implementation phase, no studies have presented empirical evidence on the importance of the role of KI mechanism in the ES post-implementation phase, especially in relation to its management by different leadership styles.

Therefore, this study attempts to fill the gap in knowledge and practice by gathering the empirical evidence on the importance of KI mechanism in ES success, particularly in the post-implementation phase. This study also empirically investigates the influence of leadership styles on the use of KI mechanism towards ES success. Accordingly, a theoretical model of KI as a mediator between different leadership styles and ES success is developed as a tool in our research. Although there is a study by Cho et al. (2011) that presents a model of the effect of transformational leadership on information systems success, the model does not address KI as a mediator. Moreover, we take into account the role of other leadership styles such as the transactional leadership style. Thus, as far as we are aware, the proposed model is the first effort to empirically investigate leadership styles, in particular the transformational and transactional leadership styles, and the need to adopt KI in the ES post-implementation phase.

1.4 Problem Statement Development

Based on the guidelines proposed by Blum and Preiss (2005), we develop the problem statement through the following six steps

- a) identify and select a problem
 - b) define the problem
- } These two steps, we reflect on the investigated research problems (eg., the problem is...what...for who.. where).

- c) determine the research design

This step determines types of design (quantitative, qualitative), will do what (explore, describe) what (topic) by doing what (interviewing, observing) who (subjects or population) where (location).

- d) state the relevance

This step create the problem statement derived from step a until step c.

- e) cite research

This step involves the citing relevant research.

- f) share the checklist.

This final step of problem statement development is sharing the problem statement with the community (e.g., lecturers, officers from the companies related with the research, other researchers).

1.4.1 Step 1 and Step 2 – Identify and Define the Problem

As indicated above in the brief discussion (Section 1.3), KI is a suitable mechanism for coping with the difficulties of the ES post-implementation phase. Operational delays, cost overruns, the mismatch with business process, unmotivated workers, untrained workers and

leadership misjudgements are among the many consequences that occur due to the lack of integrated knowledge among workers or ES team members. These problems can, in turn, lead to other major problems in the organisation, such as decreased production, financial problems, migration of knowledgeable workers/expertise to other companies and bankruptcy. The problem statement in the present research is therefore articulated as follows:

No empirical research has been conducted to gather evidence on the use of KI mechanisms to facilitate superiors in the ES post-implementation phase.

The next section explains the research design used to investigate the problem.

1.4.2 Step 3 – Select the Research Design

Departing from our problem definition, we employ a quantitative study design to empirically explore the role of KI in the ES post-implementation phase and the adoption of KI mechanisms by organisational superiors. This quantitative study analyses data gathered from private and government sector organisations which were in the adoption stage of ES (i.e. using an ES for more than 1 year). The next section discusses the relevance of the research in the context of the potential benefits of its results.

1.4.3 Step 4 – Determining Relevance

The problem addressed in this study is that no empirical research has been conducted to gather evidence on the use of KI mechanisms by organisational superiors in the ES post-implementation phase. Thus, we employ a quantitative study design to empirically explore the role of KI in the ES post-implementation phase with a particular focus on the adoption of

KI practices by organisational superiors. This quantitative study analyses data gathered from private and government sector organisations which were in the adoption stage of ES (i.e. using an ES for more than 1 year). It is expected that the findings will help to promote successful leadership strategies and KI practices in the ES post-implementation phase, which will be beneficial to organisations which have made huge investments in ES implementation. The next section identifies the theories and cites the research that is relevant to the problem and validates the need for the study.

1.4.4 Step 5 – Cite Research

The most relevant literature to the problems and situations of the study : Grant (1996b, 1996a); Newell et al.(2004); Gable(2008); Sedera and Gable (2010). Consequently, we verify our problem statement according to the checklist as described in the next section.

1.4.5 Step 6 – Share the Checklist

In the last step, we share the checklist for the problem statement development. Table 1.2 presents the checklist for the problem statement development in this study, based on the guidelines proposed by Blum and Preiss (2005). The next section outlines the problem statement in this study.

Table 1.2: Problem statement checklist development (Blum and Preiss, 2005)

Task	Checklist
Ensure a stranger could understand your problem in no more than 250 words.	Done: <ul style="list-style-type: none"> ✓ University 1st assessment (2011, 2012) ✓ Post Graduate Annual Research Seminar (2012, 2013, 2014) ✓ Correspondence with industry stakeholders
What is wrong in the sector/industry?	No empirical research has been conducted to gather evidence on the use of KI mechanisms by organisational superiors in the ES post-implementation phase, although many researchers have emphasised the importance and benefits of KI in ES.
What program needs evaluation?	ES post-implementation phase.
What accepted practice needs to be revisited?	KI mechanisms
Determines where the problem exists or is under study (specific organisations or areas of the country).	Private and government sector organisations which have been implementing an ES for more than a year as the ES implementation more than a year can be consider that the organisation already in maturity phase of ES adoption.
Determines what group is impacted by the problem.	Superiors and workers who are directly involved with an ES
Describes what needs to be done (evaluate, explore, test, understand, describe).	Empirically explore the role of KI mechanisms and the adoption of KI practices by superiors in the ES post-implementation phase.
Describes the type of design and how data will be collected.	Quantitative study will be performed. Data will be collected by distributing survey questionnaires that consist of 42 questions.
Describe the geographical location of population.	The questionnaires will be distributed to private and government sector organisations which are in the adoption stage of an ES (i.e. using an ES for more than 1 year) and having more than 20 ES workers.
Determines how others can benefit from the findings.	The findings will promote successful leadership strategies and KI practice in the ES post-implementation phase; this will be beneficial to organisations that have made huge investments in the ES implementation phase.

1.4.6 Research Problem Statement

The problem is that no empirical research has been conducted to gather evidence about KI mechanisms and the adoption of KI practices by superiors in the ES post-implementation phase. Yet the importance of KI has been postulated by many researchers as a useful tool for superiors in managing the ES post-implementation phase. Thus, we employ a quantitative study design to empirically explore the role of KI mechanisms and the adoption of KI practices by superiors in the ES post-implementation phase. This quantitative study analyses data gathered from private and government sector organisations which were in the adoption stage of an ES (i.e. using an ES for more than 1 year). It is expected that the findings will promote successful leadership strategies and KI practices in the ES post-implementation phase. This will be beneficial to organisations that have made huge investments in the ES implementation phase (Grant, 1996b, Grant, 1996a, Newell et al., 2004, Gable, 2008, Sedera and Gable, 2010). Consequently, our research questions are postulated in the next section.

1.5 Research Questions

Thus, derived from the identified problem, the main question (RQ) and the sub-questions (RQ1, RQ2 and RQ3) for this study are presented in Table 1.3. Each of the research objectives is unique and has its own significance. The significance of this research is highlighted in the next section.

Table 1.3: Research questions

Question	Statement	
Main research question	RQ	Do KI mechanisms mediate between ES success and leadership styles whilst managing ES-related knowledge in the post-implementation phase?
Sub-research questions	RQ1	Which leadership styles are positively related to KI mechanisms during the ES post-implementation phase?
	RQ2	How do KI mechanisms enable superiors with different leadership styles to achieve the organisation's goals in the ES post-implementation phase?
	RQ3	What is the influence of leadership style on the use of KI as a tool towards ES success?

In order to answer these questions, the objectives of our research are achieved through the development of a theoretical framework of KI as a mediator between leadership styles. The framework enables us to empirically validate the study. Our research objectives are discussed in the following section.

1.6 Research Objectives

Motivated by the factors that contribute to ES failure as discussed above (Section 1.3), and aiming to answer our research questions, this study is intended to achieve the five objectives:

Objective 1 : To investigate how KM processes, particularly KI, can contribute to ES success.

Objective 2 : To develop an inferential theoretical model that empirically measures KI as a mediator between leadership styles and ES success.

Objective 3 : To outline how KI mechanisms are used differently by different leadership style approaches.

Objective 4 : To demonstrate to the organisation the importance of nurturing KI as a management practice.

Objective 5 : To show how an organisation can forecast the kind of leadership that would efficiently manage ES-related knowledge using KI as a tool in the ES post-implementation phase.

1.7 Research Significance

Organisations spend a huge amount of money in order to utilise all the benefits offered by an ES. Yet organisations often fail to realise that implementing the ES is not the end of the story: as a consequence, inappropriate leadership behaviour and the use of improper tools while managing the ES post-implementation phase can have negative impacts on the organisation (e.g. workers not well equipped with sufficient knowledge to operate ES, lack of superior supports in ES maintenance activities, superior not conducted or less attention on ES group problem solving). The outcomes of the present study can help organisations to forecast the consequence of not implementing KI when managing ES post-implementation and to identify the most effective leadership style.

