



A Study on Leadership Skills of Project Manager for a Successful Construction Project

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Abstract

A construction project consists of a diversity of individuals and organizations which are all gathered to achieve a specific task in a specific time. Therefore, leadership is an important characteristic for construction manager in managing construction projects. Leadership skills can improve construction productivity, where its outcomes include effectiveness, satisfaction, and extra effort. The main objective of the study is to identify the influence of project manager's leadership skill toward successful of a construction project. A key element in the success of a company is good leadership skills of a project manager and a project can be managed with minimal problems occur. Apart from that, interpersonal skills are also needed in order to reflect the project manager's ability to bring workers involved in a project. The study concluded that project manager leading characteristics influence the success of the project positively, and it can be acquired through never-ending training and learning. There are seven leadership skills that a good project manager possesses; communication skills, problem solving and decision making skills, team building skills, conflict resolution skills, planning and goal setting skills, sense of responsibility and time management skills. Based on seven skills that needed as a project manager, to have skill in planning and setting target on the construction project is seen as the most important skill acquired among the rest.

INTRODUCTION

The project manager is one of the main parties in the role of the construction industry. Between a successful industry is under construction and development, based on the studies that have been made between the success and failure of a company is dependent on the construction project manager. The effectiveness of project managers in managing finances, schedule, quality, and act as the main liaison with the success of a project.

PROBLEM STATEMENT

Based on research conducted by Oshinubi (2007), a common problem that effect group's performance was came from the project manager's leadership style itself. Among the specific issues that are commonly encountered in the study by Oshinubi (2007) was the problem in the poorest of effective leadership and the bigger problem is about management practices in the construction industry, which will cause wasted time, unnecessary costs, and

increases of errors in the construction process or completed construction. In addition, if there are many mistakes made in the management of the project manager, her/his credibility will be challenged and will influence an organization's name. In addition, all defects occurred after completion of the project will have negative effects either the client or the organization (Mohamad Doll, 2009).

Previous research stated that one of the problems of unsuccessful construction project is because of poor leadership skills as a project manager. The study together with the literature survey was conducted to identify the leadership theory, skills, roles and responsibilities. The findings of this research will help to built up a good behavioural of leadership skills as a project manager in managing the construction project.

RESEARCH OBJECTIVES

From the problem statement, the following are the objectives of the study:

- 1) To identify the roles and responsibilities of project manager.
- 2) To identify the influence of project manager's leadership skill toward the success of a construction project

RESEARCH METHODOLOGY

In order to achieve the research objectives, a systematic method in conducting this research had been organized. This study uses the concept of questionnaires to ensure that the study is conducted is practical and realistic from the point of view of the various agencies involved in the construction industry. A total of 60 questionnaires given to the respondents involved in the construction industry in Perak. Target population is 60 respondents but the sampling size only 33 respondents. The scale used in the questionnaire based of Likert Scale. Next stage is analysis of data through SPSS software and analyzed by using frequency, reliability and descriptive analysis. Last stage is make finding and recommendation based on finding and analysis the data before.

LITERATURE REVIEW

Leadership Theory

FIGURE I
RELATIONSHIPS FOR LEADERSHIP THEORY



Trait Theory

According to research Nanus (1989), most of the leadership research began in the 1920s, trait theory of leadership emerges from the perception that the leaders different from the others and this theory has also become the basis for the notion of most research. In addition to leadership can also be seen through the qualities or attributes of leadership that is has been awarded. There are seven abilities make an individual effective leader. Among the seven abilities that just now can be classified as megaskills. In addition, between the three abilities derived from the theory of types are: (a) farsightedness or the ability to operate in the future tense; (b) initiative or the ability to make things happen; and (c) integrity, deemed vital in a leader.

