



A STUDY OF RESPONSIBILITY AND PERFORMANCE OF PROJECT
MANAGEMENT CONSULTANT(PMC) IN THE CONSTRUCTION INDUSTRY IN
MALAYSIA
(RESIDENTIAL PROJECT)

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ABSTRACT

Nowadays, abandoned housing projects taking place in Malaysia was a major problem that is getting scabby in the residential industry. It is a residential project where construction or development phase of the project has been delayed or stopped in an unreasonable time frame. Among the causes of abandoned housing projects are; financial flow problems developers; Problem disputes between landlords and developers; studies were not conducted detailed market; technical problem site; squatter problem, and the company's internal problems. To accommodate the national rapid economic expansion demands for building and infrastructure, new model or method must be introduced to replace the regular practice. Thus before these things become more severe it is better to take appropriate action. In this thesis proposes to appoint a Project Management Consultant by each contractor or developer site before work on the run. With this in hope every residential project can be developed without any delay and cost to the developer. Project management consultant is one of the way to overcome the problem arises. Project management consultant is an organization that helps client or owner to supervise their construction, so that the construction done without any delays or overruns cost due to poor management handling materials, tools and labour. The use of Project management consultant must become a mandatory requirement for five kinds of projects, namely national key projects, large-scale public projects, large-scale housing projects, projects funded or aided by foreign loans and special projects.

ABSTRAK

Pada masa kini, projek-projek perumahan terbengkalai yang berlaku di Malaysia adalah masalah utama yang semakin berkudis dalam industri perumahan. Ia adalah projek kediaman di mana pembinaan atau pembangunan fasa projek telah ditangguhkan atau dihentikan dalam tempoh masa yang tidak munasabah. Antara punca-punca projek perumahan terbengkalai ialah; masalah aliran kewangan pemaju; Masalah pertikaian antara tuan-tuan tanah dan pemaju; kajian tidak dijalankan pasaran terperinci, laman masalah teknikal; masalah setingan, dan masalah dalaman syarikat. Untuk menampung permintaan pertumbuhan ekonomi negara yang pesat untuk pembangunan dan infrastruktur, model baru atau kaedah baru perlu diperkenalkan untuk menggantikan amalan biasa. Oleh itu, perkara-perkara ini sebelum menjadi lebih teruk ia adalah lebih baik untuk mengambil tindakan sewajarnya. Dalam tesis ini bercadang untuk melantik Perunding Pengurusan Projek oleh setiap kontraktor atau pemaju tapak sebelum kerja-kerja di jalankan. Dengan ini berharap setiap projek perumahan boleh dibangunkan tanpa sebarang kelewatan dan kos untuk pemaju. Perunding pengurusan projek adalah salah satu cara untuk mengatasi masalah yang timbul. Perunding pengurusan projek adalah sebuah organisasi yang membantu pelanggan atau pemilik untuk menyelia pembinaan mereka, supaya pembinaan yang dilakukan tanpa apa-apa kelewatan atau lebih kos kerana bahan-bahan yang miskin pengurusan pengendalian, peralatan dan buruh. Penggunaan Projek perunding pengurusan mesti menjadi satu keperluan wajib bagi lima jenis projek, projek-projek utama, iaitu negara, projek-projek awam yang besar-besaran, projek-projek perumahan besar-besaran, projek yang dibiayai atau dibantu oleh pinjaman asing dan projek-projek khas.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Engineering construction related planning and construction management structures such as highways, bridges, airports, railroads, buildings, dams, and reservoirs (Es Andersen et al., 1987). Construction of such projects requires knowledge of engineering and management principles and business procedures, economics, and human behaviour. Successful of construction project will depend on the organization, planning and preparation all the basic necessary requirements to execute the project.

Organization, planning and preparation is what project management is all about. Thus, project manager has the vital decision to define the project accordingly. The starting of a project can decide the end of the project whether it achieve the objective or not. As Pilcher (1992) had endorsed, “without planning, wasteful, unproductive time is unavoidable. In planning, a logical attempt is being made to foresee all of those events that are likely to prevent or deter attainment of the stated objective”.