Many extant studies on the ES post-implementation phase have focused on cause-effect and ES best practice (Yu, 2005; Wagner and Newell, 2007; Häkkinen and Hilmola, 2008; Helo et al., 2008; Zhu et al., 2010); however, the present study focuses on how KI mechanisms can function as a mediator between different leadership behaviours and ES success in the post-implementation phase. The impact of leadership styles on IS success has already been explored by some researchers (Bryant, 2003; Ke and Wei, 2008; Ramirez, 2010; Cho et al., 2011; Shao et al., 2012a); however, the actual influence of transactional and transformational leadership styles, and the use of KI mechanisms as mediator between leadership styles and ES success, have not been empirically tested. Most of the studies in the

literature investigate only one of the leadership styles and none empirically test KI as a mediator. Hence, we develop a research model of leadership styles and KI as a mediator to be used:

1. As a lens to investigate how KI can be used as a tool in the ES post-implementation phase to ensure ES success.
2. As a way to identify which leadership styles are most appropriate in managing the ES post-implementation phase.
3. As a way to analyse whether KI mechanisms can be part of the workplace culture adopted in organisations to ensure the longevity of the ES.

This study represents a significant endeavour to promote the nurture of knowledge in organisations and to position superiors with the right leadership styles to manage the chaos of the ES post-implementation phase. An emphasis on the appropriate leadership styles will ensure the longevity of the ES especially in the vulnerable post-implementation stage. The next section describes the scope of the research.

1.8 Research Scope

The scope of this research is delimited by the following areas of focus:

1. The target organisations are the companies which are implementing and adopting an ES (i.e. implementing an ES for more than one year).
2. The target group consists of managers and workers who are directly involved in the ES post-implementation phase.

3. Only KI mechanisms which are used by superiors in the ES post-implementation phase are investigated.
4. The data is collected from private and government sectors.
5. Only organisations with more than 100 ES users will be considered for data collection.
6. All the data with straight line answers (i.e. all questions have same answer), incomplete (i.e. more 15% of the questions in the survey is not answered by respondent) are removed.

For the survey, the companies that have already implemented an ES in its daily operations for more than one year is choose. This duration is considered appropriate for an investigation of the ES post-implementation phase. For the target group, the questionnaire will be distributed to superiors who have had at least five workers under his/her supervision in order to gain more variation in the data and thus guarantee the accuracy of the results. During data collection, the KI mechanism is focusing on rather than the knowledge that is to be integrated (as long the knowledge is ES-related knowledge, see Chapter 2, Section 2.9). KI mechanisms will be captured based on Grant's (1996b) knowledge-based theory (KBT) and the discussion by Huang and Newell (2003) which provide the study with an understanding of practical KI mechanisms in managing the ES post-implementation phase (Chapter 5). According to this scope of research, the data are gathered by disseminating questionnaires on the investigated areas.

1.9 The Thesis Outline

This section provides an overview of the chapters in this thesis. The remainder of this thesis is organised as follows:

Chapter 2 – *Literature Review*

A review of the related literature is presented in this chapter. Extant studies that are related to the research domain are analysed in order to show the motivation for the present research. For the topics which are particularly focused on, thorough discussions are presented in the relevant chapters. Chapter 2 also acts as the knowledge base for this research.

Chapter 3 – *Research Methodology*

This chapter discusses the methodology that is used to conduct the study, including the research approach to be used and a step by step explanation of the research design.

Chapter 4 – *Research Model Development*

The development of the theoretical model of leadership styles and ES success without and with involvement from KI mechanism are discussed in this chapter. The research model diagram is introduced in this chapter in order to promote KI mechanisms as a mediator between two leadership styles and ES success and to demonstrate the importance of KI to the survival and success of ES implementation in the organisation.

Chapter 5 – *Analysis, Results and Discussion*

In this chapter, the analysis of the data after the data are collected are discusses in details. This chapter also discusses whether or not the hypotheses of the study are supported and either KI mechanism mediates the leadership styles and ES success.

Chapter 6 – *Contributions and Conclusion*

The final chapter of this thesis discusses the contributions of the study. This chapter also presents the conclusions from the findings in order to demonstrate the importance of the

findings to the survival of an ES in an organisation. This chapter also offer suggestions for further extensions of the research.

REFERENCES

- Ab.Rahim, N. Z. (2009). *Multiple Perspectives of Open Source Software Appropriation in Malaysia Public Sector*. Universiti Teknologi Malaysia: Doctor of Philosophy.
- Abilia, K., Thani, F. N., Mokhtarian, F. and Rashidi, M. M. (2011). The Role of Effective Factors on Organizational Knowledge Sharing. *Procedia - Social and Behavioral Sciences*, 29, 1701-1706.
- Ahmad, M. M. and Cuenca, R. P. (2013). Critical Success Factors for ERP Implementation in SMEs. *Robotics and Computer-Integrated Manufacturing*, 29(3), 104-111.
- Ahmad, M. N. (2009). *An Ontology Server for Ontology-Based Interoperation of Information Systems*. Doctor of Philosophy. University of Queensland, Queensland.
- Ahmad, M. N., Zakaria, N. H. and Sedera, D. (2011). Ontology-based Knowledge Management for Enterprise Systems. *International Journal of Enterprise Information Systems*, 7(4), 64-90.
- Alavi, M. and Tiwana, A. (2002). Knowledge Integration in Virtual Teams: The Potential Role of KMS. *Journal of the American Society for Information Science and Technology*, 53(12), 1029-1037.
- Aliaga, M. and Gunderson, B. (2000). *Interactive Statistic*. Saddle River, NJ: Prentice Hall.
- Aloini, D., Dulmin, R. and Mininno, V. (2007). Risk Management in ERP Project Introduction: Review of the Literature. *Information & Management*, 44(6), 547-567.

- Aman, A. and Kasimin, H. (2011). e-Procurement Implementation: A Case of Malaysia Government. *Transforming Government: People, Process and Policy*, 15(4), 330-344.
- Amid, A., Moalagh, M. and Ravasan, A. Z. (2012). Identification and Classification of ERP Critical Failure Factors in Iranian Industries. *Information Systems*, 37(3), 227-237.
- Apostolou, D., Mentzas, G., Stojanovic, L., Thoenssen, B. and Lobo, T. P. (2010). A Collaborative Decision Framework for Managing Changes in e-Government Services. *Government Information Quarterly*, 28(1), 101-116.
- Arrow, H. and McGrath, J. (1995). Membership Dynamics in Groups at Work - A Theoretical Framework. *Research in Organizational Behavior: An Annual Series of Analytical Essays and Critical Reviews*, 17, 373-411.
- Avolio, B. J. and Bass, B. M. (1999). Re-examining the Components of Transformational and Transactional Leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organisational Psychology*, 72, 441-462.
- Bai, C. and Sarkis, J. (2013). A Grey-based DEMATEL Model for Evaluating Business Process Management Critical Success Factors. *Int. J. Production Economics*, 146(1), 281-292.
- Ballantine, J., Bonner, M., Levy, M., Martin, A., Munro, I. and Powell, P. L. (1996). The 3-D Model of Information Systems Success: The Search for the Dependent Variable Continues. *Information Resources Management Journal*, 9(4), 5-14.
- Bani-Hani, A. I., Hinde, C. J. and Jackson, T. W. (2011). Knowledge Management, Sharing and ERP Systems in a Small Company. *Proceedings of International Conference on Information & Communication Systems*, Irbid, Jordan, 24-27.
- Baron, R. M. and Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bartlett, J. E., Kotrlik, J. W. and Higgins, C. C. (2001). Organizational Research: Determining Appropriate Sample Size in Survey Research. *Information Technology, Learning, and Performance*, 19(1), 43-50.

- Basaglia, S., Caporarello, L., Magnib, M. and Pennarola, F. (2010). IT Knowledge Integration Capability and Team Performance: The Role of Team Climate. *International Journal of Information Management*, 30(6), 542-551.
- Basoglu, N., Daimb, T. and Kerimoglu, O. (2007). Organizational Adoption of Enterprise Resource Planning Systems: A Conceptual Framework. *Journal of High Technology Management Research*, 18(1), 73-97.
- Bass, B. M. (1985). *Leadership and Performance Beyond Expectations*. New York: Free Press.
- Bass, B. M. (1995). Theory of Transformational Leadership Redux. *The Leadership Quarterly*, 6, 463-478.
- Bass, B. M. (1997). Does the Transactional-Transformational Leadership Paradigm Transcend Organizational and National Boundaries. *American Psychologist*, 52(2), 130-139.
- Bass, B. M. (1999). Two Decades of Research and Development in Transformational Leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9-32.
- Bass, B. M. and Avolio, B. J. (1993). Transformational Leadership and Organizational Culture. *Public Administration Quarterly*, 17(1), 112-121.
- Bass, B. M. and Riggio, R. E. (2006). *Transformational Leadership* (2nd ed.): Mahwah, N.J : Lawrence Erlbaum Associates Inc.
- Bennis, W. (2009). *On Becoming a Leader : The Leadership Classic*. U.S. A : Basic Books.
- Bhardwaj, M. and Monin, J. (2006). Tacit to Explicit: An Interplay Shaping Organization Knowledge. *Journal of Knowledge Management*, 10(3), 72-85.
- Bhatt, G. D. (2000). Organizing Knowledge in the Knowledge Development Cycle. *Journal of Knowledge Management*, 4(1), 15-26.
- Birasnav, M. (2014). Knowledge Management and Organizational Performance in the Service Industry: The Role of Transformational Leadership beyond the Effects of Transactional Leadership. *Journal of Business Research*, 67(8), 1622-1629.
- Blum, K. D. and Preiss, A. E. (2005). Strategies to Win: Six-Steps for Creating Problem Statements in Doctoral Research. *Journal of College Teaching & Learning*. 2 (11), 47-51.

