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**IMPROVEMENT OF PROJECT PLANNING PROCESS TO SATISFY  
CLIENTS' SATISFACTION IN PROJECT IMPLEMENTATION**

**WAN NORHAYATI BT WAN ABDUL GHANI**

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

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Name : Wan Norhayati bt Wan Abdul Ghani

Date : December 2010

To my beloved husband, parent, siblings, and friends

Thanks for your never ending love and support

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## **ABSTRACT**

*The failure and success of a project is related to the project planning and the relationship within the project team. Successful project management depends on the balancing of requirement in managing within the constraint of time, cost and quality to deliver. Failure in proper planning at the schedule time will incurred extra cost, legal problems and other related issues. Hence the aim is to provide best services to our client by reducing the number of outrages affecting our system in delighting and increasing the client satisfaction in planning a project. The objectives were to identify whether JKR to involve in the preliminary stage of project planning process, identification of the relationship and developing strategies and the success factor in order to satisfy client needs in planning process. The study was focused on the agreeable of the respondents on the questionnaires. The respondents are among the middle management level of the client department, JKR's Head of project Team and Head of Design Team). The data was analysed based on the Average Level of selection (mean), the frequency of the respondents and qualitative analysis. The study shows that the involvement of JKR in preliminary stage of project planning process is so much important in relation to improve clients' satisfaction in order to justify the duration, cost and the quality of work. The main areas concerned is to satisfy clients satisfaction through the early planning process to avoid discrepancies, delay and continuous improvement on the project planning process. The improvement demonstrate through the planning process flow chart in order to satisfy client satisfaction in project implementation.*

## **ABSTRAK**

*Kejayaan dan kegagalan menyiapkan sesebuah projek adalah bergantung kepada bagaimana ianya dirancang dan hubungan baik pasukan projek. Kejayaan pihak pengurusan projek dalam pelaksanaannya bergantung kepada pengurusan yang mengambil berat tempoh masa pelaksanaan, kos dan kualiti projek yang bakal diserahkan kepada pelanggan. Kegagalan merancang mengikut jangkamasa yang ditetapkan akan mengakibatkan kos tambahan, masalah perundangan dan lain-lain masalah yang bakal dihadapi. Sehubungan itu, matlamat utama JKR adalah untuk menyediakan perkhidmatan terbaik kepada pihak pelanggan dengan mengurangkan percanggahan supaya sistem yang disediakan akan memberi kepuasan kepada pihak pelanggan dalam merancang sesebuah projek. Objektif yang dikenalpasti dalam memberi kepuasan kepada pihak pelanggan adalah menentukan keperluan penglibatan JKR semasa peringkat awal penyediaan ringkasan projek, faktor menentukan hubungan baik pihak pelanggan dengan JKR dan membangunkan strategi dan menentukan factor kejayaan dan pencapaian bagi memberi kepuasan kepada pihak pelanggan dalam pelaksanaan projek. Kajian difokuskan kepada soal selidik yang dmukakan kepada responden yang terdiri dari pihak pengurusan pertengahan di pihak pelanggan, Ketua Pasukan Projek dan Ketua Pasukan Rekabentuk JKR. Analisis data adalah berdasarkan kepada purata, kekerapan responden dan diukur secara kualitatif. Melalui analisa tersebut, data yang diperolehi menunjukkan bahawa penglibatan JKR di awal perancangan projek adalah diperlukan dalam memberi justifikasi tempoh pelaksanaan projek, kos dan kialiti projek itu sendiri bagi memenuhi keperluan pihak pelanggan. Peenglibatan di peringkat perancangan awal bagi mengelakkan dari berlaku percanggahan maklumat yang boleh mengakibatkan kelewatan pelaksanaan projek dan memberi penambahbaikan semasa perancangan projek. Ini dipaparkan melalui rangka kerja yang dicadangkan agar dapat memberi kepuasan kepada pihak pelanggan.*