Project Management Consultant (PMC) is one of the management solutions to improve the efficiency in project management. The awareness of this consultant already adopt by the modern country in their construction development. This kind of services already available in this country. One of the most famous company that provide this kind of services is Opus Berhad. Their expertise and experience provide a holistic, whole life cycle approach in their services, and delivery of solutions to their clients. Their professionals across the world live the Opus way - delivering high quality services and innovative solutions to the delight of their clients.

Recognition of the prerequisite to plan and manage activities and resources in an integrated manner is one of the cornerstones in successfully achieving project objectives. Capabilities in analyses of project needs in terms of work components, activities milestones and resources (equipment, materials, costs, human capital), and developing their relationships into an integrated schedule enables the clients to appreciate the “health” of a project so as to enable informed and timely decisions at all levels to facilitate progress and timely completion of the project. (Opus Berhad)

1.2 OBJECTIVE OF STUDY

To achieve this thesis successfully, three objectives has been set up as guidance and there are:

- To clarify the Project Management Consultant scope of work (responsibility).
- To investigate the awareness of application Project Management Consultant in Construction in Malaysia (residential project).
- To investigate respondent expectation of Project Management performance.

1.3 SCOPE OF THE STUDY

This study is carry out based on the literature review, and data collected by the given questionnaires to developers in Selangor and Pahang with random selection. The developers might had use PMC services and might be did not use their services at all. In the end of this study we will clarify the Project Management Consultant scope of work (responsibility). We also will know what is the stage of the awareness of application Project Management Consultant in Construction in Malaysia (residential project). Besides that, we get to known the respondent expectation of Project Management performance..

1.4 EXPECTED OUTCOME

It is belief that in the end of this study Project Management Consultant (PMC) scope of work will be clarify by the literature review and respond from the respondent. Besides that the stage of the awareness using PMC services can be determined too. Furthermore, from the respond of respondent also this research cans get respondent expectation of Project Management performance.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Project Management Consultant (PMC) is one of the management solutions to improve the performance of tasks in construction development. The use of these alternatives has been improved development market around the world. Many companies have spent a lot of effort into training project supervisors to implement this strategy. Some have obtained a more effective way of finishing projects; others have not been able to include project management into a job to effective level. Some companies had to use the ability of others who offer the PMC alternatives in order to achieve their objectives and objectives.

2.2 PROJECT MANAGEMENT CONSULTANT ROLE'S IN CONSTRUCTION

Effective project management techniques are important to ensure successful project performance. A poor strategy as well as incorrect budget or schedule forecasting

can easily turn an expected profit into loss. This is especially true for the construction industry where projects have a relatively short life cycle and the project activities are non-repetitive with rather complex interrelationships, so that there is little opportunity to improve on a wrongly chosen or adopted strategy (Abu Hassan et al., 2011).

A project consists of a difficult and complex variety of activities with specific goals. Therefore the part of the Project manager as the Project Innovator is often complex as well. The tasks and responsibilities of a project manager will differ based on the customer's capabilities and requirements, the nature of the project, the moment of the consultation and similar factors. The Project manager's part and prospect of responsibilities can be arranged to match the person needs of a particular customer.

General management encompasses planning, organizing, staffing, executing, and controlling the operations of an on going enterprise. General management also includes supporting disciplines such as law, strategic planning, logistics, and human resources management. The current discussion of project management (Figure given below) overlaps and in certain cases even modifies the general management principles in many areas such as organizational behaviour, financial forecasting, and planning techniques, to name just a few (Niladri Mallick)

According to Nazira, The "Institution of Project Management-Malaysian Chapters" has simplified six roles and responsibilities of Project Consultant, which are:

- Handling the project by examining the objective and works that will be accomplished
- Handling all the people involve with the project
- Ensure that all the details is enough to create the opportunity circulation consistently by handling the connection with all the parties that involve with the project.
- Deal with the time according to plan.
- Survey the quality to ensure the work is satisfying

- Handle the price of the enterprise, hence the venture will be done at the lowest price which is according to the cash that been offered by the customers.

Project Management Consultant (PMC) that been chosen is generally to produce a object by considering the specialized requirements, price and schedule by using the current company resources. PMC also in charge in making choice to make sure all the goals of the project has been achieved.

Edwin (1984) in his research which investigated the use of project management for four public sector clients found that the project manager's role was seen as that of a liaison officer interfacing between the client and the rest of the contributors to the project with the primary role to ensure that the project was systematically planned and built within agreed cost, programmed time and specified quality standards.