- Boudreau, M.-C., Gefen, D. and Straub, D. W. (2001). Validation in Information Systems Research: A State-of-Art Assessment. *MIS Quarterly*, 25(1), 1-16.
- Braun, S., Peus, C., Weisweiler, S. and Frey, D. (2013). Transformational Leadership, Job Satisfaction, and Team Performance: A Multilevel Mediation Model of Trust. *The Leadership Quarterly*. 24(1), 270-283.
- Brown, J. S. and Duguid, P. (1998). Organizing Knowledge. *California Management Review*, 40(3), 90-111.
- Bryant, S. E. (2003). The Role of Transformational and Transactional Leadership in Creating, Sharing and Exploiting Organizational Knowledge. *The Journal of Leadership and Organizational Studies*. 9(4), 32.
- Burrell, G. and Morgan, G. (1979). *Sociological Paradigms and Organisational Analysis: Elements of the Sociology of Corporate Life*. London: Heinemann Educational Books.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Canonico, P., Nito, E. D. and Mangia, G. (2012). Control Mechanisms and Knowledge Integration in Exploitative Project Teams: A Case Study from the Coal Fired Power Plant Industry. *Journal of Knowledge Management*, 16(4), 538-549.
- Chan, E. and Mills, A. (2011). Implementation of Enterprise Resource Planning (ERP) Software in a Major Construction Contracting Organization in Hong Kong. *International Journal of Managing Projects in Business*. 4(1), 168-178.
- Chan, E. Walker, D. H. T. and Mills, A. (2009). Using a KM Framework to Evaluate an ERP System Implementation. *Journal of Knowledge Management*, 13(2), 93-109.
- Chan, R. and Rosemann, M. (2001). Managing Knowledge in Enterprise Systems. *Journal of Systems and Information Technology*, 5(2), 37-54.
- Chang, M.-Y., Hung, Y.-C., Yen, D. C. and Tseng, P. T. Y. (2009). The Research on the Critical Success Factors of Knowledge Management and Classification Framework Project in the Executive Yuan of Taiwan Government. *Expert Systems with Applications*, 36, 5376-5386.

- Chen, Y. (2012). The Empirical Analysis Model on Critical Success Factors for Emergency Management Engineering Information System. *Systems Engineering Procedia*, 5, 234-239.
- Chin, W. W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. In G. A. Marcoulides (Ed.), *Modern Methods for Business Research* (pp. 295-358). Mahwah, New Jersey: Lawrence Erlbaum.
- Chin, W. W., Marcolin, B. L. and Newsted, P. R. (1996). A Partial Least Squares Latent Variable Modeling Approach for Measuring Interaction Effects: Results from a Monte Carlo Simulation Study and Voce Mail Emotion/Adoption Study. *Proceeding of Seventeenth International Conference on Information System*. 16-18 December 1996. Cleveland, Ohio,
- Cho, J., Park, I. and Michel, J. W. (2011). How Does Leadership Affect Information Systems Success? The Role of Transformational Leadership. *Information & Management*. 48(7), 270-277.
- Chou, H.-W., Chang, H.-H., Lin, Y.-H. and Chou, S.-B. (2014). Drivers and Effects of Post-implementation Learning on ERP Usage. *Computers in Human Behavior*, 35, 267-277.
- Chou, H.-W., Chang, H.-H., Lin, Y.-H. and Chou, S.-B. (2014a). Drivers and Effects of Post-implementation Learning on ERP Usage. *Computers in Human Behavior*, 35, 267-277.
- Chou, H.-W., Lin, Y.-H., Lu, H.-S., Chang, H.-H. and Chou, S.-B. (2014b). Knowledge Sharing and ERP System Usage in Post-implementation Stage. *Computers in Human Behavior*, 33, 16-22.
- Chou, S.-W. and Chang, Y.-C. (2008). The Implementation Factors that Influence the ERP (Enterprise Resource Planning) Benefits. *Decision Support Systems*, 46(1), 149-157.
- Churchill, G. A. J. (1979). A Paradigm for Developing better Measures of Marketing Constructs. *Journal of Marketing Research*, 16(1), 64-73.
- Cochran, W. G. (1977). *Sampling Techniques* (3rd ed.). Canada: John Wiley & Sons, Inc.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Science*. New Jersey: Lawrence Erlbaum Associates.

- Cohen, J. (1992). A Power Primer. *Psychological Bulletin*, 112(1), 155-159.
- Conger, J. A. and Kanungo, R. N. (1987). Toward a Behavioral Theory of Charismatic Leadership in Organizational Settings. *The Academy of Management Review*, 12(4), 637-647.
- Conger, J. A. and Kanungo, R. N. (1998). *Charismatic Leadership in Organizations*. United States of America: SAGE
- Connelly, S. and Ruark, G. (2010). Leadership Style and Activating Potential Moderators of the Relationships among Leader Emotional Displays and Outcomes. *The Leadership Quarterly*, 21, 745-764.
- Cook, S. D. and Brown, J. S. (1999). Bridging Epistemologies: The Generative Dance Between Organizational Knowledge and Organizational Knowing. *Organization Science*, 10(4), 381-400.
- Council, A. B. D. (2002). ABDC Journal Quality List 2013. Retrieved from ABDC Australian Business Deans Council website: <http://www.abdc.edu.au/journalreview.html>
- Cronbach, L. J. (1951). Coefficient Alpha and the Internal Structure of Tests *Psychometrika*, 16(3), 297-333.
- Cronbach, L. J. and Meehl, P. E. (1955). Construct Validity in Psychological Tests. *Psychological Bulletin*, 52, 281-302
- Crossman, A. (2014), <http://sociology.about.com/od/Researchtools/a/Computer-programs-quantitative-data.htm>
- Davenport, T. H. and Prusak, L. (1998). *Working Knowledge: How Organizations Manage What They Know*. Boston, Massachusetts: Harvard Business School Press.
- Dawes, J. (2008), "Do Data Characteristics Change According to the Number of Scale Points Used? An Experiment using 5-point, 7-point and 10-Point Scales", *International Journal of Market Research*, 50 (1), 61-77.
- Dawson, J. (2008). Critical Success Factors in the Chartering Phase: A Case Study of an ERP Implementation. *International Journal of Enterprise Information Systems*, 4(3), 9-24.
- De Boer, M., Van Den Bosch, F. A. J. and Volberda, H. W. (1999). Managing Organizational Knowledge Integration in the Emerging Multimedia Complex. *Journal of Management Studies*, 36(3), 381-398.

- DeLone, W. H. and McLean, E. R. (1992). Information System Success: The Quest for Dependent Variable. *Information Systems Research*, 3(1), 60-95.
- DeLone, W. H. and McLean, E. R. (2002). Information Systems Success: A Ten-Year Update. *Journal of Management Information Systems*, 19(4), 9-30.
- Dezdar, S. and Ainin, S. (2011). The Influence of Organizational Factors on Successful ERP Implementation. *Management Decision*, 46(6), 911-926.
- Diamantopoulos, A. (2011). Incorporating Formative Measures into Covariance-Based Structural Equation Models. *MIS Quarterly*, 35(2), 335-358.
- Diamantopoulos, A. and Winklhofer, H. M. (2001). Index Construction with Formative Indicators: An Alternative to Scale Development. *Journal of Marketing Research*, 38(2), 269-276.
- Diamantopoulos, A., Riefler, P. and Roth, K. P. (2008). Advancing Formative Measurement Models. *Journal of Business Research*, 61, 1203-1218.
- Diamantopoulos, A., Sarstedt, M., Fuchs, C., Wilczynski, P. and Kaiser, S. (2012). Guidelines for Choosing between Multi-item and Single-item Scales for Construct Measurement: A Predictive Validity Perspective. *Journal of the Academy of Marketing Science*, 40(3), 434-449.
- Dittrich, Y., Vaucouleur, S. and Giff, S. (2009). ERP Customization as Software Engineering: Knowledge Sharing and Cooperation. *IEEE Software*.
- Dubé, L. and Dubé, L. (2003). Rigor in Information Systems Positivist Case Research: Current Practices, Trends, and Recommendations. *MIS Quarterly*, 27(4).
- Ebrahim, Z. and Irani, Z. (2005). e-Government Adoption: Architecture and Barriers. *Business Process Management Journal*, 11(5), 589-611.
- Edwards, J. R. and Bagozzi, R. P. (2000). On the Nature and Direction of Relationships between Constructs and Measures *Psychological Method*, 5(2), 155-174
- Ehie, I. C. and Madsen, M. (2005). Identifying Critical Issues in Enterprise Resource Planning (ERP) Implementation. *Computers in Industry*, 56, 545-557.
- Elkhani, N., Soltani, S. and Ahmad, M. N. (2014). The Effects of Transformational Leadership and ERP System Self-Efficacy on ERP System Usage. *Journal of Enterprise Information Management*, 27(6), 756-785.

