# THE RELATIONSHIP OF PROJECT MANAGEMENT INNOVATION AND PROJECT PERFORMANCE IN KEDAH CONSTRUCTION INDUSTRY

## **NAWAWI BIN OSMAN**

## BACHELOR OF PROJECT MANAGEMENT UNIVERSITY MALAYSIA PAHANG

## THE RELATIONSHIP OF PROJECT MANAGEMENT INNOVATION AND PROJECT PERFORMANCE IN KEDAH CONSTRUCTION INDUSTRY

### **NAWAWI BIN OSMAN**

Thesis submitted in fulfillment of the requirements for the award of the degree in Bachelor of Project Management ( Hons)

**Faculty of Industrial Management** 

UNIVERSITI MALAYSIA PAHANG

**NOVEMBER 2015** 

iii

SUPERVISOR'S DECLARATION

I hereby declare that I have checked this project and in my opinion, this project is adequate

in terms of scope and quality for the award of the Degree of Bachelor of Project

Management with Honors.

Signature:

Name of Supervisor: WAN KHAIRUL ANUAR BIN WAN ABD MANAN

Position: LECTURER

Date: NOVEMBER 2015

iv

STUDENT'S DECLARATION

I hereby declare that the work is my own except for quatation and summaries which have

been duly acknowledgement. the project has not been accepted for any degree and is not

concurrently submitted for award of other degree.

Signature:

Name: NAWAWI BIN OSMAN

ID Number: PB11080

Date: NOVEMBER 2015

## TABLE OF CONTENT

	PAGE
SUPERVISOR DECLARATION	II
STUDENT DECLARATION	III
DEDICATION	IV
ACKNOWLEDGEMENTS	${f v}$
ABSTRACT	VI
ABSTRAK	VII
TABLE OF CONTENTS	VIII
LIST OF TABLE	XI
LIST OF FIGURES	XII
LIST OF GRAPH	XIII
CHAPTER 1 INTRODUCTION	
1.1 Introduction of the Study	1
1.2 Background of the study	3
1.3 Research Problem	5
1.4 Research Objectives	6
1.5 Scope of Study	6
1.6 Significance of Study	6
1.7 Research Frame Work	7

## CHAPTER 2 LITERATURE REVIEW

2.1 Introduction		8
2.2 Innovation		8
2.3 Model of Innovation in Construction		9
2.4 Project Performance		11
2.5 Relationship between Innova	tion and Project Performance	12
CHAPTER 3 M	<b>IETHODOLOGY</b>	
3.1 Introduction		14
3.2 Research Design		15
3.3 Population and Sampling		15
3.4 Sample size Calculation		16
3.5 Data Collection Method		17
3.6 Data Measurement		17
3.7 Data Analysis Method		18
3.8 Conclusion		19

CHAPTER 4	DATA ANALYSIS ( RESULT AND DISCUS	SION
4.1 Introduction		20
		21
4.2 Descriptive Statistics		
4.3 Demographic Analysis		21
4.4 Normality Analysis		26
4.5 Reliability Analysis		29
4.6 Correlation Analysis		30
4.7 Anova (Analysis of Vari	ience)	31
4.8 Regression Analysis		32
CHAPTER 5	CONCLUSION AND RECOMMENDATIONS	S
5.1 Introduction		34
5.2 Conclusion and Discussi	ion	34
5.3 Limitation		35
5.4 Recommendation		35
5.5 Conclusion		36
REFERENCES		37
GANTT CHARTS		38
APPENDICES A Question	nnaire	40
APPENDICES B SPSS d	lata Results	44

## LIST OF TABLE

TABLE NO.	TITLE	PAGE
4.1	Table of demographic analysis	21
4.2	Age	23
4.3	Work Experience	24
4.4	Normality Test	26
4.5	List of Cronbach Alpha	29
4.6	Reliability	30
4.7	Summary of Pearson Correlation Value	31
4.8	Summary of ANOVA	32
4.9	Summary of Regression	33

## LIST OF FIGURES

FIGURE NO	TITLE	PAGE
2.1	Two moment model of construction innovation process	10
3.1	Symbol of Sample Size	16
4.1	Gender	22
4.2	Age	24
4.3	Work Experience	25

## LIST OF GRAPH

GRAPH	TITLE	PAGE
4.1	Normality Graph for Innovation Championing	27
4.2	Normality Graph of Project Performance Measurement	28

## THE RELATIONSHIP OF PROJECT MANAGEMENT INNOVATION AND PROJECT PERFORMANCE IN KEDAH CONSTRUCTION INDUSTRY

### **NAWAWI BIN OSMAN**

Thesis submitted in fulfillment of the requirements for the award of the degree in Bachelor of Project Management ( Hons)

**Faculty of Industrial Management** 

UNIVERSITI MALAYSIA PAHANG

**NOVEMBER 2015** 

#### **ABSTRACT**

This study aimed to investigate the relationship of innovation projects and projects under construction Kedah performance. The objective of this study was to categorize the most important element of innovation affect the performance of the project and to identify the relationship between innovation and project performance. The results of the study to see how the attack took place in each of the projects undertaken and how the performance of the project in the event of change as innovations. Therefore, this study aimed to identify whether or not it is an important innovation in every project, and it gets innovations of others to do so. The scope of this study will meet the organization and employees as the unit of analysis of this study, and Kedah in northern Malaysia. Data will be collected from construction companies selected in the state. For data derived from the survey questionnaire and sent via e-mail. The total sample of 50 respondents of 500 construction companies were used in this study. In conclusion, this study has shown that the dependent variable and the dependent variable is related to each other.

