

Case Studies of the Applicability of Risk Management Practice in Klang Valley, Malaysia

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Abstract

This research is focuses on the practice of risk management (RM) in Client's organization and aims to identify the level of awareness among construction professionals towards risk management and to examine the policy undertaken when dealing with risks in a construction project. Apart from that, it also aims to identify the problems and challenges for the implementation of risk management in Malaysian construction industry.

A series of interviews were carried out in order to obtain a better view on the implementation of risk management in the Malaysian construction industry. It was found that Malaysian clients are slowly accepting risk management tool that will help in managing a construction project effectively and successfully.

Based on the findings from the interviews there are a number of clients who know about risk management and who have attended training and some of them have even practice risk management in their organizations. At least, it's been proven that there are organizations that have implemented risk management in their operations although this is only on a small scale. It can be concluded that risk management still has a long way to go in order to be accepted and recognized in the Malaysian construction industry.

Keywords

Risk management, Risk, Implementation, Organisation, Malaysian construction industry

1. Introduction

Risk management is a continuous process that depends directly on the changes of the internal and external environment of the organization. Systematic risk management is expecting the unexpected – it is a tool which helps control risk in construction projects (Mills, 2001). Its objectives are to introduce a simple, practical method of identifying, assessing, monitoring and managing risk in an informed and structured way. However, risk management is not widely being practiced in construction industry.

According to Burchett (1999), risk in construction, however cannot be eliminated, but it can be minimized, transferred or retained. Risk management has become a main part of the organization's activities and its main aim is to help all other management activities to reach the organization's aims directly and efficiently. The companies and organization which practicing the risk management process has their own risk management approach and procedure in place. A consistent approach to risk that meets the organization's requirement should be developed for each project and communication about risk and its handling should be open and honest.

2. Objectives of the Study

In recognition of the importance of risk management in ensuring the successfulness of the project, the aims of this study is to precisely identify the implementation procedure and policy of risk management specifically in the Client's organization.

3. Risk Management in Malaysian Construction Industry

As any other country, Malaysian construction industry is also exposed with a lot of risks and uncertainty. Among of them are political risks, financial risks, environmental risks, technological risks and many others.

Many companies adopt Risk Management as part of their management practice. In Malaysia, listed companies are bound by the Malaysian Code of Corporate Governance Amended in March 2000 (The Code) which includes the principle of Corporate Governance (IIAM, 2000). To comply with the listing requirements as outlined by Kuala Lumpur Stock Exchange (KLSE), listed companies are required to report on the state of internal controls in their annual reports. It is a responsibility of the Board of Directors of listed companies to *“identify principal risks and ensure the implementation of appropriate system to manage these risks”* (source, The Code). It means that they are required to report any risk management activities done throughout the year in their annual report. The purpose is mainly to safeguard shareholder's investment and the company's asset.

Therefore, that is why there is a scenario in construction industry where the risk management is only being practise in big company specifically public listed companies. However, whether they are really practicing risk management in their daily management or merely to fulfil the requirements as set by the authorities is still a question.

4. Research Methodology and Data Analysis

Following a literature review research on risk management success, data were also gathered from a series of interviews conducted with the selected client's organization in order to identify the implementation procedure and the practice of risk management within their organization. The type of personal interview being carried out is unstructured interview. Three (3) client organizations which are operating in the Klang Valley vicinity has been chosen for interview which are ABC Holdings, RST Sdn. Bhd. and XYZ Group Sdn. Bhd.

5. Case Studies

5.1 Organisational Culture Towards Risk Management

5.1.1 ABC Holdings

As required by Bursa Malaysia, ABC Holdings has practiced risk management in their operation in order to be listed in Bursa Saham Kuala Lumpur (BSKL). In this company, there is a specific department for risk management and they have a risk management policy manual for the company and every staff can access into it and read it via the intranet network within the organization.

The main purpose of this policy manual is to enhance risk awareness and to allow their staff to deal with risks in a responsible manner. Benefit from it include the ability to share risk related knowledge, consistent risk reporting to support decision making and the ability to demonstrate externally the company's competence in handling risk and uncertainty.

However, not all of their staff really aware and understand how risk management is being practiced in their organization. This is because, although they have the manual of risk management but they do not fully practice it in their daily work. Most of them know what the risk management approach is all about but they do not fully involve with it. The construction personnel for example, involves with the risk management activity only at the risk identification stage. At this stage they are normally being instructed to identify and list out the risk that may occur and then the list will be bring up to the top management officer and they will proceed to the next step and then decide how to deal with the risk.