- Ellis, L. (1994). *Research Method in the Social Sciences* U.S.A: Wmm. C. Brown Communication, Inc.
- Elragal, A. and Haddara, M. (2013). The Impact of ERP Partnership Formation Regulations on the Failure of ERP Implementations. *Procedia Technology*, 9, 527-535.
- Emory, C. W. and Cooper, D. R. (1991). *Business Research* (4th ed.). U.S.A: Richard D. Irwin, Inc.
- Enberg, C. (2012). Enabling Knowledge Integration in Coopetitive R&D Projects—The Management of Conflicting Logics. *International Journal of Project Management*, 1-10.
- Epitropaki, O. and Martin, R. (2005). The Moderating Role of Individual Differences in the Relation between Transformational/Transactional Leadership Perceptions and Organizational Identification. *The Leadership Quarterly*, 16(4), 569-589.
- Eseryel, U. Y. and Eseryel, D. (2013). Action-Embedded Transformational Leadership in Self-Managing Global Information Systems Development Teams. *Journal of Strategic Information Systems*, 22(2), 103-120.
- Esterhuizen, D., Schutte, C. S. L. and Toit, A. S. A. d. (2012). Knowledge Creation Processes as Critical Enablers for Innovation. *International Journal of Information Management*, 32(4), 354-364.
- Fadel, K. J. and Durcikova, A. (2014). If It's Fair, I'll Share: The Effect of Perceived Knowledge Validation Justice on Contributions to an Organizational Knowledge Repository. *Information & Management*, 51(5), 511-519.
- Fornell, C. and Bookstein, F. L. (1982). Two Structural Equation Models: LISREL and PLS Applied to Consumer Exit-Voice Theory. *Journal of Marketing Research*, 19(4), 440-452.
- Furlong, S. and Al-Karaghoul, W. (2010). Delivering Professional Projects: The Effectiveness of Project Management in Ttransformational e-Government Initiatives. *Transforming Government: People, Process and Policy*, 4(1), 73-94.
- Gable, G. G. (2008). Re-Conceptualizing Information System Success: The IS-Impact Measurement Model. *Journal of the Association for Information Systems*. 9(7), 377-408.

- Gagnon, R. J. (1982). Empirical Research: The Burdens and the Benefits. *Interfaces*, 12(4), 98-102.
- Galliers, R. D. and Land, F. F. (1987). Choosing Appropriate Information Systems Research Methodologies. *Communication of the ACM*, 30(11).
- Galy, E. and Saucedo, M. J. (2014). Post-Implementation Practices of ERP Systems and their Relationship to Financial Performance. *Information & Management* 51(3), 310-319.
- Garg, P. (2010). Critical Failure Factors for Enterprise Resource Planning Implementations in Indian Retail Organizations: An Exploratory Study. *Journal of Information Technology Impact*. 10(1), 35-44.
- Geerts, G. L. (2011). A Design Science Research Methodology and its Application to Accounting Information Systems Research. *International Journal of Accounting Information Systems*, 12, 142-151.
- Ghazali, R. and Zakaria, N. H. (2013). Knowledge Management Process in Enterprise Systems: A Systematic Literature Review. In M. N. Ahmad, R. M. Colomb & M. S. Abdullah (Eds.), *Ontology-Based Applications for Enterprise Systems and Knowledge Management*. U.S.A: IGI Global.
- Gooty, J., Connelly, S., Griffith, J. and Gupta, A. (2010). Leadership, Affect and Emotions: a State of the Science Review. *The Leadership Quarterly*, 21, 979-1004.
- Grant, R. M. (1996a). Prospering in Dynamically-Competitive Environments: Organizational Capability as Knowledge Integration. *Organization Science*, 7(4), 375-387.
- Grant, R. M. (1996b). Toward a Knowledge-Based Theory of The Firm. *Strategic Management Journal*, 17 (Winter Special Issue), 109-122.
- Greenleaf, R. K. (1977). *Servant Leadership*. New York: Paulist Press.
- Groves, K. S. and LaRocca, M. A. (2012). Does Transformational Leadership Facilitate Follower Beliefs in Corporate Social Responsibility? A Field Study of Leader Personal Values and Follower Outcomes. *Journal of Leadership & Organizational Studies*, 19 (2), 215-229.

- Haddad, M. G. (2008). *Knowledge Integration for Problem Solving in the Development of Complex Aerospace Systems*. Massachusetts Institute of Technology: Doctor of Philosophy,
- Hahn, J. and Wang, T. (2009). Knowledge Management Systems and Organizational Knowledge Processing Challenges: A Field Experiment. *Decision Support Systems*, 47(4), 332-342.
- Haines, M. N. and Goodhue, D. L. (2003). Implementation Partner Involvement and Knowledge Transfer in the Context of ERP Implementations. *International Journal of Human-Computer Interaction*, 16(1), 23-38.
- Hair, J. F., Hult, G. T. M., Ringle, C. M. and Sarstedt, M. (2013). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (1st ed.). United States of America: SAGE Publications Inc.
- Hair, J. F., Ringle, C. M. and Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-151.
- Hair, J. F., Sarstedt, M., Ringle, C. M. and Mena, J. A. (2012). An Assessment of the Use of Partial Least Squares Structural Equation Modeling in Marketing Research. *Journal of the Academy of Marketing Science*, 40, 414-433.
- Hakim, A. and Hakim, H. (2010). A Practical Model on Controlling ERP Implementation Risk. *Information Systems*, 35(2), 204-214.
- Hardin, G. (1968). The Tragedy of the Commons. *Science*, 162, 1243-1248.
- Helm, S., Eggert, A. and Garnefeld, I. (2010). Modeling the Impact of Corporate Reputation on Customer Satisfaction and Loyalty using Partial Least Squares. In V. E. Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of Partial Least Squares* (pp. 515-534). Berlin: Springer Berlin Heidelberg.
- Helo, P., Anussornnitisarn, P. and Phusavat, K. (2008). Expectation and Reality in ERP Implementation: Consultant and Solution Provider Perspective. *Industrial Management & Data Systems*, 108 (8), 1045-1059.
- Henseler, J. and Chin, W. W. (2010). A Comparison of Approaches for the Analysis of Interaction Effects Between Latent Variables Using Partial Least Squares Path Modeling. *Structural Equation Modeling*, 17, 82-109.
- Henseler, J. and Sarstedt, M. (2013). Goodness-of-fit Indices for Partial Least Squares Path Modeling. *Computational Statistics*, 28(2), 565-580.

- Henseler, J., Ringle, C. M. and Sinkovics, R. R. (2009). The use of Partial Least Squares Path Modeling in International Marketing. *Advances in International Marketing*, 20, 277-319.
- Hirschheim, R. and Klein, H. (1989). Four Paradigms of Information Systems Development. *Communication of the ACM*, 32(10), 1199-1216.
- Hobbes, T. (1651/1939). *Leviathan*. New York: Modern Library.
- Hoch, J. E. and Dulebohn, J. H. (2013). Shared Leadership in Enterprise Resource Planning and Human Resource Management System Implementation. *Human Resource Management Review*, 23(1), 114-125.
- Holsapple, C. W. and Joshi, K. D. (2001). Organizational Knowledge Resources. *Decision Support Systems*, 31(1), 39-54.
- Hong, K.-K. and Kim, Y.-G. (2002). The Critical Success Factors for ERP Implementation: An Organizational Fit Perspective. *Information & Management*, 40(1), 25-40.
- Huang, J. C. and Newell, S. (2003). Knowledge Integration Processes and Dynamics Within the Context of Cross-Functional Projects. *International Journal of Project Management*. 21(3), 167–176.
- Hung, W.-H., Ho, C.-F., Jou, J.-J. and Kung, K.-H. (2012). Relationship Bonding for a Better Knowledge Transfer Climate: An ERP Implementation Research. *Decision Support Systems*, 52(2), 406-414.
- Hur, Y., Berg, P. T. V. D. and Wilderom, C. P. M. (2011). Transformational Leadership as a Mediator between Emotional Intelligence and Team Outcomes. *The Leadership Quarterly*, 22, 591-603.
- Häkkinen, L. and Hilmola, O.-P. (2008). ERP Evaluation During the Shakedownphase: Lessons From an After-Sales Division. *Information Systems Journal*, 18, 73-100.
- IBM. (2013). SPSS Software Retrieved 14 April, 2013, from <http://www-01.ibm.com/software/analytics/spss/>
- Ingebrigtsen, T., Georgiou, A., Clay-Williams, R., Magrabi, F., Hordern, A., Prgomet, M., et al. (2014). The Impact of Clinical Leadership on Health Information Technology Adoption: Systematic Review. *International Journal of Medical Informatics*, 83(6), 393-405.