#### **ABSTRAK**

Kajian ini bertujuan untuk mengkaji hubungan inovasi projek dan prestasi projek dalam pembinaan Kedah. Objektif kajian ini adalah untuk mengkategorikan Elemen paling penting dalam inovasi menjejaskan prestasi projek dan untuk mengenal pasti hubungan antara inovasi dan prestasi projek. Hasil kajian untuk melihat bagaimana perubahan itu berlaku dalam setiap projek yang dijalankan dan bagaimana prestasi projek sekiranya berlaku perubahan sebagai inovasi. Oleh itu, kajian ini bertujuan untuk mengenal pasti sama ada inovasi penting atau tidak dalam setiap projek, dan bagaimana ia mendapat inovasi daripada orang lain untuk berbuat demikian. Skop kajian ini akan memenuhi organisasi dan pekerja sebagai unit analisis kajian ini.Kajian ini akan dijalankan di Kedah iaitu utara Malaysia. Data akan dikumpulkan daripada syarikat-syarikat pembinaan yang dipilih di negeri Kedah. Bagi data yang diperolehi daripada soal selidik kajian dan dihantar melalui e-mel. Jumlah sampel 50 orang responden daripada 500 syarikat-syarikat pembinaan telah digunakan dalam kajian ini. Kesimpulannya, kajian ini telah menunjukkan bahawa bergantung pembolehubah berubah-ubah dan bergantung berkaitan antara satu sama lain.

#### CHAPTER 1

#### INTRODUCTION

#### 1.1 INTRODUCTION OF THE STUDY

At the present time the world moves quickly without realizing a lot of development going on. In Malaysia construction sector is the main sector to develop the country. This is because, this sector will boost the development of Malaysia to achieve high-income nation by 2020. There are many construction companies emerging in the present as Uda Holdings, Gamuda, UEM, and so on. If you can see all the company is a successful construction company and has a name that is noted in the present.

Annoyance about the erratic performance of the construction industry, and lack of innovation, coming at a time when customers are demanding more and more complex projects. Most of the problems in the industry stems from a lack of coordination within the organization. Importance of different opinions arise because each organization has different goals. Each organization will use different ways to do their best in their organization in order to avoid various unwanted problems occur in organizations. However, the importance of tacit knowledge and the need for personal contact in resolving problems also continued to emphasize the organization. A group of organization is common in many project-based industries.

The construction industry is often criticized by industry observers somehow less control environment of the construction industry from other industries. This case is so because, in part be based on the project and it is a common tradition that the output of the construction industry is a project. Major construction projects involving the integration of sub-systems and components that differ by various organizations. The organizational structure of the construction industry can be seen as a form of 'hybrid' or 'virtual' company Eccles, 1981 and Miles and Snow, 1987.

Therefore, the construction organization must have in every construction project innovation them. Innovation is the creation of new things that will benefit, value and benefit to everyone. It involves the creation of such products, processes, systems, organizational structures and business models of new or modified system. This approach is necessary to evaluate the organization of construction in our country, especially in the state of Kedah operate in line with the current world circulation using various means easier and faster to move their construction projects completed on time. Every organization needs to move innovation their organizations to prevent their organizations behind in the world of construction.

Feel the construction project to the high innovation to enhance an organization's product. How innovation this may affect the performance of the construction project? The organization also the opportunity to make innovation wise in line with movements in the performance of the construction project is not overwhelmed by the impact made by the organization. If innovation that interferes with job performance so far worked well then it must be stopped in order to avoid other topics untoward happens and the organization needs to find another innovation to push for the construction of the project better.

#### 1.2 BACKGROUND OF THE STUDY

Item above describes the problems that often arise in project construction and construction issues often raised in various conditions. There are times when the problem is often posed but not as big as it needs to make changes and Innovation in line with the change of how the performance of work under construction. There are certain things, which can lead to Innovation them is environmental pressure, technological capability, knowledge exchange, and the latter is the Boundary Spanning.

Environmental stress cause makes Innovation organization. Reasons why organizations do Innovation is because the environment is an important aspect of construction. If this aspect is not taken into account it will cause many undesirable hands off and project performance will not reach a predetermined level. In the Netherlands there are environmental acts, the act of building construction, and act municipalities where the organization should follow the standards of sustainability. With these laws to the organization will be better to maintain the performance of their construction project and the organization will be more organized and vigilant in making mistakes.

Technological capabilities play an Innovation why organizations need to do. The construction industry in Kedah is monitored by Pebadanan Kemajuan Negeri Kedah (PKNK) and Construction Industry Development Board Malaysia (CIDB). In addition, there is also cooperation with higher education institutions and organizations from outside the country with better technology. For example the construction of environmentally friendly buildings. Sustainable products that have been evaluated and approved by the institution, such as the use of sustainable bricks and concrete recycling. Use these materials to some extent influence the performance of the construction project. This is so because, it hands off the new and not commonly used before and they largely affect the performance of the construction project. The organization should provide training to its employees to expose the methods and how to use the new technologies used in the construction.