CHAPTER I

INTRODUCTION

1.1. Background

Indonesia's Gross Domestic Product (GDP) growth continues showing improvement over the last 10 years (2009– 2019 period) with the latest rate of 5.05% in July 2019. One of the challenges faced in shoot up Indonesia's economic growth and improving economic competitiveness is the development of infrastructure. The rapid infrastructure development has been running in various sectors, from road transport, energy systems, office buildings and schools, commercial buildings, telecommunications, and water supply networks, all of which require reliable infrastructure support.

Risks are closely linked to infrastructure projects. Risk is a complex phenomenon that has physical, monetary, cultural, and social dimensions (Loosemore et al. 2006). The consequences of risk events go well beyond the direct physical harm to financial or physical assets, people, or ecosystems. The effects include the way society operates and people think (Loosemore et al. 2006). It is, therefore, necessary to have risk management from the beginning of the construction project, to reduce the impact of risks that will occur in construction.

PMBOK Guide 5th edition (2013) describes the stages of risk management, that is, risk identification, risk assessment/analysis, risk response, risk monitoring, and control. Risk identification consists of brainstorming, Delphi technique, interview/expert opinion, experience, and checklists while risk analysis will include

two of method which is the qualitative and quantitative method. After identification and assessment of the risks are done, available options to avert the risk area marked and discussed in case they ever crop up in the future. Risk response is further subcategorized into risk avoidance, risk transfer, risk mitigation and risk acceptance depending upon the nature of the risks. To keep a rigorous check on the implementation of risk identification, risk assessment, and risk response risk monitoring and control are essential. Along with ensuring the execution of risk plans, it monitors the trigger conditions for contingencies and probabilities of new impending risks during project execution.

A study was carried out by Masood and Choudhry (2010), but its scope was limited to perceptions of contractors about risk factors. However, many project risks cannot be controlled by a single party (Tang et al. 2007). Risks in construction projects are borne by many parties involved in the project. Generally, risks are identified just from the owner and contractor perspectives; however, some other parties are also involved in the project.

The objectives of project risk management are to increase the probability and impact of positive events and decrease the probability and impact of events adverse to the project [Project Management Institute (PMI) 2004]. Avoiding project risks altogether is not desirable, especially if these risks can be turned into opportunities by proactive identification, risk analysis, timely response, and effective monitoring. Risk management is considered a vital tool in the management of projects (Wood and Ellis 2003) and is becoming an essential part of the decision-making process (Kangari 1995).

This research attempts to solve one main problem in Indonesia. First, to identify the problem in the construction industry in Indonesia by using the Risk Management technique. Second, to help stakeholders to take action of their ongoing and future project, with a focus on risk management systems. Further investigation will be needed to identify the problem in the construction industry in Indonesia.

1.2. Research Question

The existence of a problem in construction projects will need a solution. This research is carried out to investigate further:

1. What are the risks confronted by the contractors during the construction of projects in Yogyakarta?
2. How the impact of risk deal by contractors in the construction of projects in Yogyakarta?
3. What is the type of response to problems issued by contractors in Yogyakarta?

1.3. Scope and Limitation

Before starting the research, limitations have to be made in order to accomplish the main objectives. These are the limitations for this research:

1. The research about this study in Indonesia is still limited.
2. This research is conducted in Yogyakarta.
3. The Journal about this study will be obtained mostly from IASCE.

4. The Indonesian Journal regarding this study will be obtained from Intech Open.
5. The respondents will be contractors.
6. The risk factor that mention in this thesis is still limited.
7. This research is carried out during development/construction phase.

1.4. Objectives and Benefits

This research was done in order to:

1. To identify the problem in the construction industry in Indonesia using Risk Management.
2. To help the contractors to take action on their ongoing and future projects, with a focus on Risk Management.
3. To reduce/control all the risk factor that mentioned/research happen in real project or future project.

1.5. Outline of the Thesis

This thesis is breakdown into five chapters that consist of an introduction, literature review, research methodology, data analysis, and discussion, and the last is conclusion and recommendation.

The first chapter of this thesis is an introduction. It is divided into six sub-chapters which are the background of this research, research question, scope, and limitation, objectives, outline of the thesis and the last one is the originality of this

thesis. The second chapter is a literature review that encloses a literature study to uphold the thesis.

The third chapter is the research methodology. It is about methodology research, statistic tools, the respondent, etc. The fourth chapter is data analysis and discussion, it will discuss how to analyze the data that have been obtained before and discussion. The last chapter is conclusion and recommendation. It has the conclusion of the thesis and recommendation to reassure the thesis.

1.6. Originality of the Thesis

The topic “Identification of Risk Management Problem in Construction Industry in Indonesia” has never been used in any thesis previously. Hence, there has never been any endeavor to conduct similar research in the Indonesia construction industry. This final project will be a unique and new in its attempt to identify the significance of Risk Management implementation in the Yogyakarta construction industry.