- Jacobson, S., Shepherd, J., D'Aquila, M. and Carter, K. (2007). The ERP Market Sizing Report, 2006–2011 *ERP 2007 Market Sizing Series*: AMR Research.
- James E. Bartlett, I., Kotrlik, J. W. and Higgins, C. C. (2001). Organizational Research: Determining Appropriate Sample Size in Survey Research. *Information Technology, Learning, and Performance*, 19(1), 43-50.
- Jarke, M., Jeusfeld, M. A., Peters, P. and Pohl, K. (1997). Coordinating Distributed Organizational Knowledge. *Data & Knowledge Engineering*, 23(3), 247-268.
- Jarvis, C. B., Mackenzie, S. B. and Podsakoff, P. M. (2003). A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research. *Journal of Consumer Research* 30.
- Joia, L. A., Gradvohl de Macêdo, D. and Gaete de Oliveira, L. (2014). Antecedents of Resistance to Enterprise Systems: The IT Leadership Perspective. *The Journal of High Technology Management Research*, Corrected proof.
- Jones, K. and Leonard, L. N. K. (2009). From Tacit Knowledge to Organizational Knowledge for Successful KM. In W. R. King (Ed.), *Knowledge Management and Organizational Learning* (pp. 27-39).
- Jones, M. C., Cline, M. and Ryan, S. (2006). Exploring Knowledge Sharing in ERP Implementation: An Organizational Culture Framework. *Decision Support Systems*, 41(2), 411-434.
- Jung, J., Choi, I. and Song, M. (2007). An Integration Architecture for Knowledge Management Systems and Business Process Management Systems. *Computers in Industry*. 58(1), 21-34.
- Kanawattanachai, P. and Yoo, Y. (2007). The Impact of Knowledge Coordination on Virtual Team Performance Over Time. *MIS Quarterly*, 31(4), 783-808.
- Kao, S.-C. and Wu, C. (2012). A Personalized Information and Knowledge Integration Platform for DL Service. *Library Hi Tech*, 30(3), 490-512.
- Kaplan, B. and Duchon, D. (1988). Combining Qualitative and Quantitative Methods in Information Systems Research: A Case Study. *MIS Quarterly*, 12(4), 571-586.
- Ke, W. and Wei, K. K. (2008). Organizational Culture and Leadership in ERP Implementation. *Decision Support Systems*. 45(2), 208-218.

- Kim, D.-Y. and Grant, G. (2010). E-government Maturity Model using the Capability Maturity Model Integration. *Journal of Systems and Information Technology*, 12(3), 230-244.
- Kim, S. (2003). Research Paradigms in Organizational Learning and Performance: Competing Modes of Inquiry. *Information Technology, Learning, and Performance*, 21(1).
- King, S. F. and Burgess, T. F. (2006). Beyond Critical Success Factors: A Dynamic Model of Enterprise System Innovation. *International Journal of Information Management*, 26(1), 59-69.
- Kitchenham, B. and Pfleeger, S. L. (2002). Principles of Survey Research Part 5: Populations and Samples *Software Engineering Notes*, 27(5), 17-20.
- Ko, D.-G., Kirsch, L. J. and King, W. R. (2005). Antecedents of Knowledge Transfer from Consultants to Clients in Enterprise System Implementations. *MIS Quarterly*, 29(1), 59-85.
- Kogut, B. and Zander, U. (1992). Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology. *Organization Science*, 3(3), 383-397.
- Koh, S. C. L., Gunasekaran, A. and Goodman, T. (2011). Drivers, Barriers and Critical Success Factors for ERP II Implementation in Supply Chains: A Critical Analysis. *Journal of Strategic Information Systems*. 20(4), 385-402.
- Kotter, J. (2013). Management is (Still) Not Leadership. *HBR Blog Network*, 2013, from <http://blogs.hbr.org/2013/01/management-is-still-not-leadership/>
- Krone, O., Syvajarvi, A. and Stenvall, J. (2009). Knowledge Integration for Enterprise Resources Planning Application Design. *Knowledge and Process Management*. 16(1), 1-12.
- Kuhn, T. S. (1962). *The Structure of Scientific Revolutions* (3rd ed.). Chicago, London: University Chicago Press, Ltd.
- Kumara, A. and Gupta, P. C. (2012). Identification and Analysis of Failure Attributes for an ERP System. *Procedia - Social and Behavioral Sciences*, 65, 986-991.
- Kwahk, K.-Y., Kim, H.-W. and Chan, H. C. (2007). A Knowledge Integration Approach for Organizational Decision Support. *Journal of Database Management*. 18(2), 41-61.
- Law, C. C. H., Chen, C. C. and Wu, B. J. P. (2010). Managing the Full ERP Life-Cycle: Consideration of Maintenance and Support Requirements and IT

- Governance Practice as Integral Elements of the Formula for Successful ERP Adoption. *Computers in Industry*, 61(3), 297-308.
- Lawrence, P. R. and Lorsch, J. W. (1967). *Organization and Environment: Managing Differentiation and Integration*. Boston: Harvard University.
- Lee, D., Lee, S. M. and Olson, D. L. (2009). The Effect of Organizational Support on ERP Implementation. *Industrial Management & Data Systems*. 110(2), 269-283.
- Lee, Z. and Lee, J. (2000). An ERP Implementation Case Study from a Knowledge Transfer Perspective. *Journal of Information Technology*, 15(4), 281–288.
- Levin, R. C., Klevorick, A. K., Nelson, R. R. and Winter, S. G. (1987). Appropriating the Returns from Industrial Research and Development *Brookings Papers on Economic Activity*, 3, 783-820.
- Li, Y., Liao, X. W. and Lei, H. Z. (2006). A Knowledge Management System for ERP Implementation. *Systems Research and Behavioral Science*, 23(2), 157-168.
- Li, Z., Yezhuang, T. and Ping, L. (2005). Organizational Knowledge Sharing Based on the ERP Implementation of Yongxin Paper Co., Ltd. In M. Jennex (Ed.), *Case Studies in Knowledge Management* (pp. 155-164). Hershey: IGI.
- Liang, H., Saraf, N., Hu, Q. and Xue, Y. (2007). Assimilation of Enterprise Systems: The Effect of Institutional Pressure and Mediating Role of Top Management. *MIS Quarterly*, 31(1), 59-87.
- Liu, J., Liu, X. and Zeng, X. (2011). Does Transactional Leadership Count for Team Innovativeness? The Moderating Role of Emotional Labor and the Mediating Role of Team Efficacy. *Journal of Organizational Change Management*. 24(3), 282-298.
- Liu, P.-L. (2011). Empirical Study on Influence of Critical Success Factors on ERP Knowledge Management on Management Performance in High-Tech Industries in Taiwan. *Expert Systems with Applications*. 38(8), 10696–10704.
- Lopez, V. W. B. and Esteves, J. (2009). Overcoming Knowledge Integration Barriers in ERP Implementation using Action Research Approach. *Proceedings of the 2009 AMCIS*. August 6-9. San Francisco, California,

