

UNIVERSITI PUTRA MALAYSIA

EFFECTS OF PROJECT MANAGEMENT MATURITY, SUSTAINABILITY AND GOVERNANCE MEDIATED BY PROJECT SUCCESS ON CORPORATE REPUTATION OF PUBLIC SECTOR ORGANIZATIONS IN PAKISTAN

MUHAMMAD IRFAN

FEP 2018 23



EFFECTS OF PROJECT MANAGEMENT MATURITY, SUSTAINABILITY AND GOVERNANCE MEDIATED BY PROJECT SUCCESS ON CORPORATE REPUTATION OF PUBLIC SECTOR ORGANIZATIONS IN PAKISTAN



MUHAMMAD IRFAN

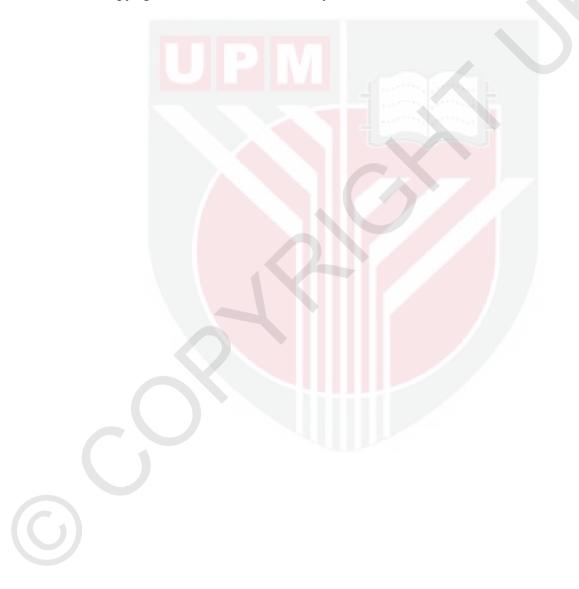
Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfillment of the Requirements for the Degree of Doctor of Philosophy

April 2018

COPYRIGHT

All material contained within the thesis, including without limitation text, logos, icons, photographs, and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



DEDICATION

I would like to dedicate my humble effort to my parents Mr. Muhammad Shah Khan and Mrs. Zarina Khan and all those who believe in the richness of learning.



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Doctor of Philosophy

EFFECTS OF PROJECT MANAGEMENT MATURITY, SUSTAINABILITY AND GOVERNANCE MEDIATED BY PROJECT SUCCESS ON CORPORATE REPUTATION OF PUBLIC SECTOR ORGANIZATIONS IN PAKISTAN

By

MUHAMMAD IRFAN April 2018 Chairman : Mazlan Hassan, PhD Faculty : Economics and Management

Since the 1960's, practitioners and researchers are interested in the concept of reputation. A positive reputation is considered to be a competitive advantage for organizations, whereas, a negative reputation results in financial losses and distrust from the stakeholders. Research on corporate reputation has mainly focused on the corporate sector ignoring the public sector. It is because the private sector is more cautious of its reputation than the public sector. Thus, this gap has resulted in an unreliable, not sufficiently transparent, and inefficient reputation of public sector organizations.

Likewise, in Pakistan, public sector does not have access to public view which limits them from realizing & establishing their own reputation. People of Pakistan have raised major concerns about negative reputation of the public sector due to its poor performance on the projects. Thus, this research aims to examine the effect of factors in projects (project governance, project management maturity, sustainability and project success) on the corporate reputation of public sector organizations in Pakistan.



This study suggests a framework which can be used to create and enhance the reputation of public sector organizations. The proposed research framework was built upon the tenets of Stewardship theory, Stakeholder theory, Resource Based theory and Signaling theory. Data for the study was collected from 425 respondents across Pakistan, which included project managers, project directors, architects, project team members working on public sector projects. The data was then analyzed using partial least squares structural equation modelling (PLS-SEM).

The result of these analyses confirmed that three of the proposed factors in projects (1) project management maturity, (2) sustainability, and (3) project success are significant predictors of corporate reputation. Other findings suggest that, success on projects can be achieved by project governance, project management maturity, and sustainability. Project success was also observed to significantly mediate between project governance, project management maturity, sustainability and corporate reputation.

In a broader perspective, this study confirms how different factors on projects can develop and enhance reputation of public sector organizations. The managerial implications of the study are, (i) managers need to improve their success rates on projects to satisfy the public, so that ultimately the reputation of these organizations can be enhanced (ii) issues related to project success can be resolved by addressing project governance, upgrading the existing project management structures and introducing sustainable practices.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Doktor Falsafah

KESAN KEMATANGAN PENGURUSAN PROJEK, KEMAMPANAN DAN TADBIR URUS DIANTARAI OLEH KEJAYAAN PROJEK KE ATAS REPUTASI KORPORAT DALAM ORGANISASI SEKTOR AWAM DI PAKISTAN

Oleh

MUHAMMAD IRFAN April 2018 Pengerusi : Mazlan Hassan, PhD Fakulti : Ekonomi Dan Pengurusan

Sejak tahun 1960-an, pengamal dan penyelidik berminat dengan konsep reputasi. Reputasi yang positif dianggap sebagai kelebihan daya saing bagi organisasi, sedangkan, reputasi yang negatif mengakibatkan kerugian kewangan dan ketidakpercayaan dari pihak yang berkepentingan. Penyelidikan mengenai reputasi korporat biasanya tertumpu kepada sektor korporat dan mengabaikan sektor awam. Ini kerana sektor swasta lebih berhati-hati terhadap reputasinya daripada sektor awam. Justeru, jurang ini mengakibatkan reputasi organisasi sektor awam tidak dapat dipercayai, tidak telus, dan tidak cekap.

Begitu juga, di Pakistan, sektor awam tidak mempunyai akses di mana mereka telah menghadkan pandangan umum daripada merealisasikan dan mewujudkan reputasi mereka sendiri. Rakyat Pakistan telah menimbulkan kebimbangan besar mengenai reputasi yang negatif dalam sektor awam yang mengakibatkan prestasi projek yang tidak baik. Oleh itu, kajian ini bertujuan untuk mengkaji kesan faktor-faktor dalam projek (tadbir urus projek, kematangan pengurusan projek, kemampanan dan kejayaan projek) terhadap reputasi korporat organisasi sektor awam di Pakistan.



Kajian ini mencadangkan rangka kerja dimana ia boleh mewujudkan dan meningkatkan reputasi organisasi sektor awam. Rangka kerja penyelidikan yang dicadangkan ini telah dibina berdasarkan "Stewardship Theory", "Stakeholder Theory", "Resource Based Theory" dan "Signaling Theory". Data untuk kajian ini dikumpulkan daripada 425 responden di seluruh Pakistan termasuk pengurus projek, pengarah projek, arkitek, ahli pasukan projek yang menjalankan projek sektor awam. Data ini kemudiannya dianalisis menggunakan Partial Least Squares - Structural Equation Modelling (PLS-SEM).

Hasil kajian ini telah mengesahkan bahawa terdapat tiga faktor yang dicadangkan dalam projek iaitu (1) kematangan pengurusan projek, (2) kemampanan, dan (3) kejayaan projek adalah peramal penting untuk reputasi korporat. Penemuan lain mencadangkan bahawa, kejayaan projek boleh dicapai oleh tadbir urus projek, kematangan pengurusan projek, dan kemampanan. Kejayaan projek juga dikaji untuk memeterai antara tadbir urus projek, kematangan pengurusan projek, kemampanan dan reputasi korporat.

Dalam perspektif yang lebih luas, kajian ini mengesahkan bahawa bagaimana factorfaktor yang berlainan mengenai projek dapat membangun dan meningkatkan reputasi organisasi sektor awam. Implikasi kajian ini adalah, (i) pengurus perlu meningkatkan kadar kejayaan mereka terhadap projek-projek untuk memuaskan hati orang awam, sehingga akhirnya reputasi organisasi dapat ditingkatkan (ii) isu-isu yang berkaitan dengan kejayaan projek dapat diselesaikan dengan mengenalpasti tadbir urus sesuatu projek, menaik taraf struktur pengurusan projek yang sedia ada dan memperkenalkan amalan yang mampan.

ACKNOWLEDGEMENTS

First, I would like to thank the Almighty "Allah" for bestowing grace upon my soul and body during this journey. Next, I would like to thank my family who always supported and believed in my abilities to accomplish this goal.

My special appreciation is to my mentor, Dr. Mazlan Hassan, for his continuous support, intellectual insights and valuable suggestions until the end of my journey. I would also like to extend my gratitude to Dr. Haslinda Hashim & Dr. Kenny Teoh for their encouragement and contribution in my work.

Also, my gratitude is for Muhammad Shah Khan, Meer Hamza, and Masood-ur-Rehman who helped me in data collection and the people who agreed to take part in this research.

Finally, I would like to thank Higher Education Commission Pakistan and Balochistan University of Information Technology Engineering & Management Sciences for catering my financial requirements during this endeavor. This thesis was submitted to the Senate of the Universiti Putra Malaysia for fulfillment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

Mazlan Hassan, PhD

Senior Lecturer Faculty of Economics and Management University Putra Malaysia (Chairman)

Kenny Teoh Guan Cheng, PhD

Senior Lecturer Faculty of Economics and Management University Putra Malaysia (Member)

Haslinda Hashim, PhD

Senior Lecturer Faculty of Economics and Management University Putra Malaysia (Member)

ROBIAH BINTI YUNUS, PhD

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date:

Declaration by graduate student

I hereby confirm that:

- this thesis is my original work;
- quotations, illustrations and citations have been duly referenced;
- this thesis has not been submitted previously or concurrently for any other degree at any institutions;
- intellectual property from the thesis and copyright of thesis are fully-owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012;
- written permission must be obtained from supervisor and the office of Deputy Vice-Chancellor (Research and innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports, lecture notes, learning modules or any other materials as stated in the Universiti Putra Malaysia (Research) Rules 2012;
- there is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software

Signature:	Date:			
	N			

Name and Matric No: Muhammad Irfan, GS43269

Declaration by Members of Supervisory Committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) were adhered to.

Signature:	
Name of Chairman	
of Supervisory	
Committee:	Dr. Mazlan Hassan
Signature:	
Name of Member	
of Supervisory	
Committee:	Dr. Kenny Teoh Guan Cheng
Signature:	
Name of Member	
of Supervisory	
Committee:	Dr. Haslinda Hashim

TABLE OF CONTENTS

Page

ABST ACKN APPR DECL LIST LIST	NOWLI OVAL ARAT OF TA OF FIC	ION	i iii v vi viii xv xviii xviii
CHAF	TER		
1	INTR 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10	CODUCTION Background of the Study Motivation of the Study Problem Statement Definition of Key Terms Research Questions Research Objectives Scope of the Study Significance of the Study 1.8.1 Contribution of the Study to Theory 1.8.2 Contribution of the Study to Practice Organization of the Thesis Chapter Summary	1 5 5 8 9 10 11 11 12 12 13 14
2	LITE 2.12.22.3	 RATURE REVIEW Corporate Reputation 2.1.1 Overview and Definition of Corporate Reputation 2.1.2 Importance of Corporate Reputation 2.1.3 Reputation and Private Sector Organizations 2.1.4 Reputation and Public Sector Organizations 2.1.5 Bridging Corporate Reputation and Project Management Projects 2.2.1 Overview & Definition of Projects 2.2.2 Fundamentals of Projects Project Success 2.3.1 Overview of Project Success 2.3.2 Definition of Project Success 2.3.3 Dimensions of Project Success 2.3.4 Public Sector & Project Success 	15 16 18 20 21 22 24 25 26 27 27 27 29 29 31

6

 \mathbf{C}

	2.3.5	Issues in Proj	ect Success	32
2.4	Projec	Governance		36
	2.4.1	Governance		36
	2.4.2	Overview and	d Definition of Project Governance	38
	2.4.3	Essentials &	Dimension of Project Governance	39
		2.4.3.1 Co	ntrol Dimension of Project Governance	41
		2.4.3.2 Sta	keholder Dimensions of Project Governance	42
	2.4.4	Project Gove	rnance as a Success Factor on Projects	45
2.5	Projec	Management	Maturity	45
	2.5.1	Overview of	Project Management Maturity	45
	2.5.2	Definition of	Project Management Maturity	46
	2.5.3	Project Mana	gement Maturity Models (PMMM's)	47
		2.5.3.1 Ca	pability Maturity Model (CMM)	48
		2.5.3.2 Ke	rzner Project Management Maturity Model	
		(K	PMMM)	50
			ganizational Project Management Maturity	
		Mo	odel (OPM3)	50
			mmary of Project Management Maturity	
			odels	51
	2.5.4		gement Maturity as a Driver to Success	52
2.6		ability		53
	2.6.1		Sustainability	53
			Sustainability	54
	2.6.3	0	cks of Sustainability	55
			vironmental Aspect of Sustainability	56
			onomic aspect of Sustainability	56
			cial aspect of Sustainability	57
	2 <mark>.6.4</mark>	U U	f <mark>Sustaina</mark> bility in Project Management	58
2.7		ying Theories		59
	2.7.1	0		59
		Stewardship '		60
		Stakeholder 7		61
	2.7.4			62
2.8	Summ	ary of the Gap	s in the Literature	62

3

C

THEC	RETI	CAL FRAMEWORK AND HYPOTHESES	
DEVE	LOPM	IENT	66
3.1	Introd	uction	66
3.2	Resear	rch Framework	66
3.3	Develo	oping the Link Between Variables & Theoretical	
	Perspe	octives	68
3.4	Hypot	heses Development	71
	3.4.1	Relationship Between Project Governance and Project	
		Success	71
	3.4.2	Relationship Between Project Management Maturity and	
		Project Success	71
	3.4.3	Relationship Between Sustainability and Project Success	72