The part of Project Management Consultant (PMC) is to achieve corporate goals and project objectives. His primary part is to lead, information, organize and connect the professional information from various expert professionals. It is also contains tracking, managing, fixing problems, disputes management and selection. His part is multi-disciplinary and his liability is to synthesize and include all the factors of a job into a natural whole.

Andrew (1996) added that in the building and construction sector, the project manager plays various roles which cover aspects such as planning, leading, organizing, guiding, coordinating, complementing, supplementing, controlling, supervising, motivating, inspiring, monitoring the activities of the entire project consortium team of consultant and contractors. The objective is of course to achieve set and stipulated corporate visions, policies, goals and project objectives.

2.3 PROJECT MANAGEMENT SCOPE OF WORK

The objectives of project management are to execute a project so that deliverables can meet scope requirements on budget and schedule, and at acceptable risk, quality, safety, and security levels (Gannet, 2009).

For any project, a project management team typically establishes a programme and the sequencing of activities required to be undertaken. These activities are *dynamics* designed to implement management objectives. The major attended dynamics of a project management system include:

1. *Decision-making*: decisions are the most important initial dynamics and result from a large number of specialists involved in the project process. Decision-making is interrelated with project organisation and structure, such that information, feedback, advice, etc., are received by the decision-maker from appropriate contributors (e.g. consultants, site manager, foremen, subcontractors, etc.), at the appropriate time(s).
2. *Techniques and technology*: these are the basic dynamics for implementing any system. They include the level of education/knowledge of staff, management skills, information techniques, and various facilities and machines within (and between) any organisations involved in a project. The techniques employed and ways of applying them are fundamental to achieving the organisations' and client's planned objectives, but may vary from company to company.
3. *Behavioural responses*: responses of individuals are the direct attended dynamics for the operation of any system. Their effects are closely related to motivation, education, role relationships, and personal goals and values. Behavioural responses directly affect the performance of an organisation. In this context, performance can be improved through effective human resource management, adequate training and personnel development schemes.
4. *Project structure*: the project procurement route essentially establishes its organisation; assigning specific responsibilities and authorities to people and systems. It also defines the relationships of various elements in a project structure. A project's structure juxtaposed with the contract(s) in force establishes the communications

structure, which dictates information flow (feedback mechanisms) and affects (principally the speed and reliability of) decision-making processes.

(G.D Holt et al., 2002)

Management initiatives to improve the project definition process include reengineering processes, creating systematic requirements processing, creating systematic decision support methods, improving stakeholder coordination, increasing transparency and improving collaborative relations (Michael, 2004).

Munns and Bjeirmi has discussed the different tools available to a project manager to achieve success. These include work breakdown structures, client information sheets and project plans, among others

In order to meet the objectives of modern projects, which are increasingly complex in nature, it is essential for project managers to be able to use a variety of managerial skills. To conclude as to what are the most important knowledge and skills that a project manager should have the following will be discussed:

- a) Management knowledge and skills: finance and accounting; sales and marketing; research and development; manufacturing and distributions; strategic planning; tactical planning; operational planning; organization structures; organizational behaviour; personnel administration; managing work relationships.
- b) Technical knowledge and skills: defined as an understanding of and proficiency in, a specific kind of activity, particularly one involving methods, processes, procedures, or techniques.
- c) Business knowledge and skill: on small projects, this can be a tough challenge because project managers are also managing the project control function.
- d) Human knowledge and kills: the ability to work with and through other people.

Abu Hassan Abu Bakar et al mentioned that Project Management is determined as the process by which the appointed Project Management Consultant (PMC) or Project Manager such as plan, arrange, schedule, apply, handle, observe, control, track, fix problems, make decisions, lead, encourage and encourage the entire project range team include in a project that use up sources (time, people, space, money, computer

systems, machineries, vegetation, landscape designs, materials, internet, knowledge-based professionals, etc) in order to achieve set and predetermined project goals and deliverables usually in terms of but not restricted to primary multiple goals of your energy and energy and effort, cost and quality and secondary goals of advertising investors, stakeholders and company's interest and tertiary goals of quality in all factors of design, finance and construction while improving the visual of the built atmosphere and taking care of customer's passions with regards to efficient and financial explanations, end-users well being and social and ethical responsibilities to society, country, nation-building and the world. (Gannet, 2009)

2.4 BENEFITS OF USING PROJECT MANAGEMENT CONSULTANT

The benefits of project management contain all the elements of what is a truly symbiotic relationship between manager, client and worker bee (UrielConsulting) .

