UNIVERSITI TEKNOLOGI MARA

LEADERSHIP STYLE INFLUENCE ON ADOPTION OF AN IMPROVED PROCESS INNOVATION BY MALAYSIAN CONSTRUCTION COMPANIES

SHAZWAN MOHAMED SHAARI

Thesis submitted in fulfilment of the requirements for the degree of **Doctor of Philosophy**

Faculty of Architecture, Planning & Surveying

July 2017

ABSTRACT

The research studied on the leadership style influence on adoption of an improved process innovation (ISO 9001: 2008) by Malaysian Grade 7 construction companies that had used the previous version (ISO 9001:2000). Process innovations play important roles in realizing the goals of the Malaysian Construction Industry Master Plan (CIMP) 2006-2015. The Construction Industry Development Board Malaysia (CIDB) uses compulsion to make construction companies to adopt process innovations under threats of sanctions. However, it does not guarantee that companies would adopt upgrades of process innovations voluntarily beyond the minimum compulsory requirements by CIDB. The review of past literature shows there is a research gap about the influence of leadership upon the intention to adopt the improved version of a currently used process innovation. There is a research gap about the influence of leadership upon the realized adoption of the improved version of a process innovation to replace the older version of the innovation. Respondents for the research were drawn from ISO 9001 registered companies under the Construction Industry Development Board (CIDB). The research used a quantitative method for its methodology through a structured questionnaire survey as its instrument. Manager and subordinates of Malaysian Grade G7 construction firms were the respondents. This was followed by telephone call interviews. The analysis of the feedback from structured questionnaire survey was through a parametric statistical analysis and a structural equation modelling (SEM) analysis. For the telephone interview, a content analysis was conducted. The findings indicate managers perceived their leadership styles as transactional leadership while employees perceive them as transformational leadership. There are significant differences ($p \le 0.05$) in perceived leadership among age of managers, working experience of managers and the numbers of years the company. There is also significant differences ($p \le 0.05$) in intended adoption of ISO 9001:2008 innovation among manager's gender, age of managers, numbers of years the ISO 9001:2000 has been implemented inside the company, the numbers of years the company has been in operation and a company's specialization. A Structural Equation Model (SEM) with good fit was generated that showed the relationship among transformational leadership, perceived of use, ease of use, satisfaction and continual improvement. The analysis of the follow-up interviews of the managers of the respondent firms generated four factors of the actual adoption of the improved innovation. These are Leadership, Perceived Usefulness, Difficulty of Use and Institutional Influence.

ACKNOWLEDGEMENT

Alhamdulillah and Syukur to the Almighty as this journey have come to the end.

I would like to this moment and opportunity to thank everyone who has been supporting me throughout my whole PhD study. Starting with my parents, my family, friends and faculty members.

My highest gratitude goes to my main supervisor Associate Prof. Sr. Dr. Mohd. Hisham Ariffin for his guidance and patience in guiding me to complete the whole journey. Another thank you to my second supervisor Associate Prof. Dr. Aini Jaapar for her motivational support and knowledge sharing.

The challenges and hardships encountered are many but I sincerely appreciate the enlightening experience of my PhD study. There were times that I thought it was a hopeless journey to complete, but there were those who still believe and never gave up hope in me.

Only the All mighty Allah can repay your love, support, guidance and friendship that everyone has given to me. You know who you are and this list of names will always be in my heart until my very end.

Sincerely from my heart thank you all.

"Let me tell you something you already know. The world ain't all sunshine and rainbows. It's a very mean and nasty place and I don't care how tough you are it will beat you to your knees and keep you there permanently if you let it. You, me, or nobody is gonna hit as hard as life. But it ain't about how hard ya hit. It's about how hard you can get hit and keep moving forward. How much you can take and keep moving forward. That's how winning is done!"

— Sylvester Stallone, Rocky Balboa

TABLE OF CONTENTS

		Page			
CON	FIRMATION BY PANEL OF EXAMINERS	II			
AUTHOR'S DECLARATION ABSTRACT ACKNOWLEDGEMENT TABLE OF CONTENTS LIST OF TABLES LIST OF FIGURES LIST OF ABBREVIATIONS		III IV V VI XI XVI			
			CHA	PTER ONE: INTRODUCTION	1
			1.1	Introduction	1
			1.2	Research Background	1
			1.3	Problem Statement	3
1.4	The Research Questions	6			
1.5	Aims And Objectives	7			
1.6	Significance Of Research	7			
	1.6.1 Contribution towards the Body of Knowledge	8			
	1.6.2 Contribution towards the Practical Usage	8			
1.7	Research Scope And Limitation	9			
1.8	Definition Of Terms	10			
1.9	Organisation Of The Research	12			
1.10	Chapter Summary	15			
СНА	PTER TWO: REVIEW OF LITERATURE	16			
2.1	Introduction	16			
2.2	An Overview Of The Construction Industry In Malaysia	17			
2.3	Innovation	22			
	2.3.1 Definition of Innovation	24			

CHAPTER ONE INTRODUCTION

1.1 INTRODUCTION

This chapter presents the research outline and proposal of the research. The areas covered under this chapter are introduction of the chapter, the research background, the problem statement, the research questions, the aims and objectives of the research, significant of the research, research scope and limitation, definition of terms used in the research, organization of the whole study and finally a chapter summary is provided to summarise the whole of this chapter.

1.2 RESEARCH BACKGROUND

In Malaysia, the construction industry plays a major role in contributing to the nation's growth and social development. In 2006, The Malaysian Construction Industry Master Plan (CIMP) 2006 – 2015 was launched to assure the sustainability of the industry and continue contributing towards the Malaysian economy. Then at the end of 2015, the Malaysian government came up with a revised version of the CIMP and rebranded it the Construction Industry Transformational Programme (CITP) 2016 – 2020.

The construction industry is significant and represent an important element to the Malaysian economy (CIDB, 2015; CIDB, 2010; Chan et al., 2004). In Malaysia, the construction industry plays a role in the implementation of the country's development agenda to make Malaysia a develop nation by 2020.

According to Ofori (1990) the construction industry provides a backward and forward linkage to the other economic sectors. This statement is found consistent with a report produced by Abdul-Aziz (2001). They (CIDB, 2007) state that the construction industry is critical to national wealth creation as it acts as a catalyst for and has multiplier effects to the economy and also enables other industries namely manufacturing, professional services, financial services education and other.