3.4.4 Relationship Bet	tween Project Success and Corporate	
Reputation	7	'3
3.4.5 Relationship Bet	tween Project governance and Corporate	
Reputation	7	'3
3.4.6 Relationship Bet	tween Project Management Maturity and	
Corporate Reput	tation 7	'4
3.4.7 Relationship Bet	tween Sustainability and Corporate	
Reputation	7	75
3.4.8 Mediating Role	of Project Success 7	75
3.5 Matching Research Obj	ectives, Research Questions & Hypotheses 7	7
3.6 Chapter Summary	8	80
4 RESEARCH DESIGN AND I	METHODOLOGY 8	31
4.1 Introduction		31
		31
4.3 Research Paradigms	1	33
4.4 Research Stance		34
4.5 Research Design		35
4.6 Population and Samplin		88
4.6.1 Population	-	88
4.6.2 Sampling Frame		88
4.6.3 Sample Size		39
4.7 Research Instrument		91
4.7.1 Questionnaire Pr	reparation 9	91
4.7.2 Scale Type Used		99
4.8 Pre-test Procedure		99
4.9 Data Collection & Exam	nination 9	99
4.9.1 Missing Data	10)1
4.9.2 Suspicious Resp	onse Patterns 10)1
4.10 Data Analysis	10	12
4.10.1 Justification of U	Jsing Structural Equation Modelling	
(SEM)	10	12
4.10.2 Data Analysis U	sing Partial Least Squares Structural	
Equation Model	ling (PLS-SEM) 10	13
4.10.2.1 Hierar	rchical Component Model in PLS-SEM 10)4
4.10.2.2 Asses	sing the Hierarchical Component Model	
(HCM	ſ) 10	15
4.11 First Stage of Measuren	nent Model Analysis Using Partial Least	
Squares Structural Equa	tion Modelling 10	16
4.11.1 Assessment of the	ne Internal Consistency Reliability 10	17
4.11.2 Assessment of C	Convergent Validity 10	17
4.11.3 Assessment of D	Discriminant Validity 10	18
	rement Model Analysis Using Partial	
Least Squares Structura		19
	Collinearity Between the Indicators 11	
4.12.2 Assessment of the	ne Indicator Weights & their Significance 11	0

	4.13	Structural Model Analysis using Partial Least Square Structural	
		Equation Modelling	110
		4.13.1 Assessment of Structural Model for Collinearity Issues	111
		4.13.2 Assessment of Structural Model Path Coefficients	111
		4.13.3 Assessment of Coefficient of Determination	111
		4.13.4 Assessment of effect size (f^2)	112
		4.13.5 Assessment of Predictive Relevance (Q^2)	112
	1 1 1		
	4.14	Assessing the Mediating Effect using PLS-SEM	113
	4.15	Chapter Summary	113
5	ДАТ	A ANALYSIS AND RESULTS	114
5	5.1	Introduction	114
	5.2	Demographic Background of the Respondents	114
	5.3	Descriptive Statistics	116
	5.4	Non-response Bias	116
	5.5	Measurement Model Analysis	117
	5.6	First Stage of Measurement Model Analysis Using Partial Least	
		Squares Structural Equation Modelling	120
		5.6.1 Assessment of Construct Reliability	120
		5.6.2 Assessment of Convergent Validity	121
		5.6.3 Assessment of Discriminant Validity	122
		5.6.3.1 Cross Loading Criteria of Discriminant Validit	y 123
		5.6.3.2 Fornell and Larcker (1981) Criteria of	2
		Discriminant Validity	123
		5.6.3.3 HTMT Criteria for Assessing Discriminant	
		Validity	125
	5.7	Second Stage of Measurement Model Analysis Using Partial	
		Least Squares Structural Equation Modelling	127
		5.7.1 Assessment of Reliability, Convergent Validity and	127
		Discriminant validity for Higher Order Reflective	
		Construct	128
			120
		5.7.2 Assessment of Collinearity Between the Indicators for	100
		Higher Order Formatively Modeled Constructs	128
		5.7.3 Assessment of Outer Weight and Collinearity Statistics	
		(VIF) of Formative Constructs	129
		5.7.4 Overall Evaluation of the Measurement Model	130
	5.8	Assessment of Structural Model	131
		5.8.1 Assessment of the Structural Model for Collinearity Issue	es 132
		5.8.2 Assessment of the Path Coefficient	132
		5.8.3 Assessment of the Level of R^2	134
		5.8.4 Assessment of the Effect Size (f^2)	134
		5.8.5 Assessment of the Predictive Relevance (Q^2)	135
	5.9	Assessment of the Mediating Effect of Project Success	136
	5.10	Overall Assessment of the Hypothesis and Their Results	130
	5.10	Chapter Summary	137
	J.11	Chapter Summary	137

DISCUSSION		140
6.1	Introduction	140
6.2	Summary of Main Findings	140
6.3	Discussion of the Findings	142
6.4	Chapter Summary	147

7 CONCLUSION

6

C

148 148

7.1	Introduction	148
7.2	Summary of the Research	148
7.3	Achievement of Research Objectives	150
7.4	Contribution of the Study	153
	7.4.1 Theoretical Contribution	153
	7.4.2 Practical Contribution	155
7.5	Limitations of the Study & Future Research Avenues	156
7.6	Concluding Remarks	157

REFERENCES	159
APPENDICES	188
BIODATA OF STUDENT	226
LIST OF PUBLICATIONS	227

LIST OF TABLES

Table		Page
1.1	Pakistan: Project Success Rates (Asian Development Bank, 2015)	3
1.2	Project Management Value Benchmarks	4
2.1	The Taxonomy of Corporate Reputation Definitions	17
2.2	Importance of Corporate Reputation to Organizations	19
2.3	Project Management & Corporate Reputation	23
2.4	The Taxonomy of Project Definitions	25
2.5	Overview of Projects	27
2.6	Short Term Dimensions of Project Success	30
2.7	Long Term Dimensions of Project Success	31
2.8	Taxonomy of Issues in Project Success	34
2.9	The Taxonomy of Project Governance Definitions	38
2.10	OECD Corporate versus Project Governance Principles	40
2.11	Summary of Project Management Maturity Models	52
2.12	Definitions of Sustainability and Project Sustainability	54
2.13	Summary of the Gaps in the Literature	65
3.1	Summary of Relationships to be Examined	68
3.2	Research Objectives, Research Questions & Hypotheses	77
4.1	Basic Assumptions in Social Science & their Respective Paradigms	84
4.2	G-Power Analysis for Medium Size Effect	90
4.3	Variables, Dimensions, Items and Sources of Measurement	93
4.4	Rule of Thumb for Choosing Between PLS-SEM & CB-SEM	104
4.5	Criteria for Choosing the Measurement Model Mode	105

4.6	Systematic Evaluation of PLS-SEM Measurement Models	107
4.7	Indices for Measurement Model Analysis using SEM (PLS-SEM)	109
4.8	Structural Model Assessment Procedure	110
4.9	Summary of Structural Model Analysis using PLS-SEM	112
5.1	Respondents Project Experience and Position Held (N =425)	115
5.2	Respondents Age and Education (N =425)	115
5.3	Respondents Region and Sector (N =425)	115
5.4	Summary of the Items Dropped	117
5.5	Reliability & Convergent Validity of Lower Order Constructs	122
5.6	Fornell and Larcker (1981) Criteria of Discriminant Validity	124
5.7	HTMT Criteria of Discriminant Validity (HTMT ^{0,9})	126
5.8	Summary of Reliability & Validity for Project Success	128
5.9	Collinearity Between Higher Order Formative Constructs	129
5.10	Outer Weights of Higher Order Formative Constructs (HOFC)	130
5.11	Collinearity Statistic (VIF) for the Structural Model	132
5.12	Path Coefficient Assessment (N = 425)	133
5.13	R-Square & Adjusted R-Square (N = 425)	134
5.14	Assessment of the Effect Size (f^2) (N = 425)	135
5.15	Predictive Relevance (Q^2) (N = 425)	136
5.16	Mediating Effect (Indirect Effect) of Project Success	137
5.17	Summary of Hypotheses & Results	138
6.1	Summary of Findings of Research Questions and Hypotheses	141
7.1	Summary of Research Objectives	151

LIST OF FIGURES

Figure		Page
1.1	Country Wise Reputation	2
2.1	Bridging Corporate Reputation and Project Management	24
2.2	Basic Project Configuration	26
2.3	The Governance Gap	37
2.4	Two Distinct Streams of Project Governance Research	41
2.5	Dimensions of Project Governance	44
2.6	Levels of Maturity in Capability Maturity Model (CMM)	49
3.1	Conceptual Framework with Supporting Theories	70
3.2	Theoretical Framework	79
4.1	Basic Underlying Assumptions of Research	83
4.2	Research Process Flow Chart	87
5.1	Measurement Model	119
5.2	Second Stage Measurement Model	127
5.3	Structural Model	131

 \bigcirc

LIST OF APPENDICES

Appendix		Page
Ι	Questionnaire	188
II	List of Respondents	195
III	Demographics of the Respondents	208
IV	Descriptive Statistics	210
V	Non-Response Bias Tests	213
VI	Convergent Validity Lower Order Constructs	215
VII	Cross Loadings Lower Order Constructs	218

3

CHAPTER 1

INTRODUCTION

This chapter provides an overview of the thesis. It consists of ten (10) Sections. The first Section (1.1) introduces the background of the study. The second Section (1.2) highlights the motivation for the study, and Section (1.3) underlines the problem statement for the study. The fourth Section (1.4) presents the definition of key terms used throughout this study. Consequently, an illustration of the research questions and objectives of this study are provided in Section (1.5) and Section (1.6) respectively. Next is Section (1.7) which addresses the scope of the study, followed by Section (1.8) which describes the significance of the study to theory and practice. Section (1.9) provides an overall outline of the organization of the thesis. Lastly Section (1.10) provides a summary of the information presented in Chapter 1.

1.1 Background of the Study

Organizations in the current globalized world continuously seek ways to stay competitive, make profits and contribute back to the society. Companies' intangible assets, such as patents, brands and copyrights, are tools that ensure financial returns and generate significant results to companies (Abratt & Kleyn, 2012b; Lim et al., 2015; Raithel, Wilczynski et al., 2010). Likewise, Corporate reputation is one of these assets and is considered an important intangible resource that may provide a competitive advantage to companies. Corporate reputation is a general term used in both public and private organizations, and it is commonly understood as the perception of the organizations that is formed by the actions and results of organizations (Firestein, 2006).

Several advantages have been associated with having a positive corporate reputation in both public and private organizations (Alsop, 2004; Beaver, 1999; Coombs & Holladay, 2006; Nicolò, 2015). The corporate reputation of a public sector organizations is more crucial because it helps in shaping the overall reputation of a country. According to Reputation Institute (2016), countries having a strong reputation can attract foreign direct investment (FDI), a highly skilled workforce, tourists, and being able to sell the products and services of the country abroad. One of the criteria of Reputation Institute for rating the countries was how well the public sector organizations were performing in the underlying countries. It can be observed in Figure 1.1 that in a global context most of the countries have a weak/vulnerable reputation whereas a few countries on the continuum have a poor reputation due to their inability in fulfilling their obligations towards the public. Pakistan has fallen into the lowest tier consecutively for five years (2011-2016) and has been considered as a poor performer in its public sector organizations.



Therefore, public sector organizations have started to realize the value of reputation, as many of its effects are crucial for their survival. Luoma-aho (2007) argues that a positive reputation of an organization among the stakeholders is understood as reputational capital. Furthermore, he believes that a positive corporate reputation will contribute to added employee loyalty, easier recruitment, reduced transaction costs, and a basis of the legitimacy of the organization.

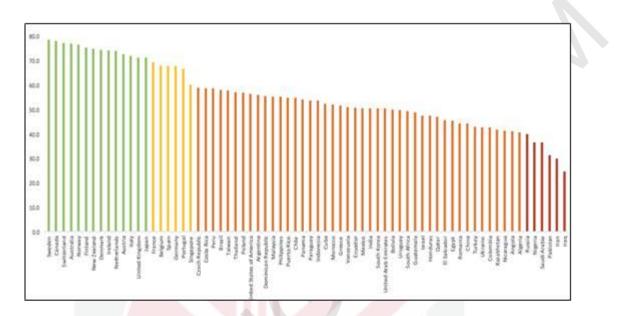


Figure 1.1 : Country Wise Reputation (Source : Adopted from Reputation Institute, 2016)

Establishing the corporate reputation from stakeholders' perspectives is therefore essential for public sector organizations. Research into the factors of corporate reputation has become important for many academicians (e.g. see Maden et al., 2012 & Sandu, 2015), organizations (Swoboda et al., 2013) and countries (Abdullah & Abdul Aziz, 2013). Consequently, studies have focused on corporate social responsibility, corporate governance, firm age and managerial styles (Dickinson-Delaporte et al., 2010; Learmount, 2002; Olmedo-Cifuentes & Martínez-León, 2014) for the development of corporate reputation.

Apart from the traditional measures used for developing corporate reputation, studies have observed that different aspects of projects can also improve the reputation of organizations besides contributing to the overall success. Successful results on projects, governance in projects, organizational maturity and sustainability have been theoretically associated with the private sector organization's reputation in the context of developed world (Esen, 2013; Fernández et al., 2015; Fernández-gámez et al., 2016; Shenhar et al., 2007; Todorović et al., 2015; Mullaly, 2014). However, this study undertakes the challenge to empirically test the association between factors in projects and corporate reputation in the context of public sector organizations of a developing country "Pakistan."