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## LIST OF ABBREVIATIONS

BTN	-	Biro Tata Negara
CSI	-	Customer Satisfaction Index
HOPT	-	Head of Project Team
HODT	-	Head of Design Team
HODT (A)	-	Head of Design Team (Architect)
HODT (C&S)	-	Head of Design Team (Civil & Structure)
HODT (E)	-	Head of Design Team (Electrical)
HODT (M)	-	Head of Design Team (Mechanical)
HODT (QS)	-	Head of Design Team (Quantity Surveyor)
ILSM	-	Institut Latihan Statistik Malaysia
INTAN	-	Institut Tadbiran Awam Negara
JBA	-	Jabatan Bekalan Air
JKR	-	Jabatan Kerja Raya

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## **Chapter 1**

### **INTRODUCTION**

#### **1.1 Introduction**

Running a successful project requires a high degree of stakeholder management. A stakeholder is anyone who has an interest in a project or will be affected by its deliverables or output. It is important to understand the values and issues that stakeholders have in order to address them and keep everyone on board for the duration of the project. Satisfaction in implementing and project planning by the project management team become something to be proud off. The success in delivering project as scheduled is through the time taken, cost incurred and the quality of the project produced. It is measured through the completion of the project according to the duration allocated, within the agreed cost and the quality of the product. In order to deliver project satisfactorily, the project manager has to play a big role in managing and coordinating the sequence of the project flow.

The role of the project manager should involve not only in the understanding of the technical know how, but he should know the link between the technology, the environment, the community and the needs of the clients or stakeholder.

Management of project can results to a positive output due to the strong relationship between a corporation and their stakeholders are an asset that add values.

According to Freeman (1984), a stakeholder is any group or individual who can affect , or is affected by the achievement of an organization's decisions, policies and operations. The word *stake* means an interest in or claim on a business enterprise. Stakeholder management has been describe as a 'tool' for strategic management (Langry, 1884). Managing relationship with stakeholder for mutual benefits is essential for corporate success (Post, Sauter-Sachs and Preston, 2002). This means that stakeholder themselves can benefit from the creation of value to an organization, or be adversely affected (Schneider, 2992), they may voluntarily or involuntarily bear some risk through the organization's act of value creation (Clarkson, 1994). The relationship between the project organization and the stakeholder are essential for success (Leana and Rouseay,2000). For the purpose of the project success, the project manager must know how to work within organization's cultural and political environment to ensure that both the project organization and its stakeholder community have their needs met (Pinto,1998).

According to Gibson (2000) Stakeholder can be divided into internal and external stakeholder. Internal stakeholder, who are those actively involved in the project execution and external stakeholder, who are those affected by the projects in a significant way.

Internal stakeholder consist of the upper (top) management, project manager, team members, groups normally involve and group needed just for the project while external stakeholder consist of the clients departments (government sectors), consultants, collaborators, vendors, suppliers, contractors, regulators, professional societies and the public.

In order to get hold of the client satisfaction in project planning, communication will be the most important techniques to achieve the goal in getting

messages. Without communicating to each other, messages cannot be delivered. Communication can be done through discussions, meetings and writing letters.

Before a project to be implemented, every client department has to prepare a project brief encompasses of what is scope of work together with approved budget by the Ministry of Finance and the location of where the building or project to be built. From this point of time, JKR has to start the ball rolling. The duration of the project usually depends on the scope of work. Implementing project in JKR is done through a few processes. It is done through conventional method or by engaging consultants where consultants are invited to prepare drawings and related document for the purposes of tendering.

## **1.2 PROBLEM STATEMENT**

Jabatan Kerja Raya Malaysia (JKR) was established since 1872 and serves as a technical agency to the Government of Malaysia. JKR act as a government agency in implementing almost all development projects. JKR is responsible to the various ministries, departments, statutory bodies and state government such as roads, building, airports, ports and jetties in providing technical advice . JKR Malaysia is headed by a Director General of Public Works Department and is assisted by three Deputy Director General which comprises of three major sectors supported by 14 branches. JKR Headquarters is responsible for planning and designing development projects, monitor the implementing of projects and policies, guidelines and technical advice to the JKR State, JBA Affairs and the special unit in JKR. JKR Organization chart is shown as Chart 1.1

In lieu to the implementation, project delivery becomes an issue where most of the buildings project were delivered not at the specific time and cost to the client.