Furthermore according to Tseganoff, the management consulting services of management consultants may be procured by a client to;

- Provide a strategic overview on the position of the organisation in its marketplace or environment, and hence to recommend mid to long term strategic directions.
- Provide an independent review of a proposed course of action or of the choice two or more, typically tactical decision, based on knowledge of how such decisions have been effected in other organizations.
- Strengthen a team.
- Achieve the implementation of a new system or process.
- Be involved in the long term operation of the organization.

Benefits

- Having an objective platform to consult on project processes, techniques, and methods without any career limiting moves
- Being able, as an independent consultant, to ask the questions other permanent staff usually must avoid addressing
- Often enjoying hands-off guru status by others in the organization due to perceived expertise
- More credibility coming in as a project savior if for no other reason than you're not directly associated with the organization that is already failing

(<http://pmtips.net/challenges-benefits-project-management-consultant/>)

2.5 SUMMARY

In this chapter we had discussed Project Management Consultant roles in construction industry and had determined Project Management scope of work. Besides that we get to know what is the beneficial of using Project Management Consultant.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

The study methodology is planned by levels according to their main concerns and features in order to guarantee the potency of perform. To carry out this project the work will be separated into few levels which include literary works review, gathering data and information, how to analysis the data and summary.

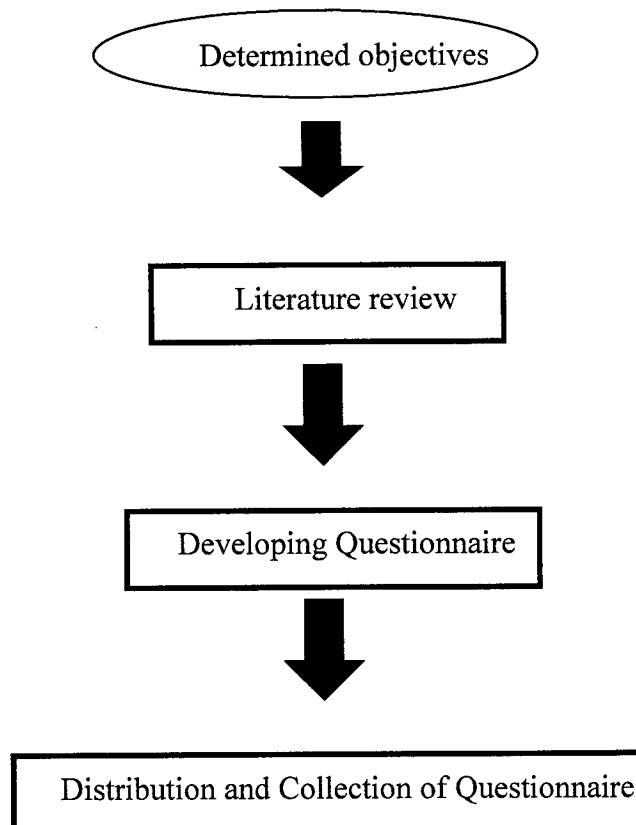
An arranged and suitable research technique is required to ensure that the potency of the research process. All required details and points can also obtained through well-structured plan or technique which outlines various stages in collecting details and details.

3.2 LITERATURE REVIEW

Through the literary performs assessment, a better platform of this analysis has been identified. The purpose of writing the literary works performs assessment is to provide the history of analysis, show the knowledge and ideas that have been identified and also the gains and drawbacks of the issue. The information could be obtained from guides, book articles, opinions, publications and also from sites. From all this sources, a better view will get on how to construct the questionnaire and at a time meet the objectives that has been stated.

3.3 QUESTIONNAIRE

Questionnaire is the method to be use in this research. Figure below shows the flow how this research will be done.