Currently, an increasing number of activities in both the private and the public sector, are in the form of projects. The role of public sector and private sector projects is different, as public sector projects are initiated to protect and maintain the economy whereas private sector projects are executed merely for profit generation. The government is the convener of public sector projects; Hence, the success of these projects is reflected through the perceptions of the general public which ensues if the project has delivered value and if the results of the project subsidize to the anticipated sustainable welfare of the society (Samset & Volden, 2016).

Managing projects effectively is a challenging task due to the competitive environment, and also because of the necessity of transforming successful results (projects) into enhancing organizational reputation (Zinko et al., 2007). Currently, a number of challenges are faced by projects in the public sector which should be resolved to achieve successful results on projects, such as lack of governance structures (Joslin & Muller, 2016), proficiency among planners also known as project management maturity (Pretorius et al., 2012) and sustainable practices (Todorov, 2014). The Asian Development Bank (2015) evaluated fifty-one public sector projects of Pakistan over the last eight years and concluded that only 21.6% of them were successful in terms of meeting time, cost and quality requirements. The possible reasons listed for this poor project success rate in Pakistan and other developing countries included poor governance of projects, project management immaturity and lack of sustainable practices.

Year	Success Rate (%) Based on Project completion	
	Report	Public Sector Projects
2007	50.0	6
2008	28.6	7
2009	-	14
2010	20.0	10
2011	40.0	5
2012	33.3	6
2014		2
2015		1
Total	21.6	51

 Table 1.1 : Pakistan: Project Success Rates (Asian Development Bank, 2015)

(Source : Adopted from Asian Development Bank, 2015)

Too & Weaver (2014) believe that project governance is an important factor in ensuring project success. The concept of project governance has been defined and discussed in the last decade extensively by different academicians, consultants and business managers (see: Muller et al., 2015; Ruuska et al., 2011; Turner, 2006). The prominence of project governance has been recognized by the management literature, advocating that, in order to create value for organizations, projects should be in harmony with corporate strategy (e.g. see; Meskendahl, 2010; Aubry et al., 2007). Bekker (2015) stated that given the transient nature of projects each one demands a separate project governance structure. In a historical perspective, the

World Bank conducted a study in which they assessed 1125 projects, they reported that 80% of the projects with formal governance structures were successful. Whereas, in projects where there was no formal project governance structure, only 30% of them were able to achieve success (World Bank, 1996).

Santos & Varajão (2015) argued that managing projects are a difficult activity, specifically when it involves multiple stakeholders. This escalating complexity requires project management maturity on projects that assure an efficient use of resources. Souza & Gomes (2015) advocated that the concern of project management maturity has surfaced in organizations because the ideal way to change complex situations is through projects. Knodel (2004) stated that a number of projects are not completed within the defined schedule and estimated budget and do not provide the expected value to the organization due to the insufficiency of project management resources. In a research report, PM Solutions (2014) claimed that there is a direct and strong correlation between the project management maturity of an organization and its overall performance which indicates the crucial role of maturity on projects. Table 1.1 shows the average value organizations have seen by increasing their levels of project management maturity. Hence, it may be the assumed that the concept of project management maturity in organizations as suggested by literature is closely associated with the possible success of projects which will be investigated in this study.

Table 1.2 : Pro	ject Manageme	nt Value Benchmarks
------------------------	---------------	---------------------

Decrease in failed projects	29%
Project delivered under budget	23%
Improvement in productivity	21%
Increase in customer satisfaction	26%
Project delivered ahead of schedule	16%
Improvement in projects aligned with objectives	37%
Cost savings per project (% of total project cost)	16%

(Source : Adopted from PM Solutions, 2014)

Another factor in projects which has attracted the attention of academicians as well as practitioners of projects is sustainability. Wagner (2007) recommended that sustainability needs to be incorporated into the business processes (e.g. projects) of organizations to achieve performance benefits (Project Success and corporate reputation). This is in coherence with findings of Gareis et al. (2013) who have drafted principles of sustainable development relevant to projects: economic, environmental and societal perspectives. Limited research has been conducted to study the integration of sustainability in project management; most project management methodologies, as well as governance structures, would support organizations in incorporating sustainability in their project management and making it a part of the success of the project (Warda, 2014).

1.2 Motivation of the Study

The Asian Development Bank (2015) evaluated fifty-one public sector projects of Pakistan over the last eight years and concluded that only 21.6% of them were successful. The poor performance has resulted in a negative corporate reputation of the public sector organizations. The possible reasons listed for this poor project success rate includes poor governance of projects, project management immaturity and lack of sustainable practices.

Currently, most of the facts about projects relate to those being performed in developed economies ignoring the practices required in developing economies. Thus, this study aims to fulfil the need to understand and empirically test the usefulness of governance structures, sustainability and project management maturity and their impact on corporate reputation through project success for organizations operating in the public sector in Pakistan. Furthermore, this study is undertaken to establish facts about project governance, measure the outcomes of sustainable practices in developing economies, maturity of project management practices which may improve the chances of project success and result in the enhancement of the reputation of public sector organizations.

1.3 Problem Statement

The reputation of an organization serves as an indicator of organizational success. International loans and investments do not depend only on economic fundamentals, but also on the independent evaluation of the reputation of public sector organizations. It is reported that globally the reputation of public sector organizations is unreliable, not sufficiently transparent, and inefficient (Wæraas & Byrkjeflot, 2012). Public sector organizations with negative reputations are suffering from financial performance and distrust from the stakeholders (Fernández-gámez et al., 2016; Radbourne, 2003; Taghian et al., 2015; Luoma-aho, 2014)

In Pakistan, the reputation of public sector organizations is predominantly negative, due to the poor performance of the government policies and projects causing discontent among the public and other stakeholders. According to a survey conducted by the BBC in 2014, Pakistan has been rated as the second worst country after Iran due to its poor performance on the public sector projects (GlobalScan/PIPA, 2014). Similarly, Pakistan has been rated at 56th position among 60 countries in the U.S. News Best Countries Ranking 2016 for investment. The Index of Economic Freedom (2016) considers the public sector institutions in Pakistan as highly unstable where volatile economic turbulence discourages foreign investment. Yousaf & Li (2015) believe that this disastrous course for reputation needs to be rectified.



Numerous studies have identified factors such as culture (Deephouse et al., 2016), corporate social responsibility (Abdullah et al., 2013; Taghian et al., 2015), corporate governance (Bravo et al., 2015) and firms age (Ali et al., 2015) as measures to improve corporate reputation of private organizations. On the contrary, Berssaneti & Carvalho (2015) suggested that success on projects, governance structures, project management maturity and sustainability can also improve the reputation of organizations besides solving the problems. Similarly, Joslin & Muller (2015) posited that successful completion of projects are the results of a firm that may have an impact on the reputation of the private organizations. However, it becomes necessary to investigate whether the findings of private companies are also applicable to public sector organizations in developing countries such as Pakistan.

Another issue addressed in the current study are the falling project success rates around the globe. Serrador & Pinto (2015) reported that annually, trillions of US dollars are invested in projects; unfortunately, the failure rates on these projects are more significant than the success rates. Observing the trends globally, only 30% of technology-based public projects in the UK are successful due to poor project governance (Parliamentary Office of Science and Technology, 2003). Similarly, Australian organizations are involved in over 200 defense-related major projects totaling USD 23 billion, many of which are estimated to exceed their schedules, budget and quality requirements, resulting in huge project overruns (Mazur et al., 2014). Independent evaluation bodies such as Standish group and Organization for Economic Cooperation and Development (OECD) claim that most of the publicsector projects failing globally are due to the lack of project governance structures.

The fate of public sector projects in Pakistan is also facing similar governance challenge with a dropping project success rate. According to the Asian Development Bank (2015), on an average 21.6% of public sector projects were successful in the last eight years due to poor project governance. Similarly, a World Bank study of Pakistan Infrastructure Implementation Capacity in 2007 reported that due to poor governance, public sector projects took three times more duration and two times more funds as originally planned (South Asia Sustainable Development Unit, 2007). Rehman et al. (2011) advocated in their study that the issue of governance is of greater importance for the developing countries like Pakistan to improve the chances of successful projects. Therefore, one of the gaps that this study addresses is to determine factual evidence that supports the impact of project governance on project success in public sector organizations of Pakistan.

Literature also suggests that public sector projects fail to be successful due to immaturity in project management practices. Improperly managed projects cost U.S. government agencies and companies an estimated USD 150 billion per year (Larson & Gray, 2011). Rolstadas et al. (2014) claims that the Boston Big Dig Project, one of the most expensive highway projects in the USA completed in 2007, and notorious for a 190% cost overrun, and years of delay because of immaturity in its project practices. Similarly, Malaysian public sector projects due to lack of project management maturity have also faced similar threats of extended delays and cost overruns. Shehu et al. (2014) stated that majority of Malaysian construction projects experience 0.03% to 72.88% cost overruns. Vlahov et al. (2014) advocated that one of the main cause for unsuccessful public projects is the immaturity of project management practices.

Likewise, in Pakistan, due to immature project management practices public sector projects have been facing several problems. The World Bank (2006) attributed immature project management practices as the core reason for failures of Social Action Program projects (SAP-I commenced in 1994 and SAP-II in 1998, each with a cost of USD 250 Million). Presently, 8000 public projects and programs are underway (Khattak, 2014) and according to the Project Management Institute Pakistan (T. Riaz, personal communication, August 9, 2016) there are only 552 certified project managers, thereby, illustrating a huge deficiency in the maturity on the projects. Rehman et al. (2011) believe that project success may be achieved through project management maturity in organizations. Although there is plenty of evidence that shows the effect of project management maturity on project success, but none of these studies highlight or discuss the different aspects of project management maturity and the significance of project management maturity in public sector organizations. This vacuum has attracted the attention of researchers to understand and investigate the impact of project management maturity on project success in Pakistan.

Another factor leading to project success is sustainability. Sustainability is development along the protection of the environment, economy and society. Lack of sustainable practices has resulted in global warming and since 1960 average sea level globally has risen at an average rate of 1.8 mm/year and since 1993, 3.1 mm/year (Thomson & El-Haram, 2014). Approximately 530 million tonnes of demolition and construction waste from different projects has been produced by the European Union, which has accounted for 25-30% of the total solid waste generated (Zhong & Wu, 2015).

C

Rehman et al. (2011) believe that current efforts to improve the project management systems in public sector organizations of Pakistan are not effective. It is further iterated in the literature that Pakistan has a long history of public sector projects that have also faced the sustainability challenges (Khan et al., 2013). Simultaneously,

Pakistan1 is far behind in meeting Sustainable Development Goals. The problems reported suggest that sustainable development activities in Pakistan are fragmented in projects and thus needs to be empirically tested with project success to quantify its effects. Also, It is evident from the existing literature that the focus of the existing literature is explicitly on the reputation of the private sector and it has only assessed the impact of sustainability reporting and corporate social responsibility on corporate reputation.

Consequently, this idea has driven many public-sector organizations and their respective decision makers to realize that they need to build structures and develop models that can help in restructuring their reputation. So, one of the objective of this study is to propose a model with which public-sector organizations can improve their reputation and achieve success on projects.

Extending from the above discussions, it is observed that certain factors in project management may impact corporate reputation. Additionally, public sector organizations lack project governance, project management maturity, and sustainability to achieve project success. There are lack of findings and contributions from the various existing individual studies related to corporate reputation, project success, project governance, project management maturity and sustainability. Literature on the issues from developing economies such as Pakistan is noted to be insufficient, probably due to failures in examining the subject in these areas.

1.4 Definition of Key Terms

• Corporate Reputation

"Corporate reputation is defined as a reflection of a collective stakeholder judgment's made over time about an organizations communications and actions" (Dickinson-Delaporte et al., 2010).

• **Project**

"A project is defined as a temporary unique undertaking which is limited by time and cost constraints in achieving organizational objectives" (PMI, 2013a).

• Project Management

"Project Management is defined as the application of knowledge, skills, tools and Techniques to project activities to meet project objectives" (PMI, 2013a)

¹Pakistan far behind in meeting sustainable development goals. (2016, Feb 13). *Daily Times* Retrieved from http://search.proquest.com/docview/1764803347?accountid=27932

• Project Success

"Project success is defined as the achievement of a set of objective and subjective measures, manifested in the success criteria and measured at the end of a project" (Müller & Jugdev, 2012).

• Project Governance

"Project governance is defined as the effective and efficient decision making, ensuring accountability and reporting throughout project life cycle, application of performance parameters enabling contractual fairness and aligning project objectives with organization" (PMI, 2013a).

• Project Management Maturity

"Maturity is defined as the development of systems and processes that are repetitive by nature, setting a high probability that each project is successful" (Kerzner, 2003).

Sustainable Development/Sustainability

"Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment & Development, 1987).

1.5 Research Questions

The problems enumerated above invite several questions which require answers through empirical investigation. Thus, this study aims at investigating some of these questions. The following is the main research question: What are the impact of project governance, sustainability and project management maturity on project success and corporate reputation? To be able to appropriately study this question, more specific research questions have been developed. These are:

- **RQ1** What is the impact of project governance on the project success in public sector organizations of Pakistan?
- **RQ2** What is the influence of project management maturity on project success in public sector organizations of Pakistan?
- **RQ3** What is the effect of sustainability on the project success in public sector organizations of Pakistan?
- **RQ4** What is the effect of project success on corporate reputation of public sector Organizations of Pakistan?
- **RQ5** What is the impact of project governance on corporate reputation of a public sector organization of Pakistan?
- **RQ6** What is the effect of project management maturity on the corporate reputation of a public sector organization in Pakistan?
- **RQ7** What is the influence of sustainability on corporate reputation of a public sector organization in Pakistan?
- **RQ8** What is the influence of project governance, project management maturity and sustainability on corporate reputation with project success as a mediating variable in a public sector organization of Pakistan?