This is due to the management of the project with respect to the project manager, the project team, clients, the contractor, suppliers and the related sub ordinates in implementing the project management.

In order to planned project as scheduled, communication and coordination between the internal and external stakeholder and the project manager has to be well planned and monitor closely. To avoid the discrepancies in coordination at earlier stage or development of design should be identified. The client firstly should prepare the design brief as per required within the approved scope and budget supported by the specific location. Besides the coordination, stakeholder do sometimes support the course of delay in making decision due to the additional of works made during the project implementation. In managing this kind of problems, the project manager has to control over the proposed additional works by using soft skill in explaining the problem foreseen in the future.

The problem faced by JKR is that between the development unit in the client's department and the end user of the client department usually not having the same understanding. This happens due to the budget constraint where the end user wants sky is the limit whereas the development unit only has certain allocated budget for a project implementation. In this situation JKR has to play the role in getting the same vision in the clients' department. In order to justify this problem arise, planning stage of the project management becomes crucial in determining the satisfaction to the stakeholder in delivering project.

From the analysis that was done by a consultant in 2009, Customer Satisfaction Index (CSI) towards the clients satisfaction in implementing projects by the department resulting from the table shows that :

- i. Customer Satisfaction Index is not up to the clients' expectation.
- ii. Performance Index : overall performance not as expected
- iii. Prediction Index : not convincing enough
- iv. Trust Index : not confident of the capability to manage future project

v. Image Index : Moderate

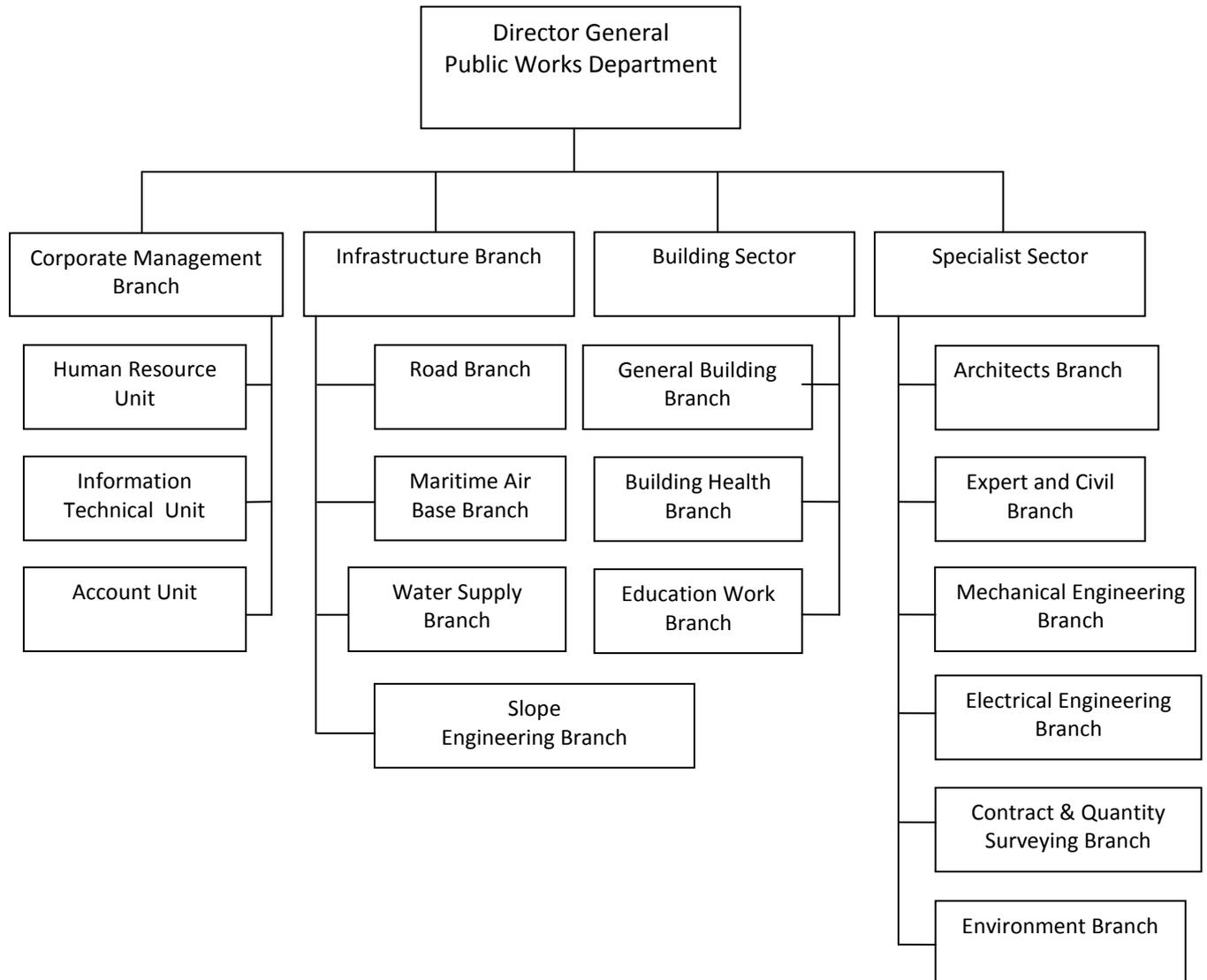
**Table 1.1 : Customer Satisfaction Index (CSI) – by consultant**