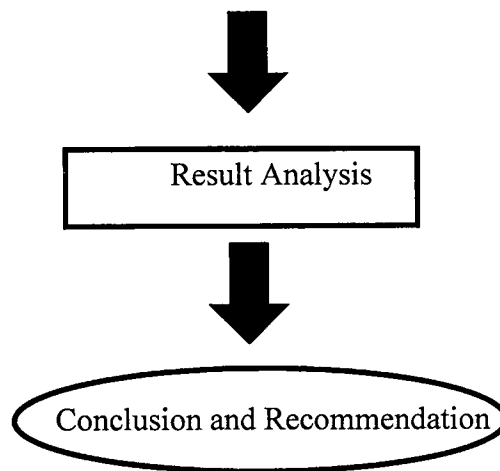


Figure 3.1: Flowchart of This Research

3.3.1 Questionnaire Development

The primary resource of details acquires for details research is from the set of questions. These set of questions will be given to the professional and specialist to get the realistic details which display the real scenario of the PMC services as solutions.

The survey, which was developed in the evaluation of literary works that have been done in the past which includes PMC service as a solution and change between projects using PMC and project options that do not use this as an option. Furthermore, the results of the evaluation literature have also noted the level of development of the project using the solution and thinking PMC main benefits of using this aid.

As a result the question is set up and are divide into two section, section A and section B. The set of questions is design as open ended for section A and close ended set of questions for section B. The section where into two, where section A is to know respondent background such as their position in the company, type of their company, company's name and thus their company have use Project Management Consultant (PMC). While in section B there are three criteria. These three criteria are to determine whether the objectives can be achieved or not. For criteria A; the awareness of hiring Project Management Consultant, in this criteria it has 8 question to be answered. For

criteria B; roles and responsibility of Project Management Consultant, in these criteria there are 10 questions to be answered. For criteria C; performance of Project Management Consultant, this criteria also has 10 questions to be answered.

Open finished options indicate no options or predetermined groups are recommended. The participant resources their own response without being restricted by a fixed set of possible reactions. Closed- finished options indicates respondents' response are restricted to a fixed set of reactions such as yes or no response. These set of questions will be separated into three areas, which is aspect a, aspect b and aspect c.

3.3.2 Data Analysis

The data obtained will collect, calculated and sort by preference statistical respondents and all data will be analysed using Microsoft excel to get the percentage and the average value of each question. After that, the data will be presented in the form of diagrams such as pie charts or graphs as a simple presentation to understand.

In analysing the data was obtained from the respondents, the answers are given in the questionnaire were available in 5 levels to meet the objectives of the study. In table 4.2 there is a scale for answering the question in criteria B.

Table 3.1: Scale index for questionnaire

Scale	Indication
1	Strongly disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly agree

Scale index is intended to determine whether respondent agree or not with the statement given. If the respondent answers 4 or 5 it means they are agree with the statement, and if they are answering 2 and 1 it means they are not agree with the statement.

For the second and third criteria, average index is use, and from average the average index the statement will be sorted from the highest average index to the lowest numbers. The equation to find average index is as below:

$$\text{AVERAGE INDEX: } \frac{\text{No. of Respondent} * \text{Scale}}{\text{Total of Respondent}}$$

EQUATION 3.1 : Average Index

After the calculation finding the average index of each statement than the statement where arrange according to the score, from the highest to the lowest. The result was tabulated in table below.

3.3.3 Respondent of This Survey

Hundred set of questionnaire are distributed to developers in Selangor and Pahang to get at least 50 respondent for this surveys. Main targets of the respondent are project manager or manager or engineer or architect, who has direct relation with the construction.

3.3.4 Method of Delivery And Collecting

To conduct this survey, respondent to be identified beforehand, then the survey questions are given for respondents to answer. After the respondents answer survey questions then directly returned the question to be recorded as the data.

3.4 SUMMARY

This survey was planned well from the setting up of objectives to conclusions of this thesis. All the planning in the run as planned. No change in the plan for time this survey on the run until end of this thesis.

CHAPTER 4

DATA AND DISCUSSION

4.1 INTRODUCTION

In this chapter the results of data gathered from the respondents and responses are analysed to obtain the results of the questions that have been asked. There are two sections, section A and section B where in the section B there are three criteria from the questionnaire to determine whether it achieves the objective of the study that has been mentioned early in the chapter 1. Those questionnaires are distributed only in the state Selangor and Pahang.