1.6 Research Objectives

The main objective of this research is to study and understand the impact of project governance, sustainability and project management maturity on the corporate reputation through project success in public sector organizations of Pakistan. The objective will be achieved by examining the consequences of antecedents on the focus which will ultimately lead to the outcome that is the corporate reputation. In accordance with the questions mentioned above, the specific objectives of this study are articulated below:

- **RO1** To study the nature of the relationship between project governance, and project success in public sector organizations in Pakistan.
- **RO2** To investigate the influence of project management maturity on the project success in public sector organizations of Pakistan.
- **RO3** To examine the impact of sustainability on the project success in public sector organizations of Pakistan.
- **RO4** To analyze the nature of the relationship between project success and corporate reputation of public sector organizations in Pakistan.
- **RO5** To examine the impact of Project governance on corporate reputation of a public sector organization in Pakistan.
- **RO6** To analyze the effect of project management maturity on the corporate reputation of a public sector organization in Pakistan.
- **RO7** To investigate the influence of sustainability on corporate reputation of a public sector organization in Pakistan.
- **RO8** To investigate the influence of project governance, project management maturity and sustainability on corporate reputation with project success as a mediating variable in a public sector organization of Pakistan?

1.7 Scope of the Study

The purpose of this quantitative study is to examine relationships among project governance, sustainability, project management maturity, project success, and corporate reputation of public sector organizations in Pakistan. The reason for using these constructs is that they are established constructs and are tested from time to time in developed countries. This study considers organizations that are performing public sector projects as the unit of analysis of the study since they have a first-hand experience working with the government. The sample is selected from a list of organizations provided by the Pakistan Engineering Council, involved in public sector projects. Also, these firms were selected because they are projectized firms and are expected to have an exposure and understanding of project management.

In this study, corporate reputation, project success, project governance, sustainability and project management maturity are conceptualized as a project level construct in public sector organizations. By this conceptualization, the study does not deny the fact that these constructs can span private sector organizations as well. The studied public sector organizations are understood to reflect project governance structures, maturity of project management and sustainable efforts. Project governance, sustainability and project management maturity will be treated as the causal variables or the antecedents leading to the outcome of this study.

Project success which will be measured by the widely accepted criterion of time, cost, quality and stakeholder satisfaction. Also, Project success will be viewed as a mediating construct, between the Independent variables (project governance, sustainability and project management maturity) and the Dependent variable (corporate reputation). Project Success will also be considered as an exogenous variable for project governance, project management maturity and sustainability. Corporate reputation is the effect created by the causal variables will be measured by different adjectives such as integrity, empathy, warmth, and conscientiousness.

This study will determine the relationships of factors in project management together with corporate reputation in Pakistan, as limited existing studies on the subject are available in the perspective of the developing economies. This may be due to the fact that the discipline of project management is comparatively new to the developing economies whilst it is established and growing rapidly in the developed world.

1.8 Significance of the Study

The research will produce results and findings that will be useful to researchers and academicians, as well as practitioners in the field of project management and corporate reputation. The following are some of the identified valuable results, presented as contributions to theory and practice.

1.8.1 Contribution of the Study to Theory

The current study is expected to contribute to the current literature at different levels. In terms of theoretical contribution,

- The study will be able to develop and validate a theoretical framework which covers different streams of literature, which are project management literature, sustainability literature and corporate reputation literature.
- The study will apply different theories from various fields to the framework: Stakeholder Theory, Resource Based Theory, Stewardship Theory and Signaling Theory to explain the interrelationship between project governance, sustainability, Project management maturity, project success and corporate reputation.
- Similarly, we intend to contribute to development of the existing theories (Stakeholder Theory, Resource Based Theory, Stewardship Theory and Signaling Theory) by applying these theories in the arena of project management. Significant results from this study will validate the generalizability of these theories both within the current field of research and their application in other fields of study as well.
- The study will be able to identify gaps in project governance, sustainability and project management maturity theory and practice. This will help academicians and practitioners make valuable improvements on the existing systems. Theoretical gaps will determine guidance for future research areas.

1.8.2 Contribution of the Study to Practice

- It is hoped that his study will provide insight to practitioners on the importance of project governance, project management maturity and sustainability; and by using these antecedents an engaged project manager can achieve higher project success rates.
- This study also aims to demonstrate how project success which is the focal element of the study is vital in establishing the outcome i.e. corporate reputation.
- Similarly, public sector organizations will be presented with evidence that their governance structures, project management maturity and sustainable practices should collectively be improved in order that project success is achieved. This, in turn, will lead to improved corporate reputation.
- Lastly, it is hoped that the identified best practices can be used by the firms that are willing to start implementing project governance structures, sustainable practices and project management maturity models in the bid to improve their performance.

1.9 Organization of the Thesis

The thesis is divided into seven chapters. Chapter one presents the introduction to this thesis, giving the background and the scope of the research conducted, as well as the contribution of the research to academia and practitioners. This chapter also provides the research questions and the research objectives of the study.

Chapter two deals with the review of the literature. This chapter details most aspects related to corporate reputation, projects, project management, project success, project governance, and the dimensions of project governance. The aspects of sustainability and project management maturity in a general perspective are also covered. Also, the chapter presents discussions on project management maturity models and the relevance of sustainability to project management. This chapter further presents the discussion on the constructs under consideration in this study.

Chapter three enables us to understand how the research framework was constructed. It provides a summary of the theories that have been used for different relationships in this study with literature support. This chapter allows us to understand, how the gaps in the theory and practice can be addressed by hypothesizing relationships.

Chapter four deals with the research design and methodology, whereby all details related to the quantitative procedures used in data collected are presented. All procedures in the research design (e.g. sampling procedure, identification of target population; sample size, procedures for development of measurement items etc.) are discussed. The data analysis techniques are also proposed in this chapter.

Chapter five presents and displays the analysis and results of the study. The results for the measurement model which includes reliability and validity of the instrument are discussed in this chapter. The overall structural model is also given in this chapter which answers the hypotheses that were developed in chapter 3.

Chapter six summarizes and compares the results of the present study with previous studies. Finally, in chapter seven the conclusions that have been derived from this study are given. These conclusions will help academicians and practitioners to comprehend the main findings of the study in a general perspective. In the same chapter, the limitations of the study as well as the direction for future study are also given.

13

1.10 Chapter Summary

This chapter provides the motivation and challenges for the researcher to undertake this study. This chapter presents the research problem, research questions and research objectives.

The following chapter presents a review of literature relevant to this current research and highlights the research gaps. More specifically, the chapter begins by briefly reviewing the concept of corporate reputation, projects, project success, project governance; it provides an overview of sustainable practices globally adopted for projects. It also includes the prospects and challenges of project management maturity. The last section of the chapter highlights details about the supporting theory.



REFERENCES

- Abdullah, Z., & Abdul Aziz, Y. (2013). Institutionalizing corporate social responsibility: effects on corporate reputation, culture, and legitimacy in Malaysia. *Social Responsibility Journal*, 9(3), 344–361.
- Abednego, M. P., & Ogunlana, S. O. (2006). Good project governance for proper risk allocation in public-private partnerships in Indonesia. *International Journal of Project Management*, 24(7), 622–634.
- Abratt, R., & Kleyn, N. (2012). Corporate identity, corporate branding and corporate reputations: Reconciliation and integration. *European Journal of Marketing*, 46(7/8), 1048–1063.
- Agnihotri, A. (2014). Corporate reputation based theory of choice between organic, hybrid and inorganic growth strategies. *Corporate Communications: An International Journal*, 19(3), 247–259.
- Ahola, T., Ruuska, I., Artto, K., & Kujala, J. (2013). What is project governance and what are its origins? *International Journal of Project Management*, 32(8), 1321–1332.
- Aksorn, P., & Chotchai, C. (2015). Sustainability factors affecting local infrastructure project The case of water resource, water supply, and local market projects in Thai communities. *Facilities*, 33(1/2), 119–143.
- Albrecht, J. C., & Spang, K. (2014). Linking the benefits of project management maturity to project complexity: Insights from a multiple case study. *International Journal of Managing Projects in Business*, 7(2), 285–301.
- Albrecht, J. C., & Spang, K. (2016). Disassembling and Reassembling Project Management Maturity. *Project Management Journal*, 47(5), 18–35
- Albrecht, J. C., & Spang, K. (2016). Disassembling and Reassembling Project Management Maturity. *Project Management Journal*, 47(5), 18–35.
- Albrecht, P., Burandt, S., & Schaltegger, S. (2007). Do sustainability projects stimulate organizational learning in universities?. *International Journal of Sustainability in Higher Education*, 8(4), 403-415.
- Ali, A., & Nisar, A. (2016). Exploration of IT Governance Practices and their Effect on Strategic Projects' Outcomes in Public Sector Organizations of Pakistan. *International Journal of Computer Science and Network Security* (IJCSNS), 16(8), 10.

- Ali, I. Zia, M. (2011). Corporate reputation influences consumer satisfaction and loyalty: evidence from cellular industry of Pakistan. Paper presented at *International Conference on Challenges for Knowledge Society*, held on 15-16 April, at Bucharest, Romania.
- Ali, R., Lynch, R., Melewar, T. C., & Jin, Z. (2015). The moderating influences on the relationship of corporate reputation with its antecedents and consequences: A meta-analytic review. *Journal of Business Research*, 68(5), 1105–1117.
- Alsop, R. J. (2004). Corporate reputation: Anything but superficial the deep but fragile nature of corporate reputation. *Journal of Business Strategy*, 25(6), 21–29.
- Alsop, R. J. (2006). The 18 immutable laws of corporate reputation: Creating, protecting and repairing your most valuable asset. Kogan Page Publishers.
- Andersen, E. S., Birchall, D., Jessen, S. a., & Money, A. H. (2006). Exploring project success. *Baltic Journal of Management*, 1(2), 127–147.
- Anne Skaates, M., Tikkanen, H., & Lindblom, J. (2002). Relationships and project marketing success. Journal of Business & Industrial Marketing, 17(5), 389–406.
- Asian Development Bank. (2015). Asian Development Bank Member Fact Sheet. Retrieved from https://www.adb.org/publications/pakistan-fact-sheet
- Atkinson, R. (1999). Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria. *International journal of project management*, 17(6), 337-342.
- Atuahene-Gima, K., & Murray, J. Y. (2004). Antecedents and outcomes of marketing strategy comprehensiveness. *Journal of Marketing*, 68(4), 33-46.
- Baccarini, D. (1999). The logical framework method for defining project success. *Project Management Journal*, 30(4), 25–32.
- Backlund, F., Chronéer, D., & Sundqvist, E. (2014). Project Management Maturity Models – A Critical Review. *Procedia - Social and Behavioral Sciences*, 119, 837–846.
- Badewi, A. (2016). The impact of project management (PM) and benefits management (BM) practices on project success: Towards developing a project benefits governance framework. *International Journal of Project Management*, 34(4), 761–778.
- Balmer, J. M. T., Gray, E. R., Kiriakidou, O., & Millward, L. J. (1999). Corporate identity and corporate communications: creating a competitive advantage. *Corporate Communications: An International Journal*, 4(4), 49–58.

- Baron, R. M., & 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.
- Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of management, 17(1), 99-120.
- Barnett, M. L., Jermier, J. M., & Lafferty, B. A. (2006). Corporate reputation: The definitional landscape. *Corporate reputation review*, 9(1), 26-38.
- Baron, R. M., & 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.
- Bartikowski, B., & Walsh, G. (2011). Investigating mediators between corporate reputation and customer citizenship behaviors. *Journal of Business Research*, 64(1), 39–44.
- Bartikowski, B., Walsh, G., & Beatty, S. E. (2011). Culture and age as moderators in the corporate reputation and loyalty relationship. *Journal of Business Research*, 64(9), 966–972.
- Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations*, 61(8), 1139–1160.
- Basdeo, D. K., Smith, K. G., Grimm, C. M., Rindova, V. P., & Derfus, P. J. (2006). The impact of market actions on firm reputation. *Strategic Management Journal*, 27(12), 1205–1219.
- Beaver, G. (1999). Competitive advantage, corporate governance and reputation management: The case of Marks & amp; Spencer. Journal of Communication Management, 4(2), 185–196.
- Becker, J. M., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM: guidelines for using reflective-formative type models. *Long Range Planning*, 45(5), 359-394.
- Bekker, M. C. (2015). Project Governance-the definition and leadership dilemma. *Procedia-Social and Behavioral Sciences*, 194, 33-43.
- Bekker, M., Parham, M., & Hall, L. (2009). Defining "Project Governance" for large capital projects. *South Africa Journal of Industrial Engineering*, 20(2) (November), 81-92.
- Belassi, W., & Tukel, O. I. (1996). A new framework for determining critical success/failure factors in projects. *International Journal of Project Management*, 14(3), 141–151.

