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FACTORS ASSOCIATED WITH COMMUNICATION PERFORMANCE IN JKR

FAZILAH BINTI MUSA

A capstone project report submitted in partial fulfillment of the
requirements for the award of the degree of
Master Project Management

Faculty of Civil Engineering
Universiti Teknologi Malaysia

DECEMBER, 2010

I declare that this capstone project report entitled "*FACTORS ASSOCIATED WITH COMMUNICATION PERFORMANCE IN JKR"* is the result of my own research except as cited in the references. The capstone project report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

Signature : .....
Name : Fazilah Binti Musa
Date : .....

To my beloved mother, father, husband and all my children

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ABSTRACT

The purpose of this study is to identify methods of communication that is being practiced currently in JKR at design stage. This paper will also outline the current problems faced by JKR regarding project communication during it course of project implementation at design stage. Location of the study is in Specialist Sector in JKR Headquarters. The methodology use for this study is survey by giving questionnaires to 75 respondents at the design office by email and by hand. The respondents are selected among the professional and management group. Data gathered from questionnaires was analysed using descriptive statistic method and results are calculated on mean, ranking, percentage, and standard deviation. The findings from the study showed that not all methods listed in the questionnaire were used in the Specialist Sectors. Mainly, the feedback showed that the problems were due to people compared to process and technology. The quality level of project information is moderate. In conclusion, to have a high communication performance, the organization must used a proper methods, break the barriers in order to have effective communication, and continuous improvement on the quality of project information. These are the factors that associated with effective project communication. As a proposal, a 4P's conceptual model is introduced for effective project communication in Specialist Sector, JKR.

ABSTRAK

Tujuan kajian ini adalah bagi menentukan kaedah komunikasi yang di gunakan pada masa ini di JKR pada peringkat rekabentuk. Kertas ini juga akan menggariskan masalah yang dihadapi oleh JKR berkaitan komunikasi projek semasa perlaksanaan projek diperingkat rekabentuk. Kajian ini dijalankan di Sektor Pakar di JKR Ibupejabat. Kaedah yang diguna pakai adalah kajian lapangan dengan mengedarkan soalan kajian kepada 75 responden di pejabat rekabentuk melalui email dan tangan. Responden adalah dari kalangan pegawai dari kumpulan professional dan pengurusan. Data yang dikumpul dari soalan kajian dianalisa menggunakan kaedah statistik diskriptif dan keputusan di kira berdasarkan purata, peratus, ranking dan sisihan piawai. Keputusan telah menunjukkan bahawa tidak semua kaedah yang disenaraikan didalam soalan kajian digunakan di pejabat rekabentuk di Sektor Pakar. Kebanyakkan maklumbalas menunjukkan masaalah berkaitan komunikasi adalah lebih kepada manusia berbanding dengan proses dan teknologi. Aras bagi kualiti komunikasi projek adalah sederhana. Kesimpulannya, bagi mendapatkan prestasi komunikasi projek yang tinggi, pihak organisasi mestilah menggunakan kaedah yang betul, memecahkan halangan kepada komunikasi berkesan dan pembaikan secara berterusan kepada kualiti maklumat.Ini adaalah faktor yang berkaitan dengan prestasi organisasi. Sebagai cadangan, Model konsep 4Ps disyorkan diguna pakai untuk projek kommunikasi yang berkesan di Sektor Pakar, JKR

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

BQ	-	Bills of quantity
CPC	-	Certificate of practical completion
C-Plan	-	Construction plan
DLP	-	Defect liabilities period
D-Plan	-	Design Plan
HODT	-	Head of design team
HOPT	-	Head of project team
ICT	-	Information and communication technology
IT	-	Information technology
JKR	-	Jabatan Kerja Raya
LA	-	Letter of acceptance
MOF	-	Ministry of Finance
NCR	-	Non conformance report
O&M	-	Operation and maintenance
PDA	-	Preliminary Detail Abstract
PMO	-	Project management office
PWD	-	Public Work Department
QAS	-	Quality assurance system
QMS	-	Quality management system
Q-Plan	-	Quality Plan
QS	-	Quantity surveyor
SKALA	-	Sistem kawal dan lapor
S.O	-	Superintendent Office
SPK	-	Sistem pengurusan kualiti
TNB	-	Tenaga National Berhad