- MacKenzie, S. B., Podsakoff, P. M. and Podsakoff, N. P. (2011). Construct Measurement and Validation Procedures in MIS and Behavioral Research : Integrating New and Existing Techniques. *MIS Quarterly*, 35(2), 293-334.
- MacKinnon, D. P., Fairchild, A. J. and Fritz, M. S. (2007). Mediation Analysis. *The Annual Review of Psychology*, 58, 591-614.
- Malhotra, A., Majchrzak, A., Carman, R. and Lott, V. (2001). Radical Innovation without Collocation: A Case Study at Boeing-Rocketdyne. *MIS Quarterly*, 25(2), 229-249
- Malone, D. (2002). Knowledge Management A Model for Organizational Learning. *International Journal of Accounting Information Systems*, 3(2), 111-123.
- Mann, R. D. (1959). A Review of the Relationship between Personality and Performance in Small Groups. *Psychological Bulletin*, 56(4), 241-270.
- Mannering, D. E. and Wilde, K. D. (1991). *How Good Managers Become Great Leaders*. Green Bay, WI: Options Unlimited, Inc.
- Matavire, R., Chigona, W., Roode, D., Sewchurran, E., Davids, Z., Mukudu, A., et al. (2010). Challenges of eGovernment project implementation in a South African context. *Electronic Journal of Information System Evaluation*, 13(2), 153-164.
- Mathrani, S. and Mathrani, A. (2013). Utilizing Enterprise Systems for Managing Enterprise Risks. *Computers in Industry*, 64(4), 476-483.
- Mccarthy, D. J., Puffer, S. M., May, R. C., Ledgerwood, D. E. and Jr, W. H. S. (2008). Overcoming Resistance to Change in Russian Organizations: The Legacy of Transactional Leadership. *Organizational Dynamics*, 37(3), 221-235.
- McGinnis, T. C. and Huang, D. Z. (2004). Incorporation of Knowledge Management into ERP Continuous Improvement: A Research Framework. *Issues in Information Systems*, 5(2), 612-618.
- McGinnis, T. C. and Huang, Z. (2007). Rethinking ERP Success: A New Perspective from Knowledge Management and Continuous Improvement. *Information & Management*, 44(7), 626-634.
- McKenzie, J., Winkelen, C. v. and Grewal, S. (2012). Developing Organisational Decision-making Capability: A Knowledge Manager's Guide. *Journal of Knowledge Management*, 15(3), 403-421.

- Melin, U. and Axelsson, K. (2009). Managing e-Service Development –Comparing Two e-Government Case Studies. *Transforming Government: People, Process and Policy*, 3(3), 248-270.
- Menard, S. W. (1995). *Applied Logistic Regression Analysis: Sage University Series on Quantitative Applications in the Social Science*. Thousand Oaks, CA: Sage.
- Mendoza, L. E., Marius, A., Pérez, M. and Grimán, A. C. (2007). Critical Success Factors for a Customer Relationship Management Strategy. *Information and Software Technology*, 49(8), 913-945.
- Menges, J. I., Walter, F., Vogel, B. and Bruch, H. (2011). Transformational Leadership Climate: Performance Linkages, Mechanisms, and Boundary conditions at the organizational level. *The Leadership Quarterly*, 22, 893-909.
- Messick, D. M., Wilke, H., Brewer, M. B., Kramer, R. M., Zemke, P. E. and Lui, L. (1983). Individual Adaptations and Structural Change as Solutions to Social Dilemmas. *Journal of Personality and Social Psychology*, 44(2), 294-309.
- Miguel Maldonado, V. S. (2013). User Satisfaction as the Foundation of the Success Following an ERP Adoption: An Empirical Study from Latin America. *International Journal of Enterprise Information Systems*, 9(3), 77-99.
- Minbaeva, D. B. (2013). Strategic HRM in Building Micro-Foundations of Organizational Knowledge-Based Performance. *Human Resource Management Review*, 23(4), 378-390.
- Mitchell, V. L. (2006). Knowledge Integration and Information Technology Project Performance. *MIS Quarterly*, 30(4), 919-939.
- Mohan, K. and Ramesh, B. (2007). Traceability-based Knowledge Integration in Group Decision and Negotiation Activities. *Decision Support Systems*, 43, 968-989.
- Motwani, J., Subramanian, R. and Gopalakrishna, P. (2005). Critical Factors for Successful ERP Implementation: Exploratory Findings from Four Case Studies. *Computers in Industry*, 56(6), 529-544.
- Motwani, J., Mirchandani, D., Madan, M. and Gunasekaran, A. (2002). Successful Implementation of ERP Projects: Evidence from Two Case Studies. *International Journal of Production Economics*, 75(1-2), 83-96.

- Myers, B. L., Kappelman, L. A. and R.Prybutok, V. (1998). A Comprehensive Model for Assessing the Quality and Productivity of the Information Systems Function: Toward a Theory for Information Systems Assessment. *Information Resources Management Journal*, 10(1), 6-25.
- Myers, M. D. (1997). Qualitative Research in Information Systems. *MIS Quarterly*, 21(2), 241.
- Nah, F. F.-H., Islam, Z. and Tan, M. (2007). Empirical Assessment of Factors Influencing Success of Enterprise Resource Planning Implementations. *Journal of Database Management*, 18(4), 26-50.
- Nah, F. F.-H., Zuckweiler, K. M. and Lau, J. L.-S. (2003). ERP Implementation: Chief Information Officers' Perceptions of Critical Success Factors. *International Journal of Human-Computer Interaction*, 16(1), 5-22.
- Nemanich, L. A. and Vera, D. (2009). Transformational Leadership and Ambidexterity in the Context of an Acquisition. *The Leadership Quarterly*, 20, 19-33.
- Newell, S., Huang, J. and Tansley, C. (2006). ERP Implementation: A Knowledge Integration Challenge for the Project Team. *Knowledge and Process Management*, 13(4), 227-238.
- Newell, S., Tansley, C. and Huang, J. (2004). Social Capital and Knowledge Integration in an ERP Project Team: The Importance of Bridging and Bonding. *British Journal of Management*. 15(1), 43-57.
- Nguyen, H. N. (2009). Leadership Behaviors, Organizational Culture and Knowledge Management Practices : An Empirical Investigation. *Journal of Management Development*, 30(2), 206-221.
- Nielsen, K. and Cleal, B. (2011). Under Which Conditions Do Middle Managers Exhibit Transformational Leadership Behaviors? An Experience Sampling Method Study on the Predictors of Transformationa Leadership Behaviors. *The Leadership Quarterly*. 22(2), 344-352.
- Nikolaos, K. and Yiannis, T. (2013). The Leadership's Information System of New Performance Management Practices after Mergers & Acquisitions. *Procedia - Social and Behavioral Sciences*, 73, 634-642.

- Nixon, P., Harrington, M. and Parker, D. (2012). Leadership Performance is Significant to Project Success or Failure: A Critical Analysis. *International Journal of Productivity and Performance Management*, 61(2), 204-216.
- Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*. 5(1), 14-37.
- Nonaka, I., Toyama, R. and Konno, N. (2000). SECI, Ba and Leadership: A Unified Model of Dynamic Knowledge Creation. *Long Range Planning*, 33(1), 5-34.
- Okhuysen, G. A. and Eisenhardt, K. M. (2002). Integrating Knowledge in Group: How Formal Interventions Enable Flexibility. *Organization Science*, 13(4), 370-386.
- O'Leary, D. E. (2002). Knowledge Management Across the Enterprise Resource Planning Systems Life Cycle. *International Journal of Accounting Information Systems*, 3(2), 99-110.
- Orlikowski, W. J. and Baroudi, J. J. (1991). Studying Information Technology in Organizations: Research Approaches and Assumptions. *Information Systems Research*, 2(1).
- Palrecha, R., Spangler, W. D. and Yammarino, F. J. (2012). A Comparative Study of Three Leadership Approaches in India. *The Leadership Quarterly*, 23, 146-162.
- Pan, S. L., Newell, S., Huang, J. C. and Cheung, A. W. K. (2001). Knowledge Integration as a Key Problem in an ERP Implementation. Paper presented at the *Twenty-Second International Conference on Information Systems (ICIS)*.
- Pan, S. L., Newell, S., Huang, J. and Galliers, R. D. (2007). Overcoming Knowledge Management Challenges during ERP Implementation: The Need to Integrate and Share Different Types of Knowledge. *Journal of the American Society for Information Science and Technology*, 58(3), 404-419.
- Peng, G. C. and Nunes, M. B. (2009a). Identification and Assessment of Risks Associated with ERP Post-implementation in China. *Journal of Enterprise Information Management*, 22(5), 587-614.
- Peng, G. C. and Nunes, M. B. (2009b). Surfacing ERP Exploitation Risks Through a Risk Ontology. *Industrial Management & Data Systems*, 109(7), 926-942.