- Bennett, R., & Kottasz, R. (2000). Practitioner perceptions of corporate reputation: an empirical investigation. *Corporate Communications: An International Journal*, 5(4), 224–235.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological bulletin*, 88(3), 588.
- Bernardo, M. D. R. (2014). Performance Indicators for Enhancing Governance of Projects. *Procedia Social and Behavioral Sciences*, 119, 55–64.
- Berssaneti, F. T., & Carvalho, M. M. (2015a). Identification of variables that impact project success in Brazilian companies. *International Journal of Project Management*, 33(3), 638–649.
- Bickman, L., & Rog, D. J. (Eds.). (2008). The Sage handbook of applied social research methods. Sage publications.
- Biemer, P. P., Groves, R. M., Lyberg, L. E., Mathiowetz, N. A., & Sudman, S. (Eds.). (1991). *Measurement errors in surveys*. New York: John Wiley & Sons.
- Biesenthal, C., & Wilden, R. (2013). Multi-level project governance: Trends and opportunities. *International Journal of Project Management*, 32(8), 1291–1308.
- Blaikie, N. (2007). Approaches to social enquiry: Advancing knowledge. Polity.
- Blomquist, T., & Müller, R. (2006). Practices, roles, and responsibilities of middle managers in program and portfolio management. *Project Management Journal*, 37(1), 52.
- Bohne, R. A., Klakegg, O. J., & Lædre, O. (2015). Evaluating Sustainability of Building Projects in Urban 21(2212), 306–312.
- Boyne, G. A. (2002). Public and Private Management: What's the Difference? Journal of Management Studies, 39(1), 97–122.
- Brammer, S. J., & Pavelin, S. (2006). Corporate Reputation and Social Performance: The Importance of Fit. *Journal of Management Studies*, *43*(3), 435–455.
- Bravo, F. (2016). La divulgación de información previsional y la reputación corporativa como mecanismos para reducir la volatilidad de las acciones. *Revista de Contabilidad*, 19(1), 122–131.
- Bravo, F., Abad, C., & Briones, J. L. (2015). The board of directors and corporate reputation: an empirical analysis. *Academia Revista Latinoamericana de Administración*, 28(3), 359–379.

- Bredillet, C. N. (2008). Learning and acting in project situations through a metamethod (MAP) a case study: Contextual and situational approach for project management governance in management education. *International Journal of Project Management*, 26(3), 238-250
- Brent, A. C., & Labuschagne, C. (2007). An appraisal of social aspects in project and technology life cycle management in the process industry. *Management of Environmental Quality: An International Journal*, 18, 413–426.
- Brookes, N., Butler, M., Dey, P., & Clark, R. (2014). The use of maturity models in improving project management performance. *International Journal of Managing Projects in Business*, 7(2), 231–246.
- Brown, D., Guidry, R. P., & Patten, D. M. (2009). Sustainability reporting and perceptions of corporate reputation: An analysis using fortune. In *Advances in Environmental Accounting and Management*, *4*, 83–104.
- Brownill, S., & Carpenter, J. (2009). Governance andIntegrated'Planning: The Case of Sustainable Communities in the Thames Gateway, England. *Urban Studies*, 46(2), 251-274.
- Burrell G, & Morgan G. (1979). Sociological Paradigms and Organizational Analysis. London: Heinemann Books.
- Bushuyev, S. D., & Wagner, R. F. (2014). IPMA Delta and IPMA Organisational Competence Baseline (OCB). International Journal of Managing Projects in Business, 7(2), 302–310.
- Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International journal of testing*, 1(1), 55-86.
- Cadbury, A. (2002). Corporate governance and chairmanship: A personal view. Oxford University Press.
- Caruana, A. (1997). Corporate reputation: concept and measurement. *Journal of Product & Brand Management*, 6(2), 109–118.
- Carvalho, M. M. de, Patah, L. A., & de Souza Bido, D. (2015). Project management and its effects on project success: Cross-country and cross-industry comparisons. *International Journal of Project Management*, 33(7), 1509–1522.
- Cennamo, C., Berrone, P., & Gomez-Mejia, L. R. (2009). Does stakeholder management have a dark side? *Journal of Business Ethics*, 89(4), 491–507.
- Chan, E., & Lee, G. K. L. (2008). Critical factors for improving social sustainability of urban renewal projects. *Social Indicators Research*, 85(2), 243–256.

- Chang, A. S., & Tsai, C. Y. (2015). Sustainable design indicators: Roadway project as an example. *Ecological Indicators*, 53, 137–143.
- Choi, S., & Ng, A. (2011). Environmental and Economic Dimensions of Sustainability and Price Effects on Consumer Responses. *Journal of Business Ethics*, 104(2), 269–282.
- Chun, R., & Davies, G. (2010). The effect of merger on employee views of corporate reputation: Time and space dependent theory. *Industrial Marketing Management*, 39(5), 721–727.
- Churchill, G. A., & Iacobucci, D. (2006). *Marketing research: methodological foundations*. New York: Dryden Press.
- Cohen, J. (1977). Statistical power analysis for the behavioral sciences (Revised ed.). Orlando, FL. Academic Press, Inc.
- Cooke-Davies, T. (2002). The "real" success factors on projects. International Journal of Project Management, 20(3), 185–190.
- Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, 10(3), 163–176.
- Coombs, W. T., & Holladay, S. J. (2006). Unpacking the halo effect: reputation and crisis management. *Journal of Communication Management*, *10*(2), 123–137.
- Cooper, D. R., Schindler, P. S., & Sun, J. (2014). Business research methods (12th Edition). New York: McGraw-Hill Irwin.
- Cravens, K., Oliver, E. G., & Ramamoorti, S. (2003). The Reputation Index:: Measuring and Managing Corporate Reputation. *European Management Journal*, 21(2), 201-212.
- Crawford, J. K. (2007). *Project management maturity model*. New York: Auerbach Publications.
- Crawford, L. H., & Cooke-Davies, T. J. (2005, September). Project governance: The pivotal role of the executive sponsor. In at *PMI Global Congress North America, Toronto, Canada*.
- Creswell, J. W. (2009). Research design: Qualitative, quantitative , and mixed method approaches. (Third Edt). *Sage Publications. Inc.*
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process.* Sage Publications.

- Davenport, T. H. (2005). The Coming Commoditisation of Processes. *Harvard Business Review*, 83(6), p 101-108.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a Stewardship Theory of Management. Academy of Management Review, 22(1), 20–47.
- Davis, K. (2014). Different stakeholder groups and their perceptions of project success. *International Journal of Project Management*, 32(2), 189–201.
- de Carvalho, M. M. de, Patah, L. A., & de Souza Bido, D. (2015). Project management and its effects on project success: Cross-country and cross-industry comparisons. *International Journal of Project Management*.
- De Souza, T. F., & Gomes, C. F. S. (2015). Assessment of maturity in project management: A bibliometric study of main models. *Procedia Computer Science*, 55(Itqm), 92–101.
- De Ven, A. H. (2007). Engaged scholarship: a guide for organizational and social research: a guide for organizational and social research. Oxford University Press.
- De Wit, A. (1988). Measurement of project success. International Journal of Project Management, 6(3), 164–170.
- Deephouse, D. L., & Carter, S. M. (2005). An examination of differences between organizational legitimacy and organizational reputation. *Journal of management Studies*, 42(2), 329-360.
- Deephouse, D. L., Newburry, W., & Soleimani, A. (2016). The effects of institutional development and national culture on cross-national differences in corporate reputation. *Journal of World Business*, *51*(3), 463–473.
- Donaldson, T., & Preston, L. E. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *The Academy of Management Review*, 20(1), 65.
- Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, 17(4), 263-282.
- Diamantopoulos, A., & Winklhofer, H. M. (2001). Index construction with formative indicators: An alternative to scale development. *Journal of marketing research*, 38(2), 269-277.
- Dickinson-Delaporte, S., Beverland, M., & Lindgreen, A. (2010). Building corporate reputation with stakeholders Exploring the role of message ambiguity for social marketers. *European Journal of Marketing*, 44(11–12), 1856–1874.

- Dijkmans, C., Kerkhof, P., & Beukeboom, C. J. (2015). A stage to engage: Social media use and corporate reputation. *Tourism Management*, 47, 58–67.
- Dinsmore, P. C. (1998). How grown-up is your organization? PM Network. 12.(6), 24-26. Citado en: Jugdev, K. y Thomas, J. 2002. Project Management Maturity Models: The silver bullets of competitive advantage? *Project Management Journal*. 33 (4), 04-14.
- Dion, R. (1993). Process Improvement and the Corporate Balance Sheet. *IEEE Software*, *10*(4), 28–35.
- Doloi, H., Iyer, K. C., & Sawhney, A. (2011). Structural equation model for assessing impacts of contractor's performance on project success. *International Journal of Project Management*, 29(6), 687–695.
- Dolphin, R. R. (2004). Corporate reputation-a value creating strategy. Corporate Governance: The international journal of business in society, 4(3), 77-92.
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of management*, 16(1), 49-64.
- Doorley, J., & Garcia, H. F. (2011). Reputation management: The key to successful public relations and corporate communication. Routledge.
- Dunović, I. B. (2010). A study of project governance frameworks for large infrastructure projects with reflection on road transport projects. Organization, technology & management in construction: an international journal, 2(1), 145-155.
- Dvir, D., & Lechler, T. (2004). Plans are nothing, changing plans is everything: The impact of changes on project success. *Research Policy*, 33(1), 1–15.
- Dvir, D., Lipovetsky, S., Shenhar, A., & Tishler, A. (1998). In search of project classification: a non-universal approach to project success factors. *Research Policy*, 27(9), 915–935.
- Dvir, D., Raz, T., & Shenhar, A. J. (2003). An empirical analysis of the relationship between project planning and project success. *International Journal of Project Management*, 21(2), 89–95.
- Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, 8(1), 37-51.
- Elkington, P., & Smallman, C. (2001). Managing project risks: A case study from the utilities sector. *International Journal of Project Management*, 20(1), 49–57.

- Esen, E. (2013). *The Influence of CSR Activities on Building Corporate Reputation*. *Advances in Sustainability and Environmental Justice* (Vol. 11). Emerald Group Publishing Limited.
- Eskerod, P., & Huemann, M. (2013). Sustainable development and project stakeholder management: what standards say. *International Journal of Managing Projects in Business*, 6(1), 36-50.
- European Commission. (2008). *Climate Change and International Security*. Retrieved from http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/99 387.pdf
- Evan, W. M. and R. E. Freeman: 1988, 'A Stakeholder Theory of the Modern Corporation: Kantian Capitalism', in T. Beauchamp and N. Bowie (eds.), *Ethical Theory and Business* (Prentice Hall, Englewood Cliffs), pp. 75–93.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods*, 39(2), 175-191.
- Fernández Sánchez, J. L., Luna Sotorrío, L., & Baraibar Diez, E. (2015). The relationship between corporate social responsibility and corporate reputation in a turbulent environment: Spanish evidence of the Ibex35 firms. Corporate Governance: The International Journal of Business in Society, 15(4), 563–575.
- Fernández-Gámez, M. A., Gil-Corral, A. M., & Galán-Valdivieso, F. (2016). Corporate reputation and market value: Evidence with generalized regression neural networks. *Expert Systems with Applications*, 46, 69-76.
- Firestein, P. J. (2006). Building and protecting corporate reputation. *Strategy & Leadership*, 34(4), 25–31.
- Fisher, P. B., & McAdams, E. (2015). Gaps in sustainability education. *International Journal of Sustainability in Higher Education*, 16(4), 407–423.

Fombrun, C. (1996). Reputation. John Wiley & Sons, Ltd.

- Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy of Management Journal*, 33(2), 233–258.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research*, 382-388.
- Freeman, M., & Beale, P. (1992). Measuring Project Success. *Project Management Journal*, 23(1), 8–18.

- Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder Theory and ?The Corporate Objective Revisited? Organization Science, 15(3), 364–369.
- Fröch, G. (2015). Sustainability issues in the valuation process of project developments. *Energy and Buildings*, 100, 2–9.
- Galbreath, J. (2010). How does corporate social responsibility benefit firms? Evidence from Australia. *European Business Review*, 22(4), 411–431.
- Gardberg, N. a. (2006). Reputatie, reputation, réputation, reputazione, ruf: A crosscultural qualitative analysis of construct and instrument equivalence. *Corporate Reputation Review*, 9(1), 39–61.
- Gardberg, N. a, & Fombrun, C. J. (2002). The Global Reputation Quotient Project: First Steps Towards a Cross-Nationally Valid Measure of Corporate Reputation. *Corporate Reputation Review*, 4(4), 303–307.
- Gareis, R., & Huemann, M. (2000). Project management competences in the projectoriented organisation. In, "The Gower handbook of project management.", pp. 709-721, J. R. Turner and S. J. Sinister, Eds. Third ed. Gower.
- Gareis, R., Huemann, M., & Martinuzzi, A. (2013). *Project Management and* Sustainable Development Principles, Project Management Institute, Inc.
- Garland, R. (2009). Project Governance: A practical guide to effective project decision making. Kogan Page Publishers.
- Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, 61(1), 101-107.
- Gibson, D. L., Goldenson, D. R., & Kost, K. (2006). *Performance results of CMMI*based process improvement (No. CMU/SEI-2006-TR-004). Carnegie-Mellon Univ Pittsburgh Pa Software Engineering Inst.
- GlobalScan/PIPA. (2014). Country Rating Poll 2014 for BBC World Service, (June),
 1–46. Retrieved from http://downloads.bbc.co.uk/mediacentre/country-rating-poll.pdf
- Goldenson, D., & Gibson, D. L. (2003). Demonstrating the impact and benefits of *CMMI: an update and preliminary results*. Software Engineering Institute, Tech. Rep.
- Goles, T., & Hirschheim, R. (2000). The paradigm is dead, the paradigm is dead... long live the paradigm: the legacy of Burrell and Morgan. *Omega*, 28(3), 249-268
- Golgeli, K. (2014). Corporate Reputation Management: The Sample of Erciyes University. *Procedia Social and Behavioral Sciences*, 122, 312–318.