CHAPTER 1

INTRODUCTION

1.1 Background

Jabatan Kerja Raya (JKR) Malaysia (originally known as Public Works Department) was formed in 1872. For all these years, JKR is the technical advisor to the government, responsible for the implementation of development projects and maintenance of infrastructure assets. JKR clients include twenty-eight ministries and numerous departments, authorities and states. Under the Ninth Malaysia Plan, JKR has over 7000 projects to be implemented by 2010. JKR aspires to contribute to the strengthening of the country's institutional and implementation capacity as outlined in the national mission.

Currently, JKR is establishing their Asset Management Sector in line with the Prime Minister's directive for JKR to manage all government assets. JKR is also moving from being just an implementer to strategic partners with their clients to help them deliver policy outcomes.

Public Works Department (PWD) was formed in 1872 with Major J.F.A McNair as the first head of the organization. The events that lead to the formation of PWD began earlier than 1872 when the British East India Company - trades between England, India, and China - needed a safe port for refitting their ships. They found it in Penang which was well positioned for these purpose. In 1786, they persuaded the Sultan of Kedah to give up the rights of Penang Island to the company. They

managed to get Penang in 1791 through a treaty. In 1825, through the Anglo-Dutch Treaty, Malacca was reverted to the British in exchange for Bengkulu. Thomas Stamford Raffles, then in 1819, entered into a treaty with Sultan Hussein and Temenggong Abdul Rahman giving the British the rights to establish settlements in Singapore. These three territories (Penang, Malacca, and Singapore) formed the Straits Settlement in 1826.

Many buildings were built by PWD in Federated Malay States capitals Kuala Lumpur between 1896 to 1941 including Sultan Abdul Samad Building, Selangor Museum, Residency, King's Palace, Masjid Jamek Kuala Lumpur, and many more.