In ABC Holdings, training on risk management is normally provided to the risk executive and the top management of the company such as General Manager, Senior Project Manager, Project Manager and others who are directly involves in the decision making process. Based on the observation and interview conducted, it can be concluded that the level of awareness among ABC Holding's staffs especially their construction personnel towards risk management activities that has been carried out in their organization is moderate. We can rank them at knowledgeable level which is still at a learning stage. They know the system but they do not fully involve in it. Only the top management officers are really involve in all the risk management activities but the others just involves in one part of it.

5.1.2 RST Sdn Bhd

In RST Sdn. Bhd., there is no specific department for risk management but the risk management activities and risk management personnel are under the Department of Total Quality Management. Risk management training is normally provided for the technical staff only especially for those who are involves in the construction project and also the top management officer such as Senior Project Manager, Project Manager, Engineer and others. For non-technical staff, normally there will be an induction course for them when they joined the company and during the induction they will be introduced to all of the management system that has being implemented in RST Sdn. Bhd such as Total Quality Management, and also risk management. However, it will not go deeper, the main purposes of the induction course is to exposed and introduced the new staff with the management system in the company and also to give them a brief explanation on the function of each of the department for their information only.

In RST Sdn. Bhd., not all of the technical staff is really understand what risk management is all about. From the interview and observation, it can be said that the top management officer are understand most about risk management. This is because they are involves in the decision making process. So, it is very crucial for them to manage the risk properly and effectively in order to make a right decision. The other technical staffs are aware about risk management but their involvement is mostly at the risk identification stage and a little bit at the risk analysis stage. From the observation and interview, the level of awareness among RST Sdn. Bhd. staff towards risk management is same as ABC Holdings which is they are knowledgeable. They have knowledge on risk management but their involvement is limited.

5.1.3 XYZ Group Sdn Bhd

As in RST Sdn. Bhd., XYZ Group Sdn. Bhd. does not have an independent department that specifically looks after Risk Management process. However, all the risk management activities in this company are under the responsibility and supervision of Internal Audit Department. In order to meet the listing requirement as stipulated by Bursa Malaysia, XYZ Group Sdn. Bhd. formed a Risk Management Steering Committee (RMSC) to review and access the risk profiles of the whole Group. RMSC consists of top level management and head of department of XYZ Group Sdn. Bhd.. The head of department involved are from Finance, Business Development, Projects and Operations departments. The main task of RMSC

basically to oversees the overall responsibility to review the entire risk management process and procedures within the organization and report to the Board of Directors at every six (6) months.

5.2 The Implementation of Risk Management

5.2.1 ABC Holdings

In order to ensure consistent and high quality risk management across the ABC Holdings, a standardized and structured approach to risk management has been developed based on existing best practices within the company. This structured approach is supported by the Board of Directors and is to be applied to all projects within the company. Generally, there are three category of risk as categorized by the company which is:-

Category A (High Risk Profile)

The following are the characteristic of the risk which fall under Category A

- Contract Sum>5% of Group Company turnover
- New or undesirable are, client, country, contract form
- New or difficult techniques of construction
- New subcontractors, suppliers and professional team difficult site condition (soil, logistic, etc.)
- Joint venture, partnership and consortium project
- Turnkey Engineer Procure Construct Contract, Public-Private Partnerships, financing projects
- Projects with specific investment or financing requirements
- High public profile projects

Category B (Medium Risk Profile)

Characteristics of risk under the Category B:

- Contract sum>2% of Group Company turnover
- Familiar area, client, country, contract sum
- Familiar techniques
- Familiar subcontractors, suppliers, professional team
- Multi-disciplinary works

Category C (Low Risk Profile)

The following are the characteristic of the risk which fall under Category C:-

- Familiar area, client, country, contract form
- Familiar techniques
- Single-disciplinary works
- Repetitive works

The company's risk management approach consists of four steps that are continuously executed throughout the construction project process. These steps are; access risks, develop countermeasures, implement countermeasures and monitor, improve and optimize. These steps are supported by a set of generic tools and reports that can be adapted for use throughout the company.

The first risk management step is the risk assessment. It involves risk identification and risk prioritization. The goal of the risk identification is to list all the potential risks for the project. Several techniques and tools can be utilized for risk identification such as brainstorming workshops, prompt list and others. After

the risk identification process then the risk prioritization being carried out. The purpose of risk prioritization is to develop a qualitative view of the overall project risk profile and to enable focus on the main risks. A three level scale ranking of the risk level is used which is high risk, medium risk or low risk. This ranking is derived by estimating the likelihood of occurrence and impact of the identified risks.

