THE PRACTICE OF TIME MANAGEMENT IN CONSTRUCTION PROJECTS

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A project report submitted in partial fulfillment of the requirement for the award of the degree of Master of Science (Construction Management)

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JANUARY 2014
To my beloved father and mother
ACKNOWLEDGEMENT

Firstly, I would like to thank my God for His blessings and guidance throughout conducting this study and my academic studies.

In particular, I would like to express my highest gratitude to my supervisor, En. Abdul Rahim Abdul Hamid for his patience, awesome tips for presentation, support, guidance, and also his reminders for this study. It is indeed my blessings to be able to work under such cool supervisor.

Also, not forgetting my friends who have stayed by me during these master years! Without them, I would be so lonely throughout the three semesters. To Debbie Melissa who is always cool and funny, without her, my master years are sure to be very boring and lonely! To Xiao Xu, thank you for helping in my crisis financial times and being a dear friend. To Yee Shian and Vrida, thank you both for the fun time together.

Last but not least, I am grateful to my family members for their love, care, support and daily encouragement during carrying the study. They are indeed my pillars of love, support and of course my financial aids!
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.
ABSTRAK

Industri pembinaan Malaysia memainkan peranan penting dalam pembangunan negara. CIOB pada tahun 2008 telah menunjukkan bahawa kualiti pengurusan masa projek-projek pembinaan umumnya miskin. Oleh itu, pengurusan masa yang berkesan untuk projek pembinaan adalah penting dalam menguruskan risiko projek siap lambat. Tujuan projek ini adalah untuk mengkaji amalan pengurusan masa di projek pembinaan. Objektif kajian ini adalah untuk menilai penyertaan responden dalam perancangan kerja-kerja pembinaan, menyiapkan bagaimana rekod kemajuan disimpan dan mengenal pasti proses memantau kemajuan kerja pada industri pembinaan. Untuk mencapai objektif ini, tiga puluh soal selidik telah diedarkan kepada responden. Daripada penemuan ini, pengurus projek mempunyai peratusan yang tertinggi dalam draf kenyataan kaedah perancangan dan mesyuarat perancangan projek. Kebanyakan responden mempunyai pengalaman mereka urutan telah dirancang hasil daripada perbincangan dan ditulis kenyataan kaedah, jangkamasa untuk aktiviti yang dikira secara keseluruhan atau sebahagian, harga yang telah diperuntukkan dalam dokumen berasingan dengan luar jangka, kekangan tarikh telah digunakan kekangan prestasi untuk tarikh yang diberikan dalam dokumen kontrak dan kekangan apungan telah digunakan untuk mengawal secara kritikal. Bagi laporan kemajuan, majoriti lebih suka menyimpan rekod-rekod di atas kertas tetapi segera input ke dalam pangkalan data. Kebanyakan mereka mempunyai pengalaman berhubung kerja-kerja tambahan kepada peruntukan buruh. Kebanyakan responden mengikut jadual bagi buruh dan jentera dan rekod peralatan apabila berkaitan dengan sumber yang digunakan untuk kerja-kerja yang dilakukan dan untuk lokasi tertentu. Responden lebih suka melaporkan kemajuan dalam mesyuarat atau surat-menyurat dan jadual telah dikemaskini setiap bulan. Akhir sekali, kebanyakan mereka membetulkan logik untuk menepati kemajuan dicapai untuk menangani akibat daripada kerja urutan.
# TABLE OF CONTENTS

| CHAPTER | TITLE | PAGE |
|---------|-------|------|
| DECLARATION | ii |
| DEDICATION | iii |
| ACKNOWLEDGEMENTS | iv |
| ABSTRACT | v |
| ABSTRAK | vi |
| TABLE OF CONTENTS | vii |
| LIST OF TABLES | xii |
| LIST OF FIGURES | xv |
| LIST OF APPENDICES | xiv |