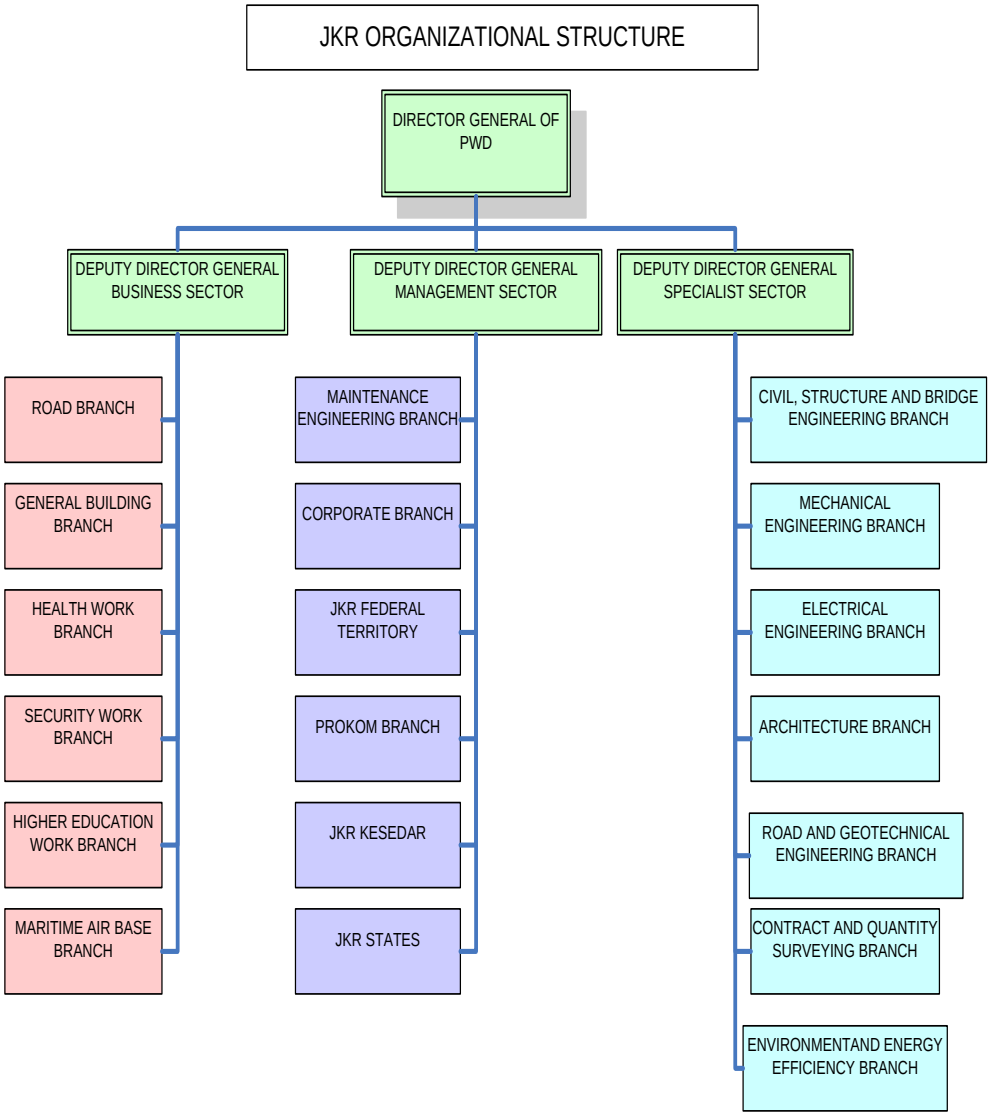

Figure 1.1: JKR Organizational Structure

Currently, PWD Malaysia is headed by a Director General of Public Works and is assisted by three Deputy General Director of Public Works. Administration of Public Works Department includes the whole of Malaysia except Sabah and Sarawak. JKR organizational structure is shown in Figure 1.1. For administrative purposes, PWD Malaysia is divided into two tiers, Head Office level and the State level.

a. **PWD Malaysia Headquarter**s

At the PWD Headquarters, the departments are subdivided by three sectors with 14 branches under them. The Business Sector consist of Road Branch, General Building Work Branch, Higher Education Work Branch, Contract and Quantity Surveying Branch, Health Work Branch and Security Work Branch. In the Management Sector, there are Corporate Management Branch, Maintenance Engineering Branch, PWD Wilayah Persekutuan, PWD Kesedar and PWD States. As for Specialist Sector, the branches include Architecture Branch, Civil, Structural & Bridge Engineering Branch, Mechanical Engineering Branch, Electrical Engineering Branch, Branch of Maritime & Air Base and Branch of the Environment & Energy Efficiency

JKR Malaysia Headquarters is responsible for planning and designing of development projects, monitoring it/s implementation, and preparation of policies, guidelines and technical advice to the JKR States, PWD WP, JBA Affairs and the Special Unit of JKR. The core business of JKR is implementation of government projects throughout the country. To produce quality end products, JKR is using its own developed system known as Quality Management System (QMS) as the management tools. JKR has been using the system for almost 12 years with a continuous yearly improvement. QMS covers the whole project life cycle starting from planning, design, procurement, constructions and handing over. Every year external auditors from SIRIM will carry out the auditing of QMS to ensure that JKR complies with MS ISO9001:2000. Since the first day of its implementation in year 2002, every JKR employees has to comply to the standard.

JKR plays an important role in the development and implementation of projects through various Malaysia Plans. Being the biggest technical department in the country, JKR's core business in delivering the projects are providing excellent Consultancy Services, Asset Management and Project Management.

