



RESEARCH ARTICLE

Risk Management in Construction Companies in Malaysia: Challenges and Strategies

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ARTICLE INFO

ABSTRACT

Received: Jan 17, 2025

Accepted: Mar 2, 2025

Keywords

Construction Industry
Risk Management
Challenge
Strategy
Malaysia

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The construction industry in Malaysia is one of the most important sectors in the economic development of this country. This research examines the challenges faced by construction companies, especially in the north of Peninsular Malaysia, as well as strategies to face those challenges. The challenges are classified into three categories, namely non-compliance with regulations, human resources and the environment. Several respondents who are project managers, construction company directors and risk management experts from academics were interviewed. The researcher found that all respondents explained that the uncertainty of the price of building materials is the main challenge at the moment in risk management in construction companies in Malaysia. The non-compliance factor is very important and is always followed. The respondents are aware of the consequences of non-compliance with the law and regulations. For the human resource factor, the respondents emphasized the need for skilled workers as well as the less skilled. Regarding environmental factors, all respondents are aware of environmental compliance and importance related to construction projects. They pay a lot of attention to environmental aspects and it has also been included as a condition in the documents of a construction project.

INTRODUCTION

The construction industry in Malaysia is one of the most important sectors in the economic development of this country. Along with the rapid growth of the economy and the continuous development of infrastructure, the construction sector continues to grow rapidly (Zaini & Mustaffa, 2018). However, this growth also comes with increasingly complex challenges in risk management. Effective risk management in the construction industry is key to project success, worker safety, and customer satisfaction (Abushammala & Bubshait, 2019).

Risk in the context of construction is inevitable. It can include various aspects, including non-compliance in regulations, changes in the environment and human resource factors (Wong & Hooi, 2019). These challenges often occur concurrently in construction projects, and ineffective risk management can lead to project failure, cost overruns, and safety issues.

This research explores and analyzes the main challenges faced by construction companies in Malaysia in risk management, as well as the strategies they use to overcome these challenges. Through this study, researchers gained a deeper understanding of the need and opportunity to improve risk management practices in the Malaysian construction industry.

This research collected data from construction companies in Malaysia, particularly in the north of peninsular Malaysia through interviews with project managers, risk management experts, and industry workers. Data analysis focuses on the critical challenges these companies face and the innovative strategies they use to effectively manage risk.

This study is focused on deepening the understanding of the risk management challenges faced by construction companies in Malaysia and the strategies they apply to overcome these challenges. With the growth and changes in this industry, a deep understanding of risk management is crucial to increase efficiency and minimize negative impacts to various stakeholders.

Problem Statement

The construction industry in Malaysia is a sector with high potential for various risks, including technical, financial, environmental, and social risks. However, risk management in construction companies in Malaysia is often faced with various challenges that can affect project performance and worker safety (Wang, Liu & Shen, 2016). These challenges include but are not limited to non-compliance with regulations, limited human resources and changes in the environment (Othman & Abdul-Rahman, 2017).

In addition, despite the awareness of the importance of risk management in the construction industry, there is still a lack of effective implementation among construction companies in Malaysia (Abdul-Rahman & Wang, 2017). This creates the need to study the challenges faced by construction companies in the implementation of risk management as well as identify appropriate strategies to overcome these challenges (Ling & Low, 2018).

This research provides a deeper insight into risk management issues in the construction industry in Malaysia and contributes to the improvement of existing risk management practices in construction companies.

Some research questions are stated as follows:

1. What are the main challenges in the implementation of risk management for construction companies in Malaysia?
2. How do factors such as regulatory non-compliance, human resources and the environment affect risk management in construction projects?
3. What are the best strategies that construction companies can take to overcome these challenges and improve the implementation of risk management?

This research provides new knowledge regarding risk management that is being practiced by construction companies in Malaysia. Cabaarn and risk management strategies are also studied and evaluated by researchers. In terms of practical contributions, construction companies will be more prepared in terms of risk management. This group of companies is also exposed to strategies in implementing more efficient risk management.

Risk Management in the Construction Industry Context

For Fathi, Mohd Nawi and Kamardeen (2018) their study has provided a critical assessment of risk management in construction projects in Malaysia including examining issues related to regulations, compliance, and best practices. While Sapiri, Akasah, and Takim (2011) through their study have studied the practices of risk management in the Malaysian construction industry and discussed the factors that affect the implementation of risk management and suggested strategies to improve these practices.

Risk management in the construction industry has received major attention in the literature review. According to Flanagan and Norman (2013), risk management in construction involves a process involving the identification, evaluation, and management of risks related to various factors such as technical, financial, and organizational. This holistic approach provides a foundation for construction companies to prepare an effective strategic plan to overcome the risk challenges that may arise. There is also past research that examines the main obstacles that prevent the implementation of effective risk management in the construction industry and it focuses on factors such as lack of awareness about risk management and uncertainty in the market (Najmi, Ahmad & Khitab, 2015).

Risk Management Challenges in Malaysia

There are several past studies that examine the challenges faced by construction companies in Malaysia. For example, Anuar, Ismail and Hui (2011) have studied some of the main challenges in the implementation of risk management in the Malaysian construction industry as well as some identified factors including regulatory uncertainty and changes in the environment. While Ismail, Sapuan and Yusuff (2013) have studied the main challenges in risk management of construction projects in Malaysia and it includes aspects such as regulations, changes in the environment, and human resource management.

The unique challenges in the Malaysian context have attracted the attention of researchers. Abdul-Rahman and Wang (2010) identified several key challenges, including local law changes, contractor failure, and financial constraints. This study provides insight into the complex and challenging business environment in Malaysia, demonstrating the need for risk management strategies specific to the local context.