1 INTRODUCTION

1.1 Introduction 1
1.2 Problem Statement 2
1.3 Objective 3
1.4 Scope of Study 3
1.5 Significance of the Study 4
1.6 Brief Methodology 5
1.7 Arrangement of the Report 6

2 LITERATURE REVIEW

2.1 Introduction 7
2.2 Time Management Definition 8
2.2.1 Time Management in Construction Industry 9
2.2.2 Time Management Process 9
2.3 Managing a Construction Project 14
  2.3.1 Procurement Definition 14
  2.3.2 Categorization of Procurement System 15
  2.3.3 Principle Tools for Time Management 19
2.4 Shareholders’ Involvement in the Planning of Construction Work 21
2.5 Types of Software 23
2.6 Progress Records 23
  2.6.1 Problems Encounter in Keeping Progress Record 25
2.7 Process of Monitoring the Progress of Work on Construction Industry 26
2.8 Conclusion 29

3 METHODOLOGY OF STUDY

  3.1 Introduction 30
  3.2 First Stage: Background Study 32
  3.3 Second Stage: Literature Review and Questionnaire Survey Design 32
  3.4 Third Stage: Data collection and Data Analysis 33
  3.5 Fourth Stage: Data and Result Discussion 34
  3.6 Fifth Stage: Conclusion and Recommendations 34
  3.7 Conclusion 35

4 RESULTS AND DISCUSSION

  4.1 Introduction 36
  4.2 Questionnaire Survey 37
    4.2.1 The Organization Represented By the Respondents 37
    4.2.2 Respondents’ Participation in the Planning of Construction Works 41
4.2.2.1 Method of Contract Procurement 41
4.2.2.2 Type of Tool used for Time Management 43
4.2.2.3 Softwares used to prepare the Construction Schedule 44
4.2.2.4 Parties Who Are Usually Involved In Drafting and Project Planning Meetings 46
4.2.2.5 Establishment of the Planned Sequence of Work 47
4.2.2.6 Method That Is Usually Used Identify the Duration of A Planned Activity 49
4.2.2.7 Application of Cost to Planned Activities 50
4.2.2.8 Application of Logic to Planned Activities 52
4.2.2.9 Application of Constraints in Construction Schedule
  4.2.2.9.1 Date Constraints 53
  4.2.2.9.2 Float Constraints 54
4.2.3 How Progress Records are kept in the Construction Industry 55
  4.2.3.1 Type of Progress Records kept in the Company 56
  4.2.3.2 Type of Delay and Compensation Event Record Kept 57
  4.2.3.3 Types of Labour Record Data (Basic Data And Work Data) kept in the Company 58
  4.2.3.4 Type of Plant and Equipment Records (Basic Data and Work Data) kept 60
4.2.4 The Process of Monitoring the Progress of Work on Construction Industry 63
  4.2.4.1 Methods That Are Adopted To Measure the Progress of Activities On Site 63
  4.2.4.2 Assessment of the Progress of the Project as a Whole 64
  4.2.4.3 Monitoring and Updating Construction Schedules 65
4.2.4.4 The Respondents Monitored or Updated Schedules 66
4.2.4.5 Dealing with the Consequences Of Out Of Work Sequence in the Project 67