Table 1: Risk Ranking

<i>Impact</i>	4	M	M	H	H
	3	M	M	H	H
	2	L	L	M	M
	1	L	L	M	M
		1	2	3	4
<i>Likelihood</i>					

H = High Risk M = Medium Risk L = Low Risk

Table 1 shows on how ABC Holdings rank the potential risk on their project based on the risk's likelihood and risk's impact.

Following the risk assessment, the next step of the risk management process is the development and implementation of countermeasures. The potential opportunities and threats for each of the risk will be list out. Once the potential opportunities and threats have been identified and prioritized the potential countermeasures strategies shall be reviewed. Risk countermeasures strategies can include:-

- i) Avoidance (do not undertake the activity)
- ii) Reduction (use alternative method)
- iii) Transfer (to contractor, insurance, etc)
- iv) Acceptance (very seldom)
- v) Containment (inspection, planning, working methods)

Transferring the risks to the contractor is being done in many cases. It is normally being done using the contract clauses such a mandatory requirement for the contractor to provide an insurance coverage to the works and many others.

After the implementation of risk countermeasures, then the improving and optimizing stage will take place. This is actually to review the performance of the risk management activities for further improvement.

5.2.2 RST Sdn. Bhd.

As ABC Holdings, RST Sdn. Bhd. also has its own risk management framework which adopted the system using ASNZ Standard Risk Management practice and implemented in the company's management system. Figure 1 shows the risk management framework that has been practiced in RST Sdn. Bhd.

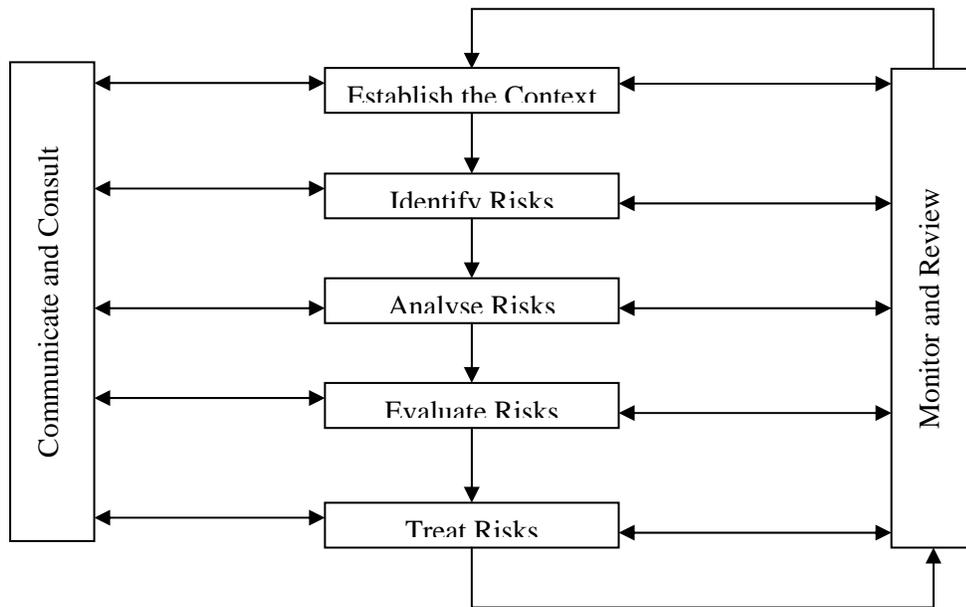


Figure 1: Group's Risk Management Methodology

Step 1: Establish Context (Environment)

The first step is focused on establishing context or business environment in which the company operates. Among of the factors that need to be considered in establishing the context or business environment are the organization's strong point, weak point, opportunities and threats and others. Apart from that it will also includes the financial, operational, competitive, political, social, client, cultural and legal aspects of organization's functions. It is also the process of which the stakeholders (internal and external) objectives are recognized and mull over while taking into account their insights.

Step 2: Identify Risks

After the establishing the context, then the risk identification stage will takes place. All the identified risk will be registered and list out according to its category. Table shows the various categories for risk register.

Step3 & 4: Risk Analysis and Evaluation

After the all the risks being identified further analysis should be carried out. This is actually to identify the alternative options to response and mitigate the risks. In this stage, the identified risks are then analyzed and evaluated to determine the:

- Likelihood of the risk occurring; and
- Magnitude of impact if the risks occur

i) Likelihood Rating

The likelihood of a risk occurring is assessed using the scale as illustrated in Table 2.