Situational-contingency Theory

Theory of situational leadership was popular in 1948. Furthermore, according to a study Butler and Reese (1991), the theoretical model is in a class is the prescriptive model that describes various approaches to leadership contingency. The study also had to explain that there are four leadership styles in situational theory,

namely that called as S1, S2, S3 and S4. In other words, the four styles that means: S1 (high service, low relationship), S2 (high task, high relationship), S3 (low task, high relationship), and S4 (low task, low relationship).

Behaviour Theory

On the theory describes the behaviour of the leadership that has been successfully done and not what they will do about the leadership of a project (Torpman, 2004). According by Bass (1990), in a research study about leadership behaviours that have been made is to ensure that the relationship between leadership behaviour and effective leader.

Roles and Responsibilities of Project Manager

Based on the review of Hussin and Hamid (2006), the role or responsibilities that should be on every project manager are shown below:

Providing Feasibility Studies, Project Summary, and Project Strategy

Before start any construction project, the project manager should make a survey on the state of the site. The project manager must also be proficient in a study on the state of development of the site to be made or a construction by determining what type of equipment or machinery that needs to be prepared to start a construction. The project manager also must think about accessibility of heavy vehicles into construction site. After making feasibility studies on the construction site, the project manager should also provide a project summary report form in order to carry out the next process with ease and according to a predetermined plan. When completed the project summary, project manager should also provide project strategy from early stages until the completion of the project.

Planning Activities, Tasks, Schedules and Budgets

The important of the planning provided by a project manager is to avoid any problems during the process of construction project. In planning activities, the project manager can forecast any incremental of budget if completed projects exceed the expected time. Project managers needs to provide planned work schedule, so that every part of the work must be completed according to the plan. Besides that, the project manager also has the responsibility to manage the budget that has been provided from the client or developer to complete the construction project.

Managing the Human Resource

In managing human resources, the project manager should also focus on workers ethics in the process of completing construction. Employee ethics should be emphasized because in order to keep the project running smoothly and to avoid any problems arising. If the employee does not follow a predetermined ethics in work ethic, managers need to take action as soon as possible by giving the sentence. This is because, to warn other employees to always be ethical in work.

Manage the Project Quality and Safety and Health

The quality of the project is one of the achievements that should be achieved by the project manager in order to show the competence or has the nature of excellent leadership in managing a project. The quality of the project is also important for a contracted company to ensure that the project has been well managed by the project manager and satisfied the client. Worker's safety and health is very important in order to reduce accidents and fatalities. This situation is controlled by strict regulation.

Monitoring the Project Progress

The next role or responsibilities as a project manager is to manage the monitoring of projects, and monitor progress report. In monitoring the progress of the project, the project manager should ensure project progress that has been made is on schedule.

Commissioning of Mechanical and Engineering Packages

Administer project closed-out by carrying out commissioning of Mechanical and Engineering packages, organising handing over activities and performing contract closed-out, post-contract evaluation and post mortem review.

Leadership Characteristics Skills

Communication

This communication is also the basic skills for a leader, this is because communication is the ability of a project manager or leader to listen, persuade, and to understand what others mean by their behaviour. Communication skills for leaders in managing projects are needed in achieving the goals of a project. As a skilled leader in communicating this way may make it easier to interact between project leader or project manager with the workers, in the case of any problems occurring on construction projects that can be completed quickly and easily (Mehta, 2012).

Problem Solving and Decision Making

For a leader it is necessary to know how to solve a problem, how to distinguish the source of the problem, identify practical solutions, and the last action is to implement it. Between the elements in problem solving is included in the problems to be solved and decisions need to be made to solve the problems that have occurred (Oduami, 2002).

Team Building

As a project manager also must engage in team building skills as necessary for the success of a project. For every decision made by a project manager or a leader should be known by their subordinates, because people definitely need to know what exactly is required of a leader, or a sharing of knowledge and learning, and in the selection process for an original team leader (Raiden et al., 2004).