- Peng, G. C. and Nunes, M. B. (2010). Why ERP Post-Implementation Fails? Lessons Learned from a Failure Case in China. *Pacific Asia Conference on Information Systems (PACIS 2010)*. 9-12 July. Taipei, Taiwan, 296-307.
- Pentland, B. T. (1995). Information Systems and Organizational Learning: The Social Epistemology of Organizational Knowledge Systems. *Accounting, Management & Information Technology*, 5(1), 1-21.
- Petter, S., Straub, D. and Rai, A. (2007). Specifying Formative Constructs in Information Systems Research. *MIS Quarterly*, 31(4), 623-656.
- Podsakoff, P. M., Bommer, W. H., Podsakoff, N. P. and MacKenzie, S. B. (2006). Relationships between Leader Reward and Punishment Behavior and Worker Attitudes, Perceptions, and Behaviors: A Meta-Analytic Review of Existing and New Research. *Organizational Behavior and Human Decision Processes*, 99, 113-142.
- Polanyi, M. (1966). *The Tacit Dimension*. Garden City, New York: Doubleday & Company, Inc.
- Poon, P. and Wagner, C. (2001). Critical success Factors Revisited: Success and Failure Cases of Information Systems for Senior Executives. *Decision Support Systems*, 30(4), 393-418.
- Poston, R. and Grabski, S. (2001). Financial Impacts of Enterprise Resource Planning Implementations. *International Journal of Accounting Information Systems*, 2(4), 271-294.
- Preacher, K. J. and Hayes, A. F. (2004). SPSS and SAS Procedures for Estimating Indirect Effects in Simple Mediation Models. *Behavior Research Methods*. 36 (4), 717-731.
- Preacher, K. J. and Hayes, A. F. (2008). Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models. *Behavior Research Methods*, 40 (3), 879-891.
- Pries-Heje, L. and Dittrich, Y. (2009). ERP Implementation as Design: Looking at Participatory Design for Means to Facilitate Knowledge Integration. *Scandinavian Journal of Information Systems*, 21(2), 27-58.
- Rai, A., Lang, S. S. and Welker, R. B. (2002). Assessing the Validity of IS Success Models: An Empirical Test and Theoretical Analysis. *Information Systems Research*, 13(1), 50-69.

- Ram, J., Corkindalea, D. and Wu, M.-L. (2013). Implementation Critical Success Factors (CSFs) for ERP: Do They Contribute to Implementation Success and Post-implementation Performance? *International Journal of Production Economics*. 144(1), 157-174.
- Ramirez, D. E. (2010). ERP Crisis Management through Leadership Communication. *International Journal of Management and Information Systems*. 14(1), 15-18.
- Razmi, J., Sangari, M. S. and Ghodsi, R. (2009). Developing a Practical Framework for ERP Readiness Assessment using Fuzzy Analytic Network Process. *Advances in Engineering Software*, 40 (11), 1168-1178.
- Reaves, C. C. (1991). *Quantitative Research for Behavioral Sciences*. Canada: John Wiley & Sons, Inc.
- Reis, R. A. d. and Freitas, M. d. C. D. (2014). Critical Factors on Information Technology Acceptance and Use: An Analysis on Small and Medium Brazilian Clothing Industries. *Procedia Computer Science*, 31, 105-114.
- Remus, U. (2007). Critical Success Factors for Implementing Enterprise Portals: A Comparison with ERP Implementations. *Business Process Management Journal*, 13(4), 538-552.
- Ringle, C. M., Sarstedt, M. and Straub, D. W. (2012). A Critical Look at the Use of PLS-SEM in MIS Quarterly. *MIS Quarterly*, 36(1), 2-14.
- Ringle, C. M., Wende, Sven and Will, A. (2005). SmartPLS, from <http://www.smartpls.de>
- Ross, J. W. and Vitale, M. R. (2000). The ERP Revolution: Surviving vs. Thriving. *Information Systems Frontiers*, 2(2), 233-241.
- Rossiter, J. R. (2002). The C-OAR-SE Procedure for Scale Development in Marketing. *International Journal of Research in Marketing*, 19(4), 305-335.
- Rowold, J. and Schlotz, W. (2009). Transformational and Transactional Leadership and Followers' Chronic Stress (Spring 2009 ed., Vol. 9, pp. 35-48): Kravis Leadership Institute.
- Sale, J. E. M., Lohfeld, L. H. and Brazil, K. (2002). Revisiting the Quantitative-Qualitative Debate: Implications for Mixed-Methods Research. *Quality & Quantity*, 36, 43-53.

- Salkind, N. J. (1997). *Exploring Research* (3rd ed.). New Jersey: Prentice Hall.
- Sarantis, D., Charalabidis, Y. and Askounis, D. (2011). A Goal-Driven Management Framework for Electronic Government Transformation Projects Implementation. *Government Information Quarterly*, 28(1), 117-128.
- Sarros, J. C. and Santora, J. C. (2001). The Transformational-Transactional Leadership Model in Practice. *Leadership & Organization Development Journal*, 22(8), 383-393.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R. and Jr., J. F. H. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): A Useful Tool for Family Business Researchers. *Journal of Family Business Strategy*, 5(1), 105-115.
- Schultze, U. and Leidner, D. E. (2002). Studying Knowledge Management in Information Systems Research: Discourses and Theoretical Assumptions. *MIS Quarterly*, 26(3), 213-242.
- Seddon, P. B. (1997). A Respecification and Extension of the DeLone and McLean Model of IS Success. *Information Systems Research*, 8(3), 240-253.
- Seddon, P. B., Calvert, C. and Yang, S. (2010). A Multi -Project Model of Key Factors Affecting Organizational Benefits from Enterprise Systems. *MIS Quarterly*. 34(2), 305-328.
- Sedera, D. (2009). Knowledge Management for Enterprise Systems: Observations from Small, Medium and Large Organizations. *Proceedings of the 2009 PACIS*. July 10-12. Hyderabad, India,
- Sedera, D. and Gable, G. G. (2010). Knowledge Management Competence for Enterprise System Success. *Journal of Strategic Information Systems*, 19(4), 296-306.
- Sedera, D. and Gable, G. G. (2010). Knowledge Management Competence for Enterprise System Success. *Journal of Strategic Information Systems*, 19(4), 296-306.
- Shamir, B., House, R. J. and Arthur, M. B. (1993). The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory. *Organization Science*, 4(4), 577-594.
- Shanks, G., Parr, A., Hu, B., Corbitt, B., Thanasankit, T. and P.Seddon. (2000). Differences in Critical Success Factors in ERP Systems Implementation in

- Australia and China: A Cultural Analysis. *Proceedings of the 2000 ECIS*. July 3-5. Vienna, Austria, 1-8.
- Shao, Z., Feng, Y. and Hu, Q. (2011). How Leadership Styles Impact Enterprise Systems Success Throughout the Lifecycle: A Theoretical Exploration. *Proceedings of the 2011 JAIS Theory Development Workshop*. December 4-7. Shanghai, China,
- Shao, Z., Feng, Y. and Hu, Q. (2012a). How Leadership Styles Impact Enterprise Systems Success throughout the Lifecycle: A Theoretical Exploration. *45th Hawaii International Conference on System Science (HICSS)*. 4-7 January. Hawaii. 11-135.
- Shao, Z., Feng, Y. and Liu, L. (2012b). The Mediating Effect of Organizational Culture and Knowledge Sharing on Transformational Leadership and Enterprise Resource Planning Systems Success: An Empirical Study in China. *Computers in Human Behavior*. 28(6), 2400-2413.
- Simola, S. K., Barling, J. and Turner, N. (2010). Transformational Leadership and Leader Moral Orientation: Contrasting an Ethic of Justice and an Ethic of Care. *The Leadership Quarterly*, 21, 179-188.
- Smith, B. N., Montagno, R. V. and Kuzmenko, T. N. (2004). Transformational and Servant Leadership: Content and Contextual Comparisons. *Journal of Leadership & Organizational Studies*, 10(4), 80-91.
- Smith, D. N. (1998). Faith, Reason, and Charisma: Rudolf Sohm, Max Weber, and the Theology of Grace. *Sociological Inquiry*, 68(1), 32-60.
- Smith, J. K. (1983). Quantitative Versus Qualitative Research: An Attempt to Clarify the Issue. *Educational Researcher*, 12(3), 6-13.
- Spender, J.-C. (1996). Organizational Knowledge, Learning and Memory: Three Concepts in Search of a Theory. *Journal of Organizational Change Management*, 9(1), 63-78.
- Srivardhana, T. and Pawlowski, S. D. (2007). ERP Systems as an Enabler of Sustained Business Process Innovation: A Knowledge-Based View. *Journal of Strategic Information Systems* 16, 51-69.
- Steckler, A., McLeroy, K. R., Bird, S. T. and McCormick, L. (1992). Toward Integrating Qualitative and Quantitative Methods: An Introduction. *Health Education Quarterly*, 19(1), 1-8.