- Gotsi, M., & Wilson, A. (2001). Corporate reputation management: "living the brand." *Management Decision*, 39(2), 99–104.
- Gottschalk, P. (2009). Maturity levels for interoperability in digital government. *Government Information Quarterly*, 26(1), 75-81.
- Goyal, P., & Yadav, V. (2014). To be or not to be a woman entrepreneur in a developing country? *Psychosociological Issues in Human Resource Management*, 2(2), 68–78.
- Graafland, J.J. and H. Smid (2004), 'Reputation, Corporate Social Responsibility and Market Regulation,' *Tijdschrift voor Economie en Management*, XLIX, April, pp. 271–308.
- Graca, C. A. M., & Arnaldo, C. (2016). The role of corporate reputation on cooperants behavior and organizational performance. *Journal of Management Development*, 35(1), 17–37.
- Graham, M. E., Moore, J., & Bansal, P. (2007). Consumers' willingness to pay for corporate reputation: The context of airline companies. *Corporate Reputation Review*, 10(3), 189–200.
- Grant, K. P., & Pennypacker, J. S. (2006). Project management maturity: An assessment of project management capabilities among and between selected industries. *IEEE Transactions on Engineering Management*, 53(1), 59–68.
- Gray, R. J. (2001). Organisational climate and project success. International Journal of Project Management, 19(2), 103–109.
- Grevelman, L., & Kluiwstra, M. (2010). Sustainability in project management: A case study on enexis. *PM World Today*, 12(7), 1-19.
- Groves, R. M. (1989). Survey errors and survey costs (Vol. 536). NewYork: John Wiley & Sons.
- Grundstein, M. (2008). Assessing Enterprise 's Knowledge Management Maturity Level. *International Journal of Knowledge and Learning*, 4(5), 380–387.
- Guangshe, J., Li, C., Jianguo, C., Shuisen, Z. and Jin, W. (2008), "Application of organizational project management maturity model (OPM3) to construction in China: an empirical study", paper presented at *International Conference on Information Management, Innovation Management and Industrial Engineering*, ICIII'08, Taipei, December 19-21.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 105-117). Thousand Oaks, Ca: Sage.

- Gupta, S., Melewar, T. C., & Czinkota, M. C. (2013). Global business management for sustainability and competitiveness: The role of corporate branding, corporate identity and corporate reputation. *Journal of World Business*, 48(3), 285-286.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*(7th ed.). Englewood Cliffs: Prentice Hall.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017a). A primer on partial least squares structural equation modeling (PLS-SEM) (2nd Edition). Sage Publications, Inc.
- Hair, J.F.; Sarstedt, M.; Ringle, C.M.; Gudergan, S.P. (2017b). Advanced Issues in Partial Least Squares Structural Equation Modeling; SAGE Publications, Incorporated.
- Hallstedt, S. I., Bertoni, M., & Isaksson, O. (2015). Assessing Sustainability and Value of Manufacturing Processes: A case in the aerospace industry. *Journal of Cleaner Production*, 108, 169–182.
- Halter, M. V., de Arruda, M. C. C., & Halter, R. B. (2009). Transparency to Reduce Corruption? *Journal of Business Ethics*, 84(S3), 373–385.
- Hamner, B., & Stinson, C. H. (1995). Managerial accounting and environmental compliance costs. *Journal of Cost Management*, 9(2), 4-10.
- Hannan, S., & Sutherland, C. (2014). Mega-projects and sustainability in Durban, South Africa: Convergent or divergent agendas? *Habitat International*, 45, 205–212.
- Hassan, M. Rahman, A.A. Ibrahim, A.R. (2012). Paradigms in logistic research. In *Research issues in management and marketing* (pp. 46-54). Selangor, Malaysia. McGraw-Hill.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication monographs*, 76(4), 408-420.
- Heil, O., & Robertson, T. S. (1991). Toward a Theory of Competitive Market Signaling: A Research Agenda. *Strategic Management Journal*, 12(6), 403– 418.
- Helm, S. (2007a). One reputation or many? Comparing stakeholders' perceptions of corporate reputation. *Corporate Communications: An International Journal*, *12*(3), 238–254.
- Helm, S. (2007b). The Role of Corporate Reputation in Determining Investor Satisfaction and Loyalty. *Corporate Reputation Review*, 10(1), 22.

- Heng, Chye Kiang., & Malone-Lee, L.C. (2010) Density and Urban Sustainability: An Exploration of Critical Issues. In Ng, Edward., *Designing High-Density Cities for Social and Environmental Sustainability* (pp.41-52). UK and USA: Earthscan.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of* the Academy of Marketing Science, 43(1), 115-135.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in international marketing*, 20, 277–319.
- Heravi, G., & Ilbeigi, M. (2012). Development of a comprehensive model for construction project success evaluation by contractors. *Engineering, Construction and Architectural Management, 19*(5), 526–542.
- Herbsleb, J. D., & Goldenson, D. R. (1996). A systematic survey of CMM experience and results. In *Proceedings of IEEE 18th International Conference* on Software Engineering (pp. 323–330). IEEE Comput. Soc. Press.
- Herremans, I. M., Akathaporn, P., & McInnes, M. (1993). An investigation of corporate social responsibility reputation and economic performance. *Accounting, Organizations and Society*, 18(7–8), 587–604.
- Hillson, D. (2003). Assessing organisational project management capability. *Journal* of Facilities Management, 2(3), 298–311.
- Hoopes DG, Madsen TL, Walker G. 2003. Guest editors' introduction to the special issue: Why is there a resource-based view? Toward a theory of competitive heterogeneity. *Strategic Management Journal*, Special Issue 24(10): 889-902.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
- Ika, L. A. (2009). Project success as a topic in project management journals. Project Management Journal, 40(4), 6–19.
- Jałocha, B., Krane, H. P., Ekambaram, A., & Prawelska-Skrzypek, G. (2014). Key Competences of Public Sector Project Managers. *Procedia - Social and Behavioral Sciences*, 119, 247–256.
- Johnston P., Everard M., Santillo D. and Robèrt K.-H., (2007), Reclaiming the Definition of Sustainability, *Environmental Science and Pollution Research*, 14(1), 60–66.

- Jiang, J. J. ,, Klein, G. ,, Hwang, H.-G. ,, Huang, J. ,, & Hung, S.-Y. . (2004). An exploration of the relationship between software development process maturity and project performance. *Information and Management*, *41*(3), 279–288.
- Joslin, R., & Müller, R. (2015). Relationships between a project management methodology and project success in different project governance contexts. *International Journal of Project Management*, 33(6), 1377–1392.
- Joslin, R., & Müller, R. (2016). The relationship between project governance and project success. *International Journal of Project Management*, 34(4), 613–626.
- Jugdev, K., & Muller, R. (2005). A retrospective look at our evolving understanding of project success. *Project Management Journal*, *36*(4), 19–32.
- Jugdev, K., & Thomas, J. L. (2002). Project management maturity models: The silver bullets of competitive advantage. *Project Management Journal*, 33(4), 4–14.
- Kajikawa, Y. (2008). Research core and framework of sustainability science. *Sustainability Science*, *3*(2), 215–239.
- Kaplan, R. S., & Norton, D. P. (2004). Strategy Maps: Converting Intangible Assets into Tangible Outcomes (Vol. 26). Harvard Business Press, 2004.
- Kapogiannis, G., Gaterell, M., & Oulasoglou, E. (2015). Identifying uncertainties toward sustainable projects. *Procedia Engineering*, 118, 1077–1085.
- Keh, H. T., & Xie, Y. (2009). Corporate reputation and customer behavioral intentions: The roles of trust, identification and commitment. *Industrial Marketing Management*, 38(7), 732–742.
- Kemp, R., Parto, S., & Gibson, R. B. (2005). Governance for sustainable development: moving from theory to practice. *International Journal of Sustainable Development*, 8, 12-30.
- Kerzner, H. (1987). In search of excellence in project management. Journal of Systems Management, 38(2), 30.
- Kerzner, H. (2001). Strategic planning for project management using a project management maturity model. John Wiley & Sons, Inc.
- Kerzner, H. (2003). Project management case studies. New York: John Wiley & Sons.
- Khan, K., Turner, R., & Maqsood, T. (2013). Factors that influence the success of public sector projects in Pakistan. In, *Proceedings of IRNOP 2013 Conference*, June 17-19, BI Norwegian Business School, Oslo, Norway.

- Khan, M. A. (2000). Planning for and monitoring of project sustainability a guideline on concepts, issues and tools. *Monitoring and Evaluation News*. Retrieved from http://www.mande.co.uk/docs/khan.htm
- Khan, M., Majid, A., Yasir, M., & Arshad, M. (2013). Corporate social responsibility and corporate reputation: A case of cement industry in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 5(1), 843-858.
- Khattak, F. H. (2014). *Projects Evaluation in Pakistan*. Retrieved from http://www.pc.gov.pk/wp-content/uploads/2014/05/Projects-Evaluation-in-Pakistan.docx
- Kibert, C. J. (2016). *Sustainable construction: green building design and delivery*. John Wiley & Sons.
- Klakegg, O. J., Williams, T., & Shiferaw, A. T. (2016). Taming the "trolls": Major public projects in the making. *International Journal of Project Management*, 34(2), 282–296.
- Knodel, T. (2004). Preparing the organizational "soil" for measurable and sustainable change: business value management and project governance. *Journal of Change Management*, 4(1), 45–62.
- Koskinen, K. (2001). Tacit Knowledge As a Promoter of Success in Small Technology Firms. HICSS '01: Proceedings of the 34th Annual Hawaii International Conference on System Sciences (HICSS-34)-Volume 8 - Volume 8.
- Krejice V.R. & Morgan W.D., (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kwak, Y. H., & Ibbs, C. W. (2002). Project Management Process Maturity (PM)2 Model. Journal of Management in Engineering, 18(3), 150–155.
- Labuschagne, C., & Brent, A. (2006). Social indicators for sustainable project and technology life cycle management in the process industry. *The International Journal of Life Cycle Assessment*, 11(1), 3–15.
- Lahti, M., Shamsuzzoha, A. H. M., & Helo, P. (2009). Developing a maturity model for Supply Chain Management. *International Journal of Logistics Systems and Management*, 5(6), 654.
- Lapiņa, I., & Aramina, D. (2011). Competence based sustainable development: quality of education. *Management theory and studies for rural business and infrastructure development*, 26(2), 138-145.

- Larson, E. W., & Gray, C. F. (2011). *Project management: The managerial process*. McGraw-Hill.
- Learmount, S. (2002). *Corporate Governance: what can be learned from Japan?* OUP Oxford.
- Lee, L. S., & Anderson, R. M. (2006). An Exploratory Investigation of the Antecedents of the IT Project Management Capability. *E-Service Journal*, 5(1), 27–42.
- Lester, D. H. (1998). Critical success factors for new product development. *Research-Technology Management*, 41(1), 36-43.
- Lianying, Z., Jing, H., & Xinxing, Z. (2012). The Project Management Maturity Model and Application Based on PRINCE2. *Procedia Engineering*, 29(Sei 1994), 3691–3697.
- Lim, C. S., & Mohamed, M. Z. (1999). Criteria of project success: an exploratory reexamination. *International Journal of Project Management*, 17(4), 243–248.
- Lim, E. H., & Ling, F. Y. Y. (2002). Model for predicting clients' contribution to project success. *Engineering, Construction and Architectural Management*, 9(5/6), 388–395.
- Lim, M., Machado, J. C., & Iglesias, O. (2015). Brand, identity and corporate reputation. *Marketing Intelligence & Planning*, 33(2).
- Litman, T. (2007). Evaluating rail transit benefits: A comment. *Transport Policy*, 14(1), 94–97.
- Litwin, M. S. (1995). *How to measure survey reliability and validity* (Vol. 7). Sage Publications.
- Lohmoller, J. B. (1988). The PLS program system: Latent variables path analysis with partial least squares estimation. *Multivariate Behavioral Research*, 23(1), 125-127.
- Loring, J. M. (2007). Wind energy planning in England, Wales and Denmark: Factors influencing project success. *Energy policy*, 35(4), 2648-2660.
- Love, E. G., Lim, J., & Bednar, M. K. (2017). The face of the firm: The influence of CEOs on corporate reputation. *Academy of Management Journal*, 60(4), 1462-1481.
- Lu, P., Guo, S., Qian, L., He, P., & Xu, X. (2015). The effectiveness of contractual and relational governances in construction projects in China. *International Journal of Project Management*, 33(1), 212–222.

- Luoma-aho, V. (2007). Neutral Reputation and Public Sector Organizations. *Corporate Reputation Review*, 10(2), 124–143.
- Luoma-aho, V. (2008). Sector reputation and public organisations. *International Journal of Public Sector Management*, 21(5), 446-467.
- Luoma-aho, V. L., & Makikangas, M. E. (2014). Do public sector mergers (re)shape reputation? *International Journal of Public Sector Management*, 27(1), 39–52.
- MacMillan, K., Money, K., Downing, S., & Hillenbrand, C. (2005). Reputation in relationships: measuring experiences, emotions and behaviors. *Corporate Reputation Review*, 8(3), 214–231.
- Maden, C., Arıkan, E., Telci, E. E., & Kantur, D. (2012). Linking Corporate Social Responsibility to Corporate Reputation: A Study on Understanding Behavioral Consequences. *Procedia - Social and Behavioral Sciences*, 58, 655–664.
- Malhotra, M. K., & Grover, V. (1998). An assessment of survey research in POM: from constructs to theory. *Journal of operations management*, 16(4), 407-425.
- Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet users' information privacy concerns (IUIPC): The construct, the scale, and a causal model. *Information systems research*, 15(4), 336-355.
- Mangione, Thomas W. 1995. *Mail Surveys: Improving the Quality*. Thousand Oaks, CA: Sage.
- Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. *Psychological bulletin*, 97(3), 562.
- Marshall, M. N. (1996). The key informant technique. Family practice, 13(1), 92-97.
- Martínez, P., Pérez, A., & Rodríguez del Bosque, I. (2013). Measuring Corporate Social Responsibility in tourism: Development and validation of an efficient measurement scale in the hospitality industry. *Journal of Travel & Tourism Marketing*, 30(September 2014), 365–385.
- Martínez, P., & Rodríguez del Bosque, I. (2014). Sustainability Dimensions: A Source to Enhance Corporate Reputation. *Corporate Reputation Review*, *17*(4), 239–253.
- Matos, S., & Lopes, E. (2013). Prince2 or PMBOK A Question of Choice. *Procedia Technology*, 9, 787–794.
- Mattera, M., & Baena, V. (2015). The key to carving out a high corporate reputation based on innovation: corporate social responsibility. *Social Responsibility Journal*, 11(2), 221–241.