5 CONCLUSIONS & RECOMMENDATIONS

5.1 Introduction 69
5.2 Conclusions of Study 69
5.3 Limitations of Study 71
5.4 Recommendation 71

REFERENCES 73
APPENDIX A 77
# LIST OF TABLES

| TABLE NO | TITLE                                                   | PAGE |
|----------|---------------------------------------------------------|------|
| 2.1      | Input, tools and techniques and outputs of each of the  | 13   |
|          | processes                                              |      |
| 2.2      | Common use of tools on construction                     | 20   |
| 2.3      | Project Stakeholders                                    | 22   |
| 4.1      | List of construction companies that participated in study| 38   |
| 4.2      | Respondent’s nature of work                             | 39   |
| 4.3      | Company’s grade                                         | 40   |
| 4.4      | Method of contract procurement                          | 42   |
| 4.5      | Type of tool used for time management                   | 43   |
| 4.6      | Softwares used to prepare the construction schedule     | 45   |
| 4.7      | Parties who are usually involved in drafting a planning  | 47   |
|          | method statement and project planning meeting           |      |
| 4.8      | Establishing the planned sequence of work               | 48   |
| 4.9      | Method that is usually used to identify the duration of  | 49   |
|          | a planned activity                                      |      |
| 4.10     | Application of cost to planned activities               | 51   |
| 4.11     | Application of logic to planned activities              | 52   |
| 4.12     | The use of date constraints in construction schedule    | 53   |
| 4.13     | The use of float constraints in construction schedule   | 55   |
| 4.14     | Type of progress records kept in the company            | 56   |
| 4.15     | Types of delay and compensation event record kept in    | 57   |
|          | construction                                            |      |
| 4.16     | How basic labour data is kept                           | 58   |
| 4.17     | How work labour records are kept                        | 59   |
| Section | Description |
|---------|-------------|
| 4.18    | How plant and equipment basic labour records are kept |
| 4.19    | How plants and equipment work data records are kept |
| 4.20    | Methods that are adopted to measure the progress of activities on site |
| 4.21    | Assessment of the progress of the project as a whole |
| 4.22    | Monitoring and updating construction schedules |
| 4.23    | Monitored or updated schedules |
| 4.24    | Dealing with the consequences of out of work sequence in the project |
### LIST OF FIGURES

| FIGURE NO | TITLE                                                                 | PAGE |
|-----------|----------------------------------------------------------------------|------|
| 1.1       | Flowchart of the methodology                                         | 5    |
| 2.1       | Category of building procurement systems                             | 15   |
| 2.2       | Flowchart for traditional project progress                           | 28   |
|           | monitoring practice                                                  |      |
| 3.1       | Methodology of Study Flow Chart                                       | 31   |
| 4.1       | The percentage of respondents’ nature of work                        | 30   |
| 4.2       | The percentage of company’s grade                                     | 40   |
| 4.3       | The percentage of respondents involving in the method of procurement | 42   |
| 4.4       | The percentage of type of tool used for time management in construction | 44   |
| 4.5       | The percentage of respondents on using the types of software in preparing the construction schedule | 45   |
| 4.6       | The percentage of respondents in establishing the planned sequence of work | 48   |
| 4.7       | The percentage of respondents in using method to identify the duration of a planned activity | 50   |
| 4.8       | The percentage of respondents in applying costs to planned activities | 51   |
| 4.9       | The Percentage of respondents in applying the logic to planned activities | 52   |
| 4.10      | The percentage of respondents using date constraints in construction schedule | 54   |
| 4.11      | The percentage of respondents used float                              | 55   |
constraints in construction schedule

4.12  The percentage of respondents in keeping the types of progress records in the company  56

4.13  The Percentage of Respondents has the experience of types of delay and compensation event record kept  58

4.14  The percentage of respondents in recording basic labour data  59

4.15  The percentage of respondents in recording work labour data  60

4.16  The percentage of respondents in recording basic plants and equipment data  61

4.17  The percentage of respondents in recording work plants and equipment data  62

4.18  The percentage of respondents in adopting methods in measuring the progress of activities on site  64

4.19  The percentage of respondents in assessing the progress of the project as a whole  65

4.20  The percentage of respondents in monitoring and updating construction schedules  66

4.21  The percentage of respondents in ways of monitoring or updating schedules  67

4.22  The percentage of respondents in dealing with the consequences of out of work sequence in the project  68
# LIST OF APPENDICES

| APPENDIX | TITLE                  | PAGE |
|----------|------------------------|------|
| A        | Questionnaire Survey   | 77   |
CHAPTER 1

INTRODUCTION

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]

**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.
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