1.2 Problems statement

As JKR is the oldest and largest technical department in Malaysia. JKR has undergone many changes and challenges in the realization of its responsibilities to the people. However, JKR is still facing a few problems related to project implementation. Some of the issues highlighted in the medias are the delay of project completion, poor quality projects and increase in the development cost of the project. JKR PROKOM, a section under the Corporate Management Branch has identified that one of the problem is the weakness in project communication between the various sectors in JKR.

Even though QMS is used for all project implementation in JKR, almost none is associated to communication during the design phase. From the previous communication research, it has identified that communication is very important at all phases of project life-cycle, from planning to handover stage for the success of the projects.

1.3 Research Questions

This study will specifically address the following questions:

i. What are the current methods of communications used during the design phase?
ii. What are the factors that contribute to problems and weaknesses in communications during design phase due JKR current practices?

iii. What is the existing level of project communication performance during the design phase in Specialist Sector?

1.4 Purpose and Aims

The study will be conducted to identify the methods and strategies of communication that has been practiced by Specialist Sector in JKR in project implementation. The aim is to get a better understanding of the issues and problems concerning project communication in order to improve JKR's internal project communication specifically during design stage.

The objectives of this study are as follow:

Objective1: To identify the current methods of communication used during the design phase.

Ojective2: To identify the factor that contributes to problems and weaknesses in communication during the design phase due to JKR current practices.

Objective 3: To investigate the existing level of project communication performance during the design phase in Specialist Sector

1.5 Scope of Study

The study will specifically focus on methods used for project communication under the perspective of Head of Design Team and to identify its effectiveness in producing quality end product. Since the spectrum of project life cycle is very wide, this study will focus on the design phase in Specialist Sector only. The Contract and Quantity Surveyor Branch, which is also under the jurisdiction of Specialist Sector, will also be excluded from the study. This is due to the fact that Quantity Surveyor

Branch is not doing design job. Other sectors in JKR will not be included too in this study.

1.6 Significant of Study

Project communication is of utmost important in any project management. The study on this subject is still very rare and not so many studies that focus in project communication were done in Malaysia. As such, the result of this study will be an additional reference material in this area. Other than that, it will help to improve project communication, give clear picture of roles and responsibility and strengthen the Specialist Sector organization of JKR.

1.7 Definition of Terms

a. Effective Communication

Effective project communication is to ensure that the right information is communicated to the right person at the right time and in a cost-effective manner. Whereas strategic communications means using corporate or institutional communications to create, strengthen or preserve, among key audiences, opinion favorable to the attainment of institutional/corporate goals. Generally, the goals are to:

i. Promote "bottom line" favorable public policy outcome
ii. Reduce cost of doing business
iii. Support marketing/operational effectiveness

b. Communication Barriers

The presence of these communication problems can have a profound impact on the effectiveness of team communication and hinder morale and decrease productivity; in fact, communications is usually high on the list of organizational problems cited by most organizations with whom I have worked.

c. Project Implementation

Project implementation refers to a logical sequence of activities to accomplish the project's goals or objectives**.** Regardless of it/s scope or complexity, any project goes through a series of stages during its life. Firstly is the planning or birth phase, in which the outputs and critical success factors are defined, followed by the design phase, characterized by breaking down the project into smaller parts/tasks, and procurement stage; or execution phase, in which the project plan is executed, and lastly the handover or exit phase, that marks the completion of the project.

d. JKR – Specialist Sector

Specialist Sector consists of Architecture Branch, Civil, Structural & Bridge Engineering Branch, Mechanical Engineering Branch, Electrical Engineering Branch, Branch of Maritime &Air Base and Branch of the Environment & Energy Efficiency. The core business of specialist sector is to carry out design work and produce tender and construction drawings of every project development.

e. Project

Project is a value creation undertaking to be achieved toward the future under a specific mission given. Project is to be implemented during a specific period having the start and end, under specific conditions of resources, situation, etc.