Score Index	Customer Satisfaction Index (CSI)	Performance Index	Prediction Index	Trust Index	Image Index	Achievement Status
Question/ Customer	Customer Satisfaction towards the quality of project implementation by JKR	Overall Performance Index (Management & Administration )	Project Implementation fulfil the clients' need or above target	Clients' trust towards JKR in giving technical service in the future	Image of JKR as project manager for all government projects	
Ministry	60.5	59.8	59.6	62.1	62	Satisfactory
Department Agency	66.8	66.7	64.8	67.8	68.8	Satisfactory

**Table 1.2 : Customer Satisfaction Index (CSI) – by JKR**

JKR Cawangan	Bil Soalselidik diterima	Penilaian melebihi skala 6	Kategori					Purata Skor %	Peratus Skor %	CSI %
			Kos	Masa	Kualiti	Komunikasi	Kehendak Pelanggan			
Caw. Kerja Bangunan Am	4	3	5.18	4.85	5.35	5.33	5.44	5.23	74.68	75
Caw. Kerja Kesihatan	5	5	6.20	5.65	5.95	6.18	6.35	6.07	86.66	100
Caw. Kerja Pendidikan dan Pengajian Tinggi	4	3	5.58	5.70	5.88	6.75	5.63	5.70	81.50	75
Cawangan Kerja Keselamatan	3	3	6.00	7.00	6.30	6.00	6.50	6.36	90.86	100
	16	14	7.74	5.80	5.87	6.98	5.98	5.84	83/42	87.50
Overall Percentage (%)			81.98	82.86	83.85	85.40	83.42			

**Chart 1.1: JKR Organization Chart**



### 1.3 PURPOSE OF STUDY

The purpose of the study is to provide best services to our client by reducing the number of outages affecting our system and increasing the client satisfaction through project planning.

