THE PRACTICE OF TIME MANAGEMENT IN CONSTRUCTION PROJECTS

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To my beloved father and mother
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ABSTRACT

The Malaysian construction industry plays a vital role in the country development. CIOB in 2008 has indicated that the quality of time-management on construction projects is generally poor. Therefore, an effective time management for the construction project is important in managing risk of delayed completion project. The aim of this project is to examine the practice of time management on construction project. The objectives of this study are to assess the respondents’ participation in the planning of construction works, to investigate how progress records are kept and to identify the process of monitoring the progress of work on construction industry. To achieve these objectives, there were thirty questionnaire survey distributed to the respondents. From the findings, project manager has the highest percentage in both drafting a planning method statement and project planning meetings. Most of the respondents had their experience of sequence was planned as a result of a discussion and written method statement, the activity durations being calculated in whole or in part, the price were allocated in separate documents with contingency, date constraints were used constraint the performance to dates given in the contract documents and float constraints were used to control critically. As for the progress reports, majority prefer to keep the records on paper but were immediately input into database. Most of them had the experience of additional work relation to labour allocation. When it came to relating the resource used to the work done and in which location, it was the experience of majority respondents identified task on schedule for both labour and plant and equipment records. The respondents preferred to report the progress in meeting or correspondence and the schedules were updated monthly. Lastly, most of them have corrected the logic to conform to progress achieved to deal with consequences of out of sequence work.
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1.1 Introduction

Construction industry only contributed only around 3 percent to the Gross Domestic Product in the year 2010 but however it makes up an important part of the Malaysian economy due to the involvement with other industry branches such as the metals processing industry and the mechanical engineering or the tourism sector. Therefore, the construction industry is a substantial economic driver for Malaysia (ANK Malaysia, 2012). But however, construction has been facing numerous issues and one of them is time management issues which have cause delayed completion of a project. According to Westland (2006), time management is the process of recording and controlling time spent by staff on the project. According to Crutsinger (1994), time management involves determining what one should do by setting goals, deciding which events are the most important and realizing that other activities will have to be scheduled around them (prioritizing), making decisions about how much time to allow for certain tasks (time estimation), adjusting to the unexpected (problem solving), reconsidering goals and priorities on a regular basis (evaluation), and observing patterns and trends in behavior. The issues are poor management of time, choice of procurement methods, participation of shareholders, poor planning of construction works, lack of participation of scheduler and lack of implementation of
software and etc. Thus these issues can lead to delays are insidious often resulting in time overrun, cost overrun, disputes, litigation, and complete abandonment of projects (Sambasivan and Soon, 2007).

1.2 Problem Statement

A research conducted by the Chartered Industry of Building (CIOB) in 2008 has indicated that the quality of time-management on construction projects is generally poor. The research also indicates that the growth in training, education and skill levels within the industry in the use of time-management techniques has not kept pace with the technology available. In addition, there are also very few projects are currently managed by reference to modern methods of time control. Ahmed et al. (2003) found that delay happen in every construction project and the magnitude of these delays varies considerably from project to project. Some projects are only a few days behind schedule and some are delayed by over a year. Also, conflicts in shareholders are one of the factors of unsuccessful projects. El-Razek et al. (2008) identified that different parties of construction in Egyptian construction projects do not agree with each other on the importance of various factors of delay, and they mostly blaming each other of delays. He too finds that team effort is vital in the success of a project. Daniel and Mohan(2002) has discussed that only first-order approximations of duration estimates are provided by the construction time prediction models developed for the Hong Kong public housing industry. Thus, more advanced or available programming computer software such as Primavera Project Planner 2.0 and Microsoft Project 98 to be utilized in order to prepare detailed construction programmes. Liberatore et al in 2001 has mentioned that high percentage of the construction respondents used project management software for general work planning or presentation (Liberatore et al, 2001). Thus this has shown the importance of use of project management software in construction works. Also, Scott and Assadi in 1999 has stated that majority of respondents did not keep records of progress that show each of the work activities on the contractor’s programme,
exactly when work took place. The problems were lack of an organized and formalized approach, lack of clear rules and guidelines on how the records are kept and organized, difficulties in ensuring the consistency of reporting by various responsible individuals, inexperience staffs and etc (Scott and Assadi, 1999). Therefore, the importance of project control techniques in managing time to improve the risk of delayed project are needed to be known and recognize so that the risk of project delayed can be minimized.

1.3 Aim and Objectives of Study

The aim of this project is to examine the practice of time management on construction project and the objectives of this study are as follows:

i. To assess the respondents’ participation in the planning of construction works

ii. To investigate how progress records are kept on construction industry

iii. To identify the process of monitoring the progress of work on construction industry

1.4 Scope of Study

The scopes of data collection in this study will focus on the aspects as follows:

i. The construction company such as contractor who involved in building and infrastructures construction.

ii. The selected construction company must be in the range of Class A till Class F for those register under Pusat Khidmat Kontractor (PKK) or Grade G1 till
G7 for those register under Construction Industry Development Board (CIDB).

iii. The selected construction company also must have their own’s managerial staffs such as project managers and site manager as well as their subordinates like site supervisors, architect, quantity surveyor and administration staff excluding foreman and labours.

iv. The selected construction companies are located around the Johor and Kuala Lumpur due to the availability of good number of projects.

1.5 Significant of Study

Successful project management insures the completion of project in time, within budget, and to the project specifications. Therefore, this study is significant to investigate on how time is managed on construction industry. So that the managerial staffs can get a clear understanding on time management and they are able to prevent them early. Shareholders need to know their roles and their responsibilities. Construction works need to have a good and detail progress records to deal with future claims. This study is to let the managerial staff to know the importance of monitoring the progress of work on construction industry. Lastly, this study can become a guideline for future development in other possible areas.
1.6 Brief Methodology

The methodologies used in this study are literature search, interview with expert panels and distribution of questionnaire survey. Figure 1.1 shows the flowchart of the methodology.

![Flowchart of the methodology](image)

**Figure 1.1:** Flowchart of the methodology
1.7 Arrangement of the Report

In order to achieve the objective of the study, methodology of study is illustrated in Figure 1.1. This study has five chapters which are discussed below.

In the first chapter, problem statement is to identify by latest global demand and trending. Based on the problem statement, formation of objective, title selection and scope of the study then can be determine.

The second chapter is the literature review where this chapter has discussed all the information on time management and other information that relates to the objectives of the study from the literature or from previous researchers. The information is based on articles, journals, research paper, published books and websites.

In the third chapter which is the methodology of the study, this chapter discussed in detail how the study being conducted as well as the method of analysis used to get the results data. Data analysis of primary data collected form the respondent answered questionnaire using SPSS version 12.0, average index formula. From analyzed data, table, graph, bar chart and pie chart can be made.

Then, in the fourth chapter, data interpretation, data discussion and data comparison are based on the result that has been analysed.

Lastly, conclusion and recommendation of the study will be discussed in detail in the fifth chapter.
REFERENCES