- Stevens, J. P. (2001). *Applied Multivariate Statistics for the Social Sciences*, Hillsdale, New Jersey, Lawrence Erlbaum Associates.
- Stogdill, R. M. (1948). Personal Factors Associated with Leadership: A Survey of the Literature. *The Journal of Psychology: Interdisciplinary and Applied*, 25(1), 35-71.
- Sullivan, G. M. and Feinn, R. (2012). Using Effect Size—or Why the P Value Is Not Enough. *Journal of Graduate Medical Education*, 4(3), 279-282
- Sun, B. (2007). A Study on Tacit Knowledge Sharing in ERP Enterprises. In L. D. Xu, A. M. Tjao & S. S. Chaudhry (Eds.), *IFIP International Federation for Information Processing* (Vol. 254, pp. 763-770). Boston: Springer.
- Sutton, S. G., Hampton, C., Khazanchi, D. and Arnold, V. (2008). Risk Analysis in Extended Enterprise Environments: Identification of Critical Risk Factors in B2B E-Commerce Relationships. *Journal of the Association for Information System*. 9 (3/4), 151-173.
- Switzer, C. (2008). Time for Change: Empowering Organizations to Succeed in the Knowledge Economy. *Journal of Knowledge Management*, 12(2), 18-28.
- Teece, D. J. (1986). Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy. *Research Policy*, 15(6), 285-305.
- Teittinen, H., Pellinen, J. and Järvenpää, M. (2012). ERP in Action — Challenges and Benefits for Management Control in SME Context. *International Journal of Accounting Information Systems*. 14(4), 278-296.
- Tenenhaus, M., Amato, S. and Esposito Vinzi, V. (2004). A Global Goodness-of-fit Index for PLS Structural Equation Modelling. *Proceedings of the 2004 Proceedings of the XLII SIS Scientific Meeting*. 2004. Padova, Italy, 739-742.
- Tenenhaus, M., Vinzi, V. E., Chatelin, Y.-M. and Lauro, C. (2005). PLS Path Modeling. *Computational Statistics & Data Analysis*, 48(1), 159-205.
- TouVai, F., Lee, L. and Negreiros, J. (2012). Melco Crown Entertainment, Macao, China: The ERP Supply Chain Case of a Post-Implementation Process. *Procedia Technology*, 5, 112-121.
- Trkman, P. (2010). The Critical Success Factors of Business Process Management. *International Journal of Information Management*, 30(2), 125-134.

- Tsai, M.-T., Li, E. Y., Lee, K.-W. and Tung, W.-H. (2011). Beyond ERP Implementation: The Moderating Effect of Knowledge Management on Business Performance. *Total Quality Management & Business Excellence*, 22(2), 131-144.
- Ucakturk, A. and Villard, M. (2013). The Effects of Management Information and ERP Systems on Strategic Knowledge Management and Decision-Making. *Procedia - Social and Behavioral Sciences*, 99, 1035-1043.
- Umble, E. J., Haft, R. R. and Umble, M. M. (2003). Enterprise Resource Planning: Implementation Procedures and Critical Success Factors. *European Journal of Operational Research*, 146(2), 241-257.
- Upadhyay, P., Jahanyan, S. and Dan, P. K. (2011). Factors Influencing ERP Implementation in Indian Manufacturing Organisations: A Study of Micro, Small and Medium-scale Enterprises. *Journal of Enterprise Information Management*. 24 (2), 130-145.
- Wagner, E. L. and Newell, S. (2007). Exploring the Importance of Participation in The Post-Implementation Period of an ES Project: A Neglected Area. *Journal of the Association for Information Systems*. 8(10), 508-524.
- Walker, J. C. and Evers, C. W. (1982). Epistemology and Justifying the Curriculum of Educational Studies. *British Journal of Educational Studies*, 30(2), 213-229.
- Van de Vliert, E. (2006). Autocratic Leadership Around the Globe: Do Climate and Wealth Drive Leadership Culture? *Journal of Cross-Cultural Psychology*, 37(1), 42-59.
- Vandaie, R. (2008). The Role of Organizational Knowledge Management in Successful ERP Implementation Projects. *Knowledge-Based Systems*. 21(8), 920-926.
- Vera, D. and Crossan, M. (2004). Strategic Leadership and Organizational Learning. *Academy of Management Review*, 29(2), 222-240.
- Vie, O. E. (2012). The Need for Knowledge Integration in Renewable Energy Innovation Projects. *Energy Procedia*, 20, 364-376.
- Vinkhuyzena, O. M. and Karlsson-Vinkhuyzen, S. I. (2013). The Role of Moral Leadership for Sustainable Production and Consumption. *Journal of Cleaner Production*, 63, 102-113.

- Voigt, B.-F., Mänz, K. and Wilkens, U. (2014). What Leadership Pattern can be Observed in IPS2 Work Systems when Compared with Production and Service? *Procedia CIRP* 16, 277-282.
- Wang, E. T. G., Lin, C. C.-L., Jiang, J. J. and Klein, G. (2007). Improving Enterprise Resource Planning (ERP) Fit to Organizational Process Through Knowledge Transfer. *International Journal of Information Management*, 27(3), 200-212.
- Wang, R. R. and Hamerman, P. D. (2008). Topic Overview: ERP Applications 2008. In Z. Thomas & M. Donnelly (Eds.).
- Wardlow, G. (1989). Alternative Modes of Inquiry for Agricultural Education. *Journal of Agricultural Education*, 30(4), 2-7.
- Werr, A. and Runsten, P. (2013). Understanding the Role of Representation in Interorganizational Knowledge Integration: A Case Study of an IT Outsourcing Project. *The Learning Organization*, 20(2), 118-133.
- Wofford, J. C. and Goodwin, V. L. (1994). A Cognitive Interpretation of Transactional and Transformational Leadership Theories. *Leadership Quarterly*, 5(2), 161.
- Woo, H. S. (2007). Critical Success Factors for Implementing ERP: The Case of a Chinese Electronics Manufacturer. *Journal of Manufacturing Technology Management*. 18(4), 431-442.
- Wu, J.-H. and Wang, Y.-M. (2006). Measuring ERP Success: The Ultimate Users' View. *International Journal of Operations & Production Management*, 26(8), 882-903.
- Xu, Q. and Ma, Q. (2008). Determinants of ERP Implementation Knowledge Transfer. *Information & Management*. 45(8), 528-539.
- Yang, C.-W., Fang, S.-C. and Lin, J. L. (2010). Organisational Knowledge Creation Strategies: A Conceptual Framework. *International Journal of Information Management*, 30(3), 231-238.
- Yang, L.-R., Huang, C.-F. and Hsu, T.-J. (2014). Knowledge Leadership to Improve Project and Organizational Performance. *International Journal of Project Management*. 32(1), 40-53.
- Yeh, C.-H. and Xu, Y. (2013). Managing Critical Success Strategies for an Enterprise Resource Planning Project. *European Journal of Operational Research*, 230, 604-614.

- Yen, H. R. and Sheu, C. (2004). Aligning ERP Implementation with Competitive Priorities of Manufacturing Firms: An Exploratory Study. *Int. J. Production Economics*, 92(3), 207-220.
- Yin, J., Ge, S. and Li, F. (2011). Research on Influence Factors Sensitivity of Knowledge Transfer from Implementation Consultant to Key User in ERP. In D. D. W. Y. Zhou (Ed.), *Modeling Risk Management for Resources and Environment in China, Computational Risk Management*. Berlin: Springer-Verlag Berlin Heidelberg.
- Yin, R. K. (2003). *Case Study Research: Design and Methods* (3rd ed.): SAGE.
- Ying, T., Wang, E., Jiang, J. and Klein, G. (2006). Knowledge Integration in ERP Project Success: A Hermeneutic Focus. *Proceedings of the 2006 International Research Workshop on IT Project Management 2006* Milwaukee, Wisconsin, USA.
- Yoshida, D. T., Sendjaya, S., Hirst, G. and Cooper, B. (2014). Does Servant Leadership Foster Creativity and Innovation? A Multi-level Mediation Study of Identification and Prototypicality. *Journal of Business Research*, 67(7), 1395-1404.
- Yu, C.-S. (2005). Causes Influencing the Effectiveness of the Post-Implementation ERP System. *Industrial Management & Data Systems*. 105(1), 115-132.
- Zakaria, N. H. (2011). *The Impact of Knowledge Integration on Enterprise Systems Success*. Doctor of Philosophy, Queensland University of Technology, Queensland, Australia.
- Zhang, X., Venkatesh, V. and Brown, S. A. (2011). Designing Collaborative Systems to Enhance Team Performance. *Journal of the Association for Information Systems*, 12(8), 556-584.
- Zhao, X., Jr, J. G. L. and Chen, O. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, 37(2), 197-206.
- Zhu, Y., Li, Y., Wang, W. and Chena, J. (2010). What Leads to Post-Implementation Success of ERP? An Empirical Study of the Chinese Retail Industry. *International Journal of Information Management*. 30(3), 265-276.
- Ziller, R. C. (1965). Toward a Theory of Open and Closed Groups. *Psychological Bulletin*, 64(3), 164-182.