## **1.4 OBJECTIVE**

In order to achieve the aim, several objectives were formulated :

- To identify the involvement of JKR in the project planning process
- To identify the involvement of clients department project planning process
- To find on how and what are the success factor in order to satisfy client needs in planning process

## **1.5 SIGNIFICANCE OF STUDY**

### **1.5.1 To the field**

In order to delivery project satisfactorily to the clients' department, JKR has procedures and guidelines to be followed. Among the procedures are Sistem Pengurusan Kualiti (SPK) and Garispanduan dan Peraturan bagi Perancangan Bangunan oleh Jawatankuasa Standard dan Kos, Unit Perancang Ekonomi, Jabatan Perdana Menteri, Design Guidelines etc. All this guidelines and procedures with regards to the quality of work has be make known to the stakeholder that in managing project, JKR has to abide to rules and regulations to be follow to avoid discrepancies in the implementation later on.

### **1.5.2 To the organization**

The significance of the result is to produce a good relationship between the clients' department where this government agencies who has given the trust to JKR to implement project. In order to satisfy the stakeholder, the effort of implementation should also be aligned with JKR's capability and capacity of the organization. Hopefully with the model or tools produced, all departments in JKR would be able to use the model as part of standard operating procedures later.

The significance of the research also to ensure the effective application of time and resources used in working with the stakeholder besides building the capacity of the organization besides to develop, implement and evaluate effectiveness of the stakeholder management strategies.

## **1.6 DEFINITION OF TERM**

### **1.6.1 Stakeholder definition**

According to The Project Management Institute's (PMI®) Guide to the Project Management Body of Knowledge (PMBOK Guide®), stakeholders are individuals that are actively involved in the project, or whose interest may be affected a results of project execution or project completion. They may also bring influence over the project's objective and outcomes. The project management team must identify the stakeholder, determine their needs and expectation and to manage the influence in relation to the requirements to ensure the project success.

According to Wikipedia, a stakeholder is individual or group with an interest in a group's or an organization's success in delivering intended results and in maintaining the viability of the group or the organization's product and/or service.

According to Business Dictionary.com., stakeholder is a person or organization that has direct or indirect stake in an organization because it can affect or be affected by the organization's actions, objectives, and policies. A stakeholder may be an employee, customer, supplier, partner, or even the local community within which an organization operates.

It is important to involve stakeholders in all phases of the project for two reasons: Firstly, experience shows that their involvement in the project significantly increases the chances of success by building in a self-correcting feedback loop; Secondly, involving them in the project team at from initiation stage, builds confidence in the product and output will greatly ease its acceptance by the end user.

In this research, the stakeholder is the important people or organization which form part of the project management team in project planning. The detail will be elaborated in section 1.8.3

## **1.6.2 Stakeholder management**

Stakeholder management has been describe as a 'tool' for strategic management (Langry,1884). Stakeholder Management is critical to the success of project, program and portfolio management in every organisation. By engaging and influencing the right people in the right way and at the right time, support and resources required for success of the project will be ensured.

According to Project Smart Co. UK, stakeholder management is the process of managing the expectation of anyone that has interest in the project or will be affected by its deliverables or outputs. It is important to understand the values and the issues that stakeholders have in order to address them and keep everyone on board for the duration of the project.

The importance of stakeholder management is to support the organization in achieving its strategic objectives by interpreting and influencing both the external and internal environments and by creating positive relationships with stakeholders through the appropriate management of their expectations and agreed objectives.

### **1.6.3 Who is the stakeholder**

The Project Management Institute's (PMI®) Guide to the Project Management Body of Knowledge (PMBOK Guide®) expands this definition to include anyone who, "... is actively involved in the project, or whose interests may be positively or negatively affected by execution or completion of the project." This means that just as the project affects its stakeholders, in a reciprocal way, stakeholders can and do affect the project.

According to Project Smart CO. UK a stakeholder is anyone who has an interest in the project or will be affected by its deliverables or output. It is important to understand the value and issues that stakeholder have in order to address them and keep everyone on board for the duration of the project. A stakeholder is any person or organization, who can be positively or negatively impacted by, or cause an on the actions of a company, government, or organization. Types of stakehold

- Primary stakeholder : are those ultimately affected, either positively or negatively by an organization's actions.