Matthews, B., & Ross, L. (2014). Research methods. Pearson Higher Ed.

- Mazur, A., Pisarski, A., Chang, A., & Ashkanasy, N. M. (2014). Rating defence major project success: The role of personal attributes and stakeholder relationships. *International Journal of Project Management*, 32(6), 944–957.
- Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in educational research*, 16(2), 193-205.
- Miles, J. A. (2012). Management and organization theory: a Jossey-Bass reader (Vol. 9). John Wiley & Sons.
- Miles, M. P., & Covin, J. G. (2000). Environmental Marketing: A Source of Reputational, Competitive, and Financial Advantage. *Journal of Business Ethics*, 23(3), 299–311.
- Miller, L. E., & Smith, K. L. (1983). Handling nonresponse issues. Journal of extension, 21, 45-50.
- Mir, F. A., & Pinnington, A. H. (2014). Exploring the value of project management: Linking Project Management Performance and Project Success. International Journal of Project Management, 32(2), 202–217.
- Mirza, M. N., Pourzolfaghar, Z., & Shahnazari, M. (2013). Significance of Scope in Project Success. *Procedia Technology*, *9*, 722–729.
- Mishra, P., Dangayach, G. S., & Mittal, M. L. (2011). An Ethical approach towards sustainable project Success. *Procedia-Social and Behavioral Sciences*, 25, 338-344.
- Morton, S. M. B., Bandara, D. K., Robinson, E. M., & Atatoa Carr, P. E. (2012). In the 21st Century, what is an acceptable response rate? *Australian and New Zealand Journal of Public Health*, *36*(2), 106–108.
- Mosavi, A. (2014). Exploring the roles of portfolio steering committees in project portfolio governance. *International Journal of Project Management*, 32(3), 388–399.
- Mullaly, M. (2014). If maturity is the answer, then exactly what was the question? *International Journal of Managing Projects in Business*, 7(2), 169–185.
- Muller, R. (2009). *Project Governance (Fundamentals of project management)*. Ashgate Publishing Group.
- Muller, R., & Jugdev, K. (2012). Critical success factors in projects. *International Journal of Managing Projects in Business*, 5(4), 757–775.

- Muller, R., & Lecoeuvre, L. (2014). Operationalizing governance categories of projects. *International Journal of Project Management*, 32(8), 1346–1357.
- Muller, R., & Martinsuo, M. (2015). The impact of relational norms on information technology project success and its moderation through project governance. *International Journal of Managing Projects in Business*, 8(1), 154–176.
- Muller, R., Pemsel, S., & Shao, J. (2015). Organizational enablers for project governance and governmentality in project-based organizations. *International Journal of Project Management*, 33(4), 839–851.
- Muller, R., & Turner, R. (2007). The Influence of Project Managers on Project Success Criteria and Project Success by Type of Project. *European Management Journal*, 25(4), 298–309.
- Munns, A. K., & Bjeirmi, B. F. (1996). The role of project management in achieving project success. *International Journal of Project Management*, 14(2), 81–87.
- Musteen, M., Rhyne, L., & Zheng, C. (2013). Asset or constraint: Corporate reputation and MNCs' involvement in the least developed countries. *Journal of World Business*, 48(3), 321–328.
- Nicolò, D. (2015). Towards a Theory on Corporate Reputation and Survival of Young Firms. *Procedia Economics and Finance*, 22 (November), 296–303.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychological theory*. New York: MacGraw-Hill.
- Ofori, D., & Deffor, E. W. (2013). Assessing Project Management Maturity in Africa: A Ghanaian Perspective. *International Journal of Business Administration*, 4(6), 41.
- Ojiako, U., Chipulu, M., Ashleigh, M., & Williams, T. (2014). Project management learning: Key dimensions and saliency from student experiences. *International Journal of Project Management*, 32(8), 1445–1458.
- Oliver, C. (1997). Sustainable Competitive Advantage: Combining Institutional and Resource- Based Views. *Strategic Management Journal*, *18*(9), 697–713.
- Olmedo-Cifuentes, I., & Martínez-León, I. M. (2014). Influence of management style on employee views of corporate reputation. Application to audit firms. *BRQ Business Research Quarterly*, *17*(4), 223–241.
- Opoku, A., Cruickshank, H., & Ahmed, V. (2015). Organizational leadership role in the delivery of sustainable construction projects in UK. *Built Environment Project and Asset Management*, 5(2), 154–169.

- Park, J., Lee, H., & Kim, C. (2014). Corporate social responsibilities, consumer trust and corporate reputation: South Korean consumers' perspectives. *Journal of Business Research*, 67(3), 295–302.
- Parliamentary Office of Science and Technology. (2003). *Government IT projects*. 7 Millbank London SW1P 3JA. Retrieved from http://www.parliament.uk/documents/post/pr200.pdf
- Paulk, M. C., Curtis, B., Chrissis, M. B., & Weber, C. V. (1993). Capability maturity model, version 1.1. *IEEE Software*, 10(4), 18–27.
- Pemsel, S., Wiewiora, A., Müller, R., Aubry, M., & Brown, K. (2014). A conceptualization of knowledge governance in project-based organizations. *International Journal of Project Management*, 32(8), 1411-1422.
- Pereira, J., Cerpa, N., Verner, J., Rivas, M., & Procaccino, J. D. (2008). What do software practitioners really think about project success: A cross-cultural comparison. *Journal of Systems and Software*, 81(6), 897-907.
- Pérez, A. (2015). Corporate reputation and CSR reporting to stakeholders. *Corporate Communications: An International Journal*, 20(1), 11–29.
- Peteraf, M. A., & Barney, J. B. (2003). Unraveling the resource-based tangle. *Managerial and Decision Economics*, 24(4), 309–323.
- Phua, F. T. T., & Rowlinson, S. (2004). How important is cooperation to construction project success? A grounded empirical quantification. *Engineering, Construction and Architectural Management*, 11(1), 45–54.
- Pinto, J. K. (2014). Project management, governance, and the normalization of deviance. *International Journal of Project Management*, 32(3), 376–387.
- Pinto, J. K., & Slevin, D. P. (1988). Project Success : Definitions and Measurement Techniques. *Project Management Journal*, 19(1), 67–72.
- Pitpreecha, R. (2013). Corporate reputation in Thailand: An analysis of indicators. *Journal of Public Relations and Advertising*, 6(1).
- Plaza-Úbeda, J. A., de Burgos-Jiménez, J., & Carmona-Moreno, E. (2010). Measuring stakeholder integration: Knowledge, interaction and adaptational behavior dimensions. *Journal of Business Ethics*, 93(3), 419–442.
- PM Solutions. (2014). Project Management Maturity & Value Benchmark. PM Solutions, Glen Mills, USA. Retrieved from http://www.pmsolutions.com/articles/PM_Maturity_2014_Research_Report_FI NAL.pdf.

- PMI. (2013a). A Guide to the Project Managemnet Body of Knowledge (fifth). Pennsylvania: Project Management Institute, Inc.
- PMI. (2013b). Organizational Project Management Maturity Model (OPM3®) -Third Edition. Project Management Institute, Inc.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of management*, 12(4), 531-544.
- Podsakoff, N. P., Shen, W., & Podsakoff, P. M. (2006). The role of formative measurement models in strategic management research: review, critique, and implications for future research. *Research methodology in strategy and management*, 3(1), 197-252.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods*, *36*(4), 717-731.
- Preston, L. E. (2004). Reputation as a source of corporate social capital. *Journal of General Management*, 30(2), 43-49.
- Pretorius, S., Steyn, H., & Jordaan, J. (2012). Project management maturity and project management success in the engineering and construction industries in southern africa. *The South African Journal of Industrial Engineering*, 23(3), 1.
- Procaccino, J. D., & Verner, J. M. (2006). Software project managers and project success: An exploratory study. *Journal of Systems and Software*, 79(11), 1541–1551.
- Procaccino, J. D., Verner, J. M., Shelfer, K. M., & Gefen, D. (2005). What do software practitioners really think about project success: an exploratory study. *Journal of Systems and Software*, 78(2), 194-203.
- Puncheva-Michelotti, P., & Michelotti, M. (2010). The role of the stakeholder perspective in measuring corporate reputation. *Marketing Intelligence & Planning*, 28(3), 249–274.
- Quinn, L., & Baltes, J. (2007). Leadership and the triple bottom line: bringing sustainability and corporate social responsibility to life. Center for Creative Leadership, North Carolina, USA.
- Rabechini Jr., R., & Pessôa, M. S. D. P. (2005). Um modelo estruturado de competências e maturidade em gerenciamento de projetos. *Produção*, 15(1), 34–43.
- Radbourne, J. (2003). Performing on Boards: The Link Between Governance and Corporate Reputation in Nonprofit Arts Boards. *Corporate Reputation Review*, 6(3), 212–222.

- Raithel, S., Wilczynski, P., Schloderer, M. P., & Schwaiger, M. (2010). The valuerelevance of corporate reputation during the financial crisis. *Journal of Product* & Brand Management, 19(6), 389–400.
- Raymond, L., & Bergeron, F. (2008). Project management information systems: An empirical study of their impact on project managers and project success. *International Journal of Project Management*, 26(2), 213–220.
- Rehman, A. U., Khan, A. M., & Khan, R. A. (2011). Measuring training effectiveness: a case study of public sector project management in Pakistan. Journal of Diversity Management (JDM), 6(1), 39-48.
- Remenyi, D., & Williams, B. (1998). Doing research in business and management: an introduction to process and method. Sage Publications.
- Renz, P. S. (2007). Project governance: implementing corporate governance and business ethics in nonprofit organizations. Springer Science & Business Media.
- Reputation Institute. (2016). 2016 Country RepTrak®: The Most Reputable Countries in the World. Retrieved from https://www.reputationinstitute.com/CMSPages/GetAzureFile.aspx?path=~\me dia\media\documents\country-reptrak-2016.pdf&hash=5a4232c6bfda0af12fca90660d5f8d18a657ac230d062e34e0bb5 89c0d3c1538&ext=.pdf
- Reve, T., & Levitt, R. E. (1984). Organization and governance in construction. International Journal of Project Management, 2(1), 17–25.
- Rigdon, E. E. (2012). Rethinking partial least squares path modeling: In praise of simple methods. *Long Range Planning*, 45(5), 341-358
- Ringle, C. M., Wende, S., and Becker, J.-M. (2015). "SmartPLS 3." Boenningstedt: SmartPLS GmbH, http://www.smartpls.com.
- Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (1991). Criteria for scale selection and evaluation. *Measures of personality and social psychological attitudes*, 1(3), 1-16.
- Roberts, P. W., & Dowling, G. R. (2002). Corporate reputation and sustained superior financial performance. *Strategic Management Journal*, 23(12), 1077–1093.
- Rolstadås, A., Tommelein, I., Morten Schiefloe, P., & Ballard, G. (2014a). Understanding project success through analysis of project management approach. *International Journal of Managing Projects in Business*, 7(4), 638– 660.

- Ruth, J. A., & York, A. (2004). Framing information to enhance corporate reputation: The impact of message source, information type, and reference point. *Journal of Business Research*, 57(1), 14–20.
- Ruuska, I., Ahola, T., Artto, K., Locatelli, G., & Mancini, M. (2011). A new governance approach for multi-firm projects: Lessons from Olkiluoto 3 and Flamanville 3 nuclear power plant projects. *International Journal of Project Management*, 29(6), 647–660.
- Samset, K., & Volden, G. H. (2016). Front-end definition of projects: Ten paradoxes and some reflections regarding project management and project governance. *International Journal of Project Management*, 34(2), 297–313.
- Sánchez, M. A. (2015). Integrating sustainability issues into project management. *Journal of Cleaner Production*, 96, 319–330.
- Sandu, M. C. (2015). Reputation An Important Element for Automotive Industry Profit? *Procedia Economics and Finance*, 32(15), 1035–1041.
- Santos, V., & Varajão, J. (2015). PMO as a Key Ingredient of Public Sector Projects' Success – Position Paper. *Procedia Computer Science*, 64, 1190–1199.
- Sarstedt, M., Wilczynski, P., & Melewar, T. C. (2013). Measuring reputation in global markets-A comparison of reputation measures' convergent and criterion validities. *Journal of World Business*, 48(3), 329–339.
- Şatır, Ç. (2006). The nature of corporate reputation and the measurement of reputation components. Corporate Communications: An International Journal, 11(1), 56–63.
- Saunders, M., Lewis, P., & Thornhill, A. (2011). *Research Methods for Business Students*. Pearson Education India.
- Sauer, C., & Reich, B. H. (2009). Rethinking IT project management: Evidence of a new mindset and its implications. *International Journal of Project Management*, 27(2), 182-193.
- Schwaninger, M. (2015). Organizing for sustainability: a cybernetic concept for sustainable renewal. *Kybernetes*, 44(6/7), 935–954.
- Segars, A. H., & Grover, V. (1993). Re-examining perceived ease of use and usefulness: A confirmatory factor analysis. *MIS quarterly*, 517-525.
- Sekaran, U. (2003). *Research Methods for Business Students* (4th Ed.). John Wiley & Sons, Inc.
- Sekaran, U., & Bougie, R. (2010). *Research Method for Business, A Skill Building Approach*. John Wiley & Sons Inc.