Table 2: Likelihood Rating

Likelihood	Rating	Description
5	Almost certain	High likelihood of occurrence unless controlled, i.e. almost certain to occur more than once within the next twelve months
4	Likely	The risk is almost certain to occur at least once within the next twelve months, unless controlled
3	Moderate	Some likelihood of risk occurring unless controlled, i.e. the risk could occur at least once within the next 3 years
2	Unlikely	The risk could occur at least once within the next 3 to 5 years
1	Rare	Very low potential for occurrence, e.g. unlikely to occur within the next 5 to 10 years.

ii) Impact Rating

Table 3 below shows the impact scale to be used in assessing the impact of a risk:-

Table 3: Impact Rating

Impact	Rating	Description (Examples)
5	Catastrophic	<ul style="list-style-type: none"> ▪ Loss of ability to sustain ongoing operations. An event or situation that would cause a standalone business to cease trading (e.g. loss of significant [50% or more] production capability, massive reduction in company's credibility with shareholders, customers, suppliers, staff and public, loss of key competitive advantage/opportunity and loss of supply of key process inputs) ▪ Financial impact likely to exceed 15% of the profit of the previous reporting period
4	Major	<ul style="list-style-type: none"> ▪ Reduce ability to achieve strategic objectives and targets (e.g. sales/revenue growth, market share, EPS and brand name/reputation building) ▪ Reduce ability to achieve business objectives (e.g. loss of market confidence, loss of key customers and sales opportunities, short term (3-6 months) loss of production capability or distribution/supply chains, incurring excessive costs which impact ongoing profitability, permanent reduction in product quality, and loss or misappropriation of significant assets) ▪ Financial impact of between 5% and up to 15% of the previous reporting period.
3	Moderate	<ul style="list-style-type: none"> ▪ Disruption to normal operation with a limited effect on achievement or corporate strategies and objectives, (e.g. temporary[less than 3 months] loss of production capability or distribution/supply chains, credibility damage to some extent, correctable product quality impact, and loss of assets) ▪ Financial impact likely to be between 2% and up to 5% of the profit of the previous reporting period.
2	Minor	<ul style="list-style-type: none"> ▪ No material impact on the achievement of corporate strategy and objectives (e.g. minor loss of production capability, limited damage to reputation, loss of audit trail, minor cost, quality and time impacts. ▪ Financial impact to be less than 2% of the profit of the previous reporting period
1	Insignificant	<ul style="list-style-type: none"> ▪ Accounting/administrative problems with no legal, decision-making or profit and loss impact.

5.2.3 XYZ Sdn. Bhd.

As RST Sdn. Bhd. this company also adopted the system using ASNZ Standard Risk Management practice and implemented in the company's management system. A series of meeting will be held by the RMSC in order to manage the risk occur in a most efficient and effective manner. During RMSC meeting, the Committee will review and evaluate identified risk by all the company under the Group including the holding company and subsidiaries. Report will be prepared in a table form based on each company and all the risk involved will be categorized, reviewed and scrutinized.

The summary of the report will be prepared and this report will include the risk identified for each risk category and the actions that will be taken to reduce the probability of the risks to happen. RMSC will meets at every six (6) months to review and access the risk that has been identified and during the final meeting, Director of Internal Audit for the Group will attend to give his views and comments on the report tabled by RMSC. The final report will take into account all the comments made during the meeting before being tabled to the Board of Director for approval. The final meeting will be held after the financial period ends and will be tabled to the Audit Committee and the Board of Directors and then be reported in Annual Report to be review by the shareholders at the end of May every year.

6. Conclusion

The construction industry has always been and continues to be risky. Without a proactive risk management process, problems that occur on a construction project are likely to increase the delays and the overall project cost. Client in construction industry is somebody who ultimately pays all the construction cost. They are justified in demanding that their project should be completed on time, within the budget, and to the quality and performance levels specified. Construction industry is among of the industry which exposed with a lot of predictable and unpredictable risk that may give a greater impact to the productivity, performance, quality and the budget of the project. Therefore, in order to ensure the successfulness of the project there should be a proper and systematic risk management in place in order to manage the risk in the most efficient manner.

From the survey result, it shows that majority of the client organization which has a risk management policy were from the category of private client and public listed companies such as ABC Holdings, RST Sdn. Bhd. and XYZ Group Sdn. Bhd.. This may be due to the stringent statutory requirements as outlined by Bursa Malaysia, where risk management is part of best practice requirement for public listed companies. This proven to us that Malaysian client is slowly accepting risk management as part of their management practice, but it has being applied if there is a mandatory requirement on it. However, the question remains whether it is truly being practiced or merely meeting the stringent statutory requirements.

7. References

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