IDENTIFYING THE INDICATORS OF PREMATURE STARTS IN CONSTRUCTION PROJECTS

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

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ABSTRAK

Kajian ini membincangkan salah satu faktor yang menyebabkan pembinaan tertunda iaitu tergesa-gesa memulakan sesuatu fasa pembinaan dalam projek. Kajian ini bertujuan untuk mengenal pasti petunjuk awal tergesa-gesa memulakan fasa pembinaan dan menentukan cabaran yang berkaitan dengan permulaan awal dalam projek pembinaan. Kaedah yang digunakan untuk mengumpul data bagi kajian ini adalah melalui satu wawancara individu. Temubual individu dilakukan dengan pengamal industri yang mempunyai pengalaman dalam menguruskan projek pembinaan seperti pengurus projek dan jurutera tapak. Kajian ini melibatkan syarikat pembinaan dan perunding yang berdaftar dengan Lembaga Pembangunan Industri Pembinaan (CIDB), Gred 7. Data daripada hasil respon temuduga akan dianalisis menggunakan analisis tematik. Dalam penyelidikan kualitatif, salah satu bentuk analisa yang paling biasa adalah analisis tematik. Kaedah ini akan mengkaji, menekankan, menentukan dan merekod corak atau tema dalam data. Melalui kaedah ini, corak dari data yang sama dapat dijumpai dan membuat tema baru yang mewakili keseluruhan data. Hasil penemuan daripada kajian ini menunjukkan bahawa tapak projek, kewangan, dan perubahan aktiviti dan lukisan adalah tiga petunjuk utama tergesa-gesa dalam projek pembinaan yang dinyatakan oleh responden, diikuti oleh penunjuk lain seperti masa, tenaga kerja, isu-isu tempat kerja, pembekal dan sumber dan kekangan cuaca. Hasil penemuan lain menunjukkan bahawa orang dan kewangan merupakan cabaran utama yang berkaitan dengan permulaan awal dalam projek pembinaan yang dinyatakan oleh responden, diikuti oleh cabaran lain seperti lukisan, bahan dan sumber, pembekal, cuaca, pengambilan tanah, dan harga bahan bakar. Kajian ini akan memberikan maklumat dan pengetahuan kepada pasukan projek mengenai isu tergesa-gesa memulakan fasa pembinaan dan membimbing pasukan projek untuk peka mengenai isu ini dalam industri pembinaan. Pasukan projek perlu sedar dan mengambil tindakan segera untuk menguruskan isu ini supaya masa, kos dan kualiti projek pembinaan tidak akan terjejas.

ABSTRACT

This study discusses a factor of construction delay which is a premature start in construction projects. The study aims to identify the indicators of premature starts and determine the challenges associated with premature starts in construction projects. The method used to collect data for this study is done through an individual interview. The individual interview is performed with the industry practitioners that have experience in managing construction projects such as project managers and site engineers. This research involves construction and consultant companies that registered with the Construction Industry Development Board (CIDB), Grade 7. The data from the interview responses result will be analyzed using the thematic analysis. In qualitative research, one of the most common forms of analysis is thematic analysis. This method will examine, emphasize, pinpoint and record the pattern or themes within the data. By using this method, the pattern from the same data can be found and create new themes that represent the whole data. The finding shows that site, financial, and changes of activities and drawing are the top three indicators of premature starts in construction projects stated by the respondents, followed by the other indicators such as time, manpower, workplace issues, supplier and resources, and weather constraint. The other finding shows that people and financial are the top challenges associated with premature starts in construction projects stated by the respondents, followed by the other challenges such as drawing, materials and resources, supplier, weather, land acquisition, and fuel price. This study will provide information and knowledge to the project team about premature starts issue and guide the project team to be alert regarding this issue in construction industries. The project team should aware and take immediate actions to manage this issue so that the time, cost and quality of the construction projects will not be affected.