- Seo, E. J., & Park, J. W. (2016). A Study on the Impact of Airline Corporate Reputation on Brand Loyalty. *International Business Research*, 10(1), 59.
- Serrador, P., & Pinto, J. K. (2015). Does Agile work? A quantitative analysis of agile project success. *International Journal of Project Management*, 33(5), 1040–1051.
- Serrador, P., & Rodney Turner, J. (2014). The relationship between project success and project efficiency. *Procedia - Social and Behavioral Sciences*, 119(4), 75– 84.
- Shamma, H. M. (2012). Toward a comprehensive understanding of corporate reputation: Concept, measurement and implications. *International Journal of Business and Management*, 7(16), 151.
- Shamma, H. M., & Hassan, S. S. (2009). Customer and non customer perspectives for examining corporate reputation. *Journal of Product & Brand Management*, 18(5), 326–337.
- Sharma, S., Durand, R. M., & Gur-Arie, O. (1981). Identification and Analysis of Moderator Variables. *Journal of Marketing Research.* 18 (August), 291-300.
- Shehu, Z., Endut, I. R., Akintoye, A., & Holt, G. D. (2014). Cost overrun in the Malaysian construction industry projects: A deeper insight. *International Journal of Project Management*, 32(8), 1471–1480.
- Shen, L., Jiao, L., He, B., & Li, L. (2014). Evaluation on the utility efficiency of metro infrastructure projects in China from sustainable development perspective. *International Journal of Project Management*, 33(3), 528–536.
- Shen, Q., Wang, H., & Tang, B. S. (2014). A decision-making framework for sustainable land use in Hong Kong's urban renewal projects. Smart and Sustainable Built Environment, 3(1), 35-53.
- Shenhar, A. ., Milosevic, D., Dvir, D., & Thamhain, D. (2007). *Linking Project* Management To Business Strategy. Project Management Institute, Inc.
- Shenhar, A. J., & Dvir, D. (2007). Reinventing project management: the diamond approach to successful growth and innovation. Harvard Business Review Press.
- Shenhar, A. J., Tishler, A., Dvir, D., Lipovetsk, S., & Lechler, T. (2002). Refining the search for project success factors : a multivariate , typological approach. *R&D Management*, *32*(2), 111–126.
- Sheth, J. N., & Sinha, M. (2015). B2B branding in emerging markets: A sustainability perspective. *Industrial Marketing Management*, 51, 79–88.

- Silvius, A. J. G., & Schipper, R. P. J. (2015). A Conceptual Model for Exploring the Relationship Between Sustainability and Project Success. *Procedia Computer Science*, 64, 334–342.
- Silvius, A. J. G., & Schipper, R. P. J. (2014). Sustainability in Project Management Competencies: Analyzing the Competence Gap of Project Managers. *Journal of Human Resource and Sustainability Studies*, 2(2), 40–58.
- Silvius, A. J., & Schipper, R. P. J. (2014). Sustainability in project management: A literature review and impact analysis. *Social Business*, *4*(1), 63-96.
- Slater, S. F., & Atuahene-Gima, K. (2004). Conducting survey research in strategic management. In *Research methodology in strategy and management* (pp. 227-249). Emerald Group Publishing Limited.
- Smith, K. T., Smith, M., & Wang, K. (2010). Does brand management of corporate reputation translate into higher market value? *Journal of Strategic Marketing*, 18(3), 201–221.
- Šontaitė-Petkevičienė, M. (2014). Crisis Management to Avoid Damage for Corporate Reputation: The Case of Retail Chain Crisis in the Baltic Countries. *Procedia - Social and Behavioral Sciences*, 156(April), 452–457.
- South Asia Sustainable Development Unit (SASSD). (2007). Pakistan Infrastructure Implementation Capacity Assessment (PIICA), (41630). Retrieved from http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/Publications/4 48813-1202436185914/PIICfull.pdf
- Souza, T. F. De, & Gomes, C. F. S. (2015). Assessment of Maturity in Project Management: A Bibliometric Study of Main Models. *Procedia Computer Science*, 55(Itqm), 92–101.
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355.
- Spence, M. (2002). Signaling in Retrospect and the Informational Structure of Markets. *American Economic Review*, 92(3), 434–459.
- Stone, E. F. (1978). *Research methods in organizational behavior*. Goodyear Publishing Company.
- Stone, M. (1974). Cross-validatory choice and assessment of statistical predictions. *Journal of the Royal statistical Society*, 36, 111-147.
- Strategic Direction. (2014). Building a corporate reputation. *Strategic Direction*, *30* (4), 21–23.

- Suhr, K., & Schumann, A. von. (2006). In the Driver's Seat: Implementing Sustainable Management Around the Globe. In *The ICCA Handbook on Corporate Social Responsibility* (pp. 331–346). John Wiley & Sons Ltd.
- Swoboda, B., Berg, B., & Schramm-Klein, H. (2013). Reciprocal Effects of the Corporate Reputation and Store Equity of Retailers. *Journal of Retailing*, 89(4), 447–459.
- Tabachnick, Barbara G & Fidell, Linda S (2001). *Using multivariate statistics* (4th ed). Allyn and Bacon, Needham Heights, Mass.
- Taghian, M., D'Souza, C., & Polonsky, M. (2015). A stakeholder approach to corporate social responsibility, reputation and business performance. *Social Responsibility Journal*, 11(2), 340–363.
- Tahri, H., & Drissi-Kaitouni, O. (2015). New Design for Calculating Project Management Maturity (PMM). *Procedia - Social and Behavioral Sciences*, 181, 171–177.
- Tan, M., & Yap, C. Y. (1994). Impact of organisational maturity on software quality. Software Quality and Productivity: Theory, Practice and Training, (3), 231– 234.
- Thomson, C., & El-Haram, M. (2014). Potential and implications of sustainability action plans. *Built Environment Project and Asset Management*, 4(1), 108–122.
- Tischer, S., & Hildebrandt, L. (2014). Linking corporate reputation and shareholder value using the publication of reputation rankings. *Journal of Business Research*, 67(5), 1007–1017.
- Todorov, T. S. (2014). Evaluating Project and Program Management as Factor for Socio-economic Development within EU. *Procedia - Social and Behavioral Sciences*, 119, 819–828.
- Todorović, M. L., Petrović, D. Č., Mihić, M. M., Obradović, V. L., & Bushuyev, S.
 D. (2015). Project success analysis framework: A knowledge-based approach in project management. *International Journal of Project Management*, 33(4), 772–783.
- Too, E. G., & Weaver, P. (2014). The management of project management: A conceptual framework for project governance. *International Journal of Project Management*, 32(8), 1382–1394.
- Tremblay, M.-A. (1957). The Key Informant Technique: A Nonethnographic Application. *American Anthropologist*, 59(4), 688–701.

- Turner, J. R. (2006). Towards a theory of project management: The nature of the project governance and project management. *International Journal of Project Management*, 24(2), 93–95.
- Turner, J. R. (2009). The Handbook of Project Based Management: Leading Strategic Change in Organizations. Manager (Vol. 3). The McGraw-Hill Companies, Inc.
- Turner, J. R., Anbari, F., & Bredillet, C. (2013). Perspectives on research in project management: the nine schools. *Global Business Perspectives*, 1(1), 3–28.
- Turner, J. R., & Keegan, A. (1999). The versatile project-based organization: governance and operational control. *European Management Journal*, 17(3), 296–309.
- Turner, J. R., & Müller, R. (2003). On the nature of the project as a temporary organization. *International Journal of Project Management*, 21(1), 1–8.
- Turner, R., Huemann, M., Anbari, F., & Bredillet, C.N. (2010). Perspectives on *Projects*. Routledge.
- Van Den Bosch, A. L. M., De Jong, M. D. T., & Elving, W. J. L. (2005). How corporate visual identity supports reputation. *Corporate Communications: An International Journal*, 10(2), 108–116.
- Vinzi, V., Chin, W. W., Henseler, J., & Wang, H. (Eds.). (2010). Handbook of partial least squares. Berlin: Springer.
- Vergin, R. C., & Qoronfleh, M. W. (1998). Corporate Reputation and the Stock Market. *Business Horizons*, 41(1), 19–26.
- Vlahov, R. D. (2014). Developing And Validating A Measuring Instrument For Assessing The Company's Maturity Of Project Management For Internal Projects. *Economic and Social Development: Book of Proceedings*, 477.
- Wæraas, A., & Byrkjeflot, H. (2012a). Public Sector Organizations and Reputation Management: Five Problems. *International Public Management Journal*, 15(2), 186–206.
- Wagner, M. (2007). Integration of environmental management with other managerial functions of the firm: empirical effects on drivers of economic performance. *Long Range Planning*, 40(6), 611-628.
- Walsh, G., & Beatty, S. E. (2007). Customer-based corporate reputation of a service firm: Scale development and validation. *Journal of the Academy of Marketing Science*, *35*(1), 127–143.

- Walsh, G., Dinnie, K. J., & Weidmann, K. P. (2006). How do corporate reputation and customer satisfaction impact customer defection? A study of private energy customers in Germany. *Journal of Services Marketing*, 20(6), 412–420.
- Wang, E. T. G., & Chen, J. H. F. (2006). The influence of governance equilibrium on ERP project success. *Decision Support Systems*, 41(4), 708–727.
- Wang, X., & Huang, J. (2006). The relationships between key stakeholders' project performance and project success: Perceptions of Chinese construction supervising engineers. *International Journal of Project Management*, 24(3), 253–260.
- Warda, S. H. A.-. (2014). Mediation effect of sustainability competencies on the relation between barriers and project sustainability (the case of Egyptian higher education enhancement projects). Sustainability Accounting, Management and Policy Journal, 5(1), 68–94.
- Weigelt, K., & Camerer, C. (1988). Reputation and corporate strategy: A review of recent theory and applications. *Strategic Management Journal*, 9(5), 443–454.
- Weiwei, T. (2007). Impact of Corporate Image and Corporate Reputation on Customer Loyalty: a Review. *Management Science and Engineering*, 2, 57–62.
- Weng, P. S., & Chen, W. Y. (2017). Doing good or choosing well? Corporate reputation, CEO reputation, and corporate financial performance. *The North American Journal of Economics and Finance*, 39, 223-240.
- World Commission on Environment and Development (1987), *Our Common Future*, Oxford University Press, New York, NY.
- Wernerfelt, B. (1984). A Resource based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Westerveld, E. (2003). The Project Excellence Model®: linking success criteria and critical success factors. *International Journal of Project Management*, 21(6), 411–418.
- Willard, M., Wiedmeyer, C., Warren Flint, R., Weedon, J. S., Woodward, R., Feldman, I., & Edwards, M. (2010). The sustainability professional: 2010 competency survey report. *Environmental Quality Management*, 20(1), 49–83.
- Williams, T., Klakegg, O. J., Magnussen, O. M., & Glasspool, H. (2010). An investigation of governance frameworks for public projects in Norway and the UK. *International Journal of Project Management*, 28(1), 40–50.

- Williamson, Kirsty (2000). The Two Major Traditions of Research. In Kirsty Williamson (Ed.). Research Methods for Students and Professionals: Information Management and Systems (pp.25-48). Wagga Wagga: Centre for Information Studies, CSU.
- Wohlin, C. ., Mayrhauser, A. vo., Höst, M. ., & Regnell, B. . (2000). Subjective evaluation as a tool for learning from software project success. *Information and Software Technology*, 42(14), 983–992.
- World Bank. 1996. Evaluation results : 1994. A World Bank operations evaluation study. Washington, D.C. : The World Bank. http://documents.worldbank.org/curated/en/370751468739195930/Evaluationresults-1994
- Young, M., Young, R., & Zapata, J. R. (2014). Project, programme and portfolio maturity: a case study of Australian Federal Government. *International Journal* of Managing Projects in Business, 7(2), 215–230.
- Yousaf, S., & Li, H. (2015). Social identity, collective self esteem and country reputation: the case of Pakistan. *Journal of Product & Brand Management*, 24(July 2015), 399–411.
- Yu, A. G., Flett, P. D., & Bowers, J. A. (2005). Developing a value-centred proposal for assessing project success. *International Journal of Project Management*, 23(6), 428–436.
- Zandhuis, A., & Stellingwerf, R. (2013). ISO 21500 Guidance on project management- A Pocket Guide. Van Haren Publishing, Zaltbommel.
- Zhong, Y., & Wu, P. (2015). Economic sustainability, environmental sustainability and constructability indicators related to concrete- and steel-projects. *Journal of Cleaner Production*, 108, 1–9.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). Business research methods. Cengage Learning.
- Zinko, R., Ferris, G., Blass, F., & Laird, M. (2007). Toward a Theory of Reputation in Organizations. *Research in Personnel and Human Resources Management*, 26, 163–204.
- Zwikael, O., & Smyrk, J. (2014). Project governance: Balancing control and trust in dealing with risk. *International Journal of Project Management*, *33*(4), 852–862.