Risk Management Strategy

Risk management strategies play an important role in dealing with risk. Tang and Zou (2012) investigated the risk management strategies used by construction companies and concluded that effective strategies include the use of detailed risk assessment methods and continuous monitoring of risks throughout the life of the project. Pinto and Slevin (1988) emphasized the importance of risk management on project stability. They state that the success of construction projects often depends on the ability of construction companies to systematically manage risks and plan to overcome uncertainties that may arise.

A study by Hillson and Murray-Webster (2017) discusses the importance of innovation in risk management. They argue that successful organizations in risk management not only identify the risks that exist, but also innovate in creating unique risk management methods that suit their project needs.

Qualitative Approach

This research uses a qualitative approach. The researcher used the interview method with the respondents to obtain data and information related to this research. The respondents are project managers, construction company directors and risk management experts from academics. Qualitative research provides an in-depth insight into the challenges and risk management strategies in the construction industry in Malaysia.

The type of interview used is semi-structured. The questions are prepared in advance before starting the interview session in addition to open-ended questions used during the interview session (Sekaran, 2003).

For this research, all construction companies in the north of peninsular Malaysia (Penang, Kedah and Perlis) are the population and include all Grades G1 to G7 as defined by the Malaysian Construction Industry Development Board (CIDB). For the purpose of sampling, the researcher used a purposive sampling procedure to select the appropriate respondents. This procedure is suitable for selecting the respondents who have been identified in this research. The characteristics of the selected respondents meet the criteria to answer the research questions. Information about the respondents was obtained from the CIDB website.

In addition to the interview method, the researcher used the document review method. The documents were obtained from the respondents in addition to the researcher's own search such as on the website.

RESULTS OF DISCUSSION AND CONCLUSION

There are five respondents in this research of which four are construction company staff and one respondent is an academic from Universiti Teknologi MARA (UiTM). The results of all these interviews are discussed in five main themes namely challenges, non-compliance, human resources, environment and strategy. For the purpose of this research and the discussion process of the interview results, the director of construction company A is labeled as respondent 1, the director of construction company B is labeled as respondent 2, the project manager of construction company C

and D is labeled as respondent 3 and 4. While respondent 5 is assigned to a member academic from UiTM.

After completing the interview with the respondents, the researcher found that all the respondents explained that the uncertainty of the price of building materials is the main challenge at the moment in risk management in construction companies in Malaysia. They had to place a relatively high bid price in order to face the effect of the increase in the price of building materials in the future in particular. For construction companies like them, risk management is very important especially in facing the economic effects such as the increase in the price of building materials and also political instability. As informed by academics during the interview session, he stressed that political uncertainty does have a direct relationship with the country's economic policy including fiscal policy. This situation will definitely affect supply and demand in the market. Next, affect the price of a product in the market including the price of building materials in this country.

In this situation, which is about the uncertainty of the price of building materials in the market, researchers found many factors that influence the price of the goods. As the academic emphasized earlier regarding political instability in Malaysia, the strength of our country's currency also plays an important role in this regard. There are some building materials that are imported from abroad or the materials to make the building materials come from foreign countries. The manufacturers or makers of building materials have definitely raised their selling prices to cover their production costs. If our currency, the Ringgit, is at a good level, it will not be a problem to this situation.

Various reactions and feedback were received by the researcher during the interview session with the respondents related to non-compliance with regulations, human resources and the environment. Regarding non-compliance with regulations, all respondents from construction companies agreed regarding compliance with laws and regulations related to the construction industry in this country. They insist that this factor is very important and is always followed. They are aware of the consequences of non-compliance with such laws and regulations. For respondents from academics, he linked non-compliance with the rules to fines that may be imposed on construction companies if they fail to comply. He then emphasized that a large fine would affect the company's finances and further cause a delay or postponement of a construction project. He emphasized this time that this situation is a big risk for a construction company.

For the human resource factor, the respondents emphasized the need for skilled workers as well as the less skilled. For skilled workers such as engineers and consultants, sometimes they have to get their services from far away like in Kuala Lumpur. This situation causes increased costs for construction companies. For unskilled workers such as construction workers, on average they are foreigners. So the construction company must provide all the employment documents to them. On the other hand, it will be a risk if caught by authorities such as the Immigration Department and will affect a construction project that is underway.

Regarding environmental factors, all respondents are aware of environmental compliance and importance related to construction projects. They pay a lot of attention to environmental aspects and it has also been included as a condition in the documents of a construction project. They are aware of the risks that will be faced if something happens like a natural disaster and so on. Construction companies have also taken environmental factors into account when planning a construction project. They are also aware of the impact on construction costs if something undesirable happens.

Various responses were given by the respondents regarding strategies that can be done in facing challenges and risk management in construction companies in Malaysia. First, the directors of construction companies who are also respondents one and two in this research describe the need for a sophisticated computer system in the aspect of risk management in their companies. For example, this system can integrate environmental factors and risk assessment and further assist in the planning of the company's preparedness plan.

In addition, there are also construction companies that are preparing investments in the development of workers' skills. Regular trainings are provided to employees so that they are always exposed to the latest information and skills.

For the academics interviewed in this research, he suggested that a holistic action should be taken by the construction industry community in this country. They should provide a sophisticated risk management system to identify, assess, and manage risks more effectively. He also summarized the importance of collaborating with stakeholders such as local authorities and environmental experts to understand and reduce the risks associated with it. He added that construction companies in this country should improve the regulatory compliance process, improve the efficiency of human resources through investment in the development of employee skills.

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