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LIST OF SYMBOLS

LIST OF ABBREVIATIONS

CIDB	Construction Industry Development Board
JKR	Jabatan Kerja Raya

CHAPTER 1

INTRODUCTION

1.1 Background Study

Productivity plays an important role in most industries as it will influence the performance of the industries. It is the number of actual work hours needed to perform the appropriate units of work and measured in the form of unit rate (Hasan Abid, Baroudi Bassam, Elmualim Abbas, 2017). For better understanding, it is defined as the measure of the rate at which work is performed. However, among the services and other industries, construction productivity shows a declining and is still low. Previous studies show that in many countries, the productivity of the construction industry usually lags behind other industries and shows a facing weak or negative growth (Hasan Abid, Baroudi Bassam, Elmualim Abbas, 2017). When the productivity of a project in construction is low, the sequence of project planning, work packages scheduling and the duration of the project will be affected. Any interruptions that occur in the project can lead to project delays.

Project delay is a common problem that occurs in most construction projects. Delay in a construction project has a bad effect on the success of the project in aspects of cost, time, quality, and safety. A project team such as client, contractor, and consultant also will be affected in terms of growth in adversarial relationships, arbitration, litigation, mistrust, and cash-flow problems. In order to minimize and prevent delays in any construction project, it is essential to know the actual causes of delay. The factors of delay are very important in a construction project, and it is crucial for all organizations to have certain knowledge regarding this issue so that the project can be completed satisfactorily and effectively (Zidane and Andersen, 2017). There are many factors of construction delays that are caused by low productivity and one of them is a premature start in construction projects.

Premature start means a decision, which can result in an interruption, by at least one party, to start construction with at least one risk that exceeds an acceptable tolerance to a party (Griego and Leite, 2016). For an easier understanding, a premature start is a project that starts construction too early although the procedures or preparations before the construction phase are not appropriately ready and have not been fully completed yet. The projects frequently experience interruption that eventually resulted in delays. The early mobilization of construction from either the client or contractor without fully preparation causes pressure to the construction projects. When an interruption occurs, later on, it can affect the time, cost, quality and safety of the construction projects.

1.2 Problem Statement

Premature start occurs in construction projects when the employer is in a hurry to start work. The early mobilization of construction from either the owner or contractor without fully or complete preparation causes pressure to the construction projects. The owner or client usually excited to market a project and want it to be completed on time. This causes the contractor to start the construction phase immediately due to the completion date of the project and at the same time being pressured by the owner. In order to start the construction phase as soon as possible, the design is rushed and measurement or specification is not done properly which results in inaccurate drawings and plans that cause interruptions to construction projects later on.

When an interruption occurs, it can affect the time, cost, quality and safety of the construction projects. This matter becomes more complicated and serious when the project teams prefer to react compared to take a proactive management approach when disruptions occur. The project teams spend more money and crash schedules that have been planned when interruptions occur in the project to overcome the delays. By doing this inappropriate action, it can add some pressure and strain to all project stakeholders that eventually lead to disputes, litigation, and claims.

This shows that although the premature start in construction projects is an irregular issue, it still exists and happens in construction industries. The project team should aware that an early and rushing start of construction can cause interruption to the project and contribute to construction delays. Therefore, in order to avoid low construction productivity and prevent construction delays, this research will focus on

identifying the indicators of premature starts in construction projects and determine the challenges associated with premature starts to obtain more information about premature starts itself.

1.3 Objectives of Study

This study aims to identify the indicators of premature starts in construction projects in developing countries such as Malaysia. To achieve this aim, some objectives have been recognized:

- i. To identify the indicators of premature starts in construction projects
- ii. To determine the challenges associated with premature starts in construction projects

1.4 Scope of Study

This study discusses on identifying the indicators of premature starts in the construction industries today until these indicators interrupt the construction phase and eventually cause construction delays. Interview sessions will be performed with industry practitioners such as project managers or site engineers that involve and have experience in managing site construction projects as a method for data collection. This interview is intended to identify the indicators of premature starts in construction projects and to know the challenges that they have to face if they are rushing to start the construction phase based on their experiences. This research involves construction and consultant companies that registered with the Construction Industry Development Board (CIDB), Grade 7. The research questions for this study are:

- i. What are the indicators of premature starts in construction projects?
- ii. What are the challenges associated with premature starts in construction projects?

These questions are given to the interviewee and the data from the interview session will be analyzed using the thematic analysis. From the data that have been analyzed, the indicators and the challenges associated with premature starts can be found.

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