Conflict Resolution

In a construction project undertaken, usually the conflict is a major problem that must be faced by the project manager or project leader. As a project manager to resolve conflicts is a very difficult task in maintaining the situation of the project ran smoothly. In this chapter, this conflict can be defined as the difference between two or more trusts, the conflict of ideas in solving a problem, or interest in project management (Yui and Cheung, 2006).

Planning and Goal Setting

Planning in achieving an objective is important, because as a project manager must be clever and wise in preparing any planning process has been designed so that every construction project can proceed smoothly. As a leader in managing a project also need to draw roads and planning with the goal that all the objectives of the project construction process can be successfully achieved (Farooqui et al, 2008).

Sense of responsibility

In the event of any problems involving workers, as a leader or project manager should feel responsible for the project manager should take care of every employee. Besides that, if there is any conflict on-site construction project manager needs to manage the problem because it has become my responsibility as a manager in controlling the problem. The project manager is also responsible for leading projects in various aspects to the overall success of a project, including cost, schedule, quality and safety requirements (Edum-Fotwe and McCaffer, 2000).

Time Management

Based on the study Ramo (2002), time is an important aspect of the construction process. If as a manager who leads a project did not manage time properly can lead to delays in the completion of a project. The delays in the completion of a project can result in additional costs to the provision in a construction project. In addition, as a

manager who leads the project should be smart enough to determine and control strategies in time to prepare a progress by stages which have been designed in the Critical Path Method.

FINDING AND ANALYSIS

Reliability Analysis

Based on Table I, it is shown the reliability analysis result of the study about the influence of project manager leadership skill toward successful about construction projects and Cronbach's alpha showed the value of variables is positive and it is mean that this questionnaire is valid and stable.

TABLE II
CRONBACH'S ALPHA FOR ACTUAL STUDY

Variables	No of item	Cronbach Alpha
Communication	5	0.747
Problem Solving and Decision Making	4	0.640
Team Building	4	0.704
Planning and Goal Setting	2	0.791
Time Management	3	0.789
Sense of Responsibility	4	0.793
Conflict Resolution	2	0.709

Variables Descriptive Analysis

Table II shows the descriptive analysis and mean for the study on the communication skill as a project manager in managing the construction project. Refer to the finding data of variables on communication skill was recorded 4.29. Mean for the problem solving and decision making is 4.06. The mean of the final data that have on team building is 4.02. Besides that, the mean for the planning and goal setting is 4.19. The mean for time management is 4.10. While the value means in the sense of responsibility is 4.15. For the last value mean of conflict resolution is 4.03. Based on the final finding data, the total mean in the descriptive analysis was represented by the respondents agreed with this matter can influence the project manager in managing the construction project.

TABLE II
MEAN FOR ACTUAL STUDY

Rank	Leadership Skills of Project Manager	Mean
1	Communication	4.29
2	Planning and Goal Setting	4.19
3	Sense of Responsibility	4.15
4	Time Management	4.10
5	Problem Solving and Decision Making	4.06
6	Conflict Resolution	4.03
7	Team Building	4.02

Frequency analysis on influence of project manager leadership skill toward successful of construction project

Referring to the Table III, it is shown the frequency analysis on influence of project manager leadership skills toward successful of construction project. Based on the finding result from the respondents feedback, planning and goal setting shown the highest percentage compared with other skills chosen by respondents. Frequency for planning and goal setting was 12 and the percentage of 37%, this shows that to be a successful project manager in managing a construction project requires skills in planning and goal setting. Planning and goal setting skills or expertise is something that is very important for the project manager because as a project manager must be smart and wise in preparing any planning process has been designed so that every construction project can proceed smoothly.

TABLE III
FREQUENCY ANALYSIS ON INFLUENCE OF PROJECT MANAGER LEADERSHIP SKILL

Type of Skills	Frequency	Percent
Planning and Goal Setting	12	37%
Problem Solving and Decision Making	7	21%
Communication skill	6	18%
Sense of Responsibility	3	9%
Team Building	2	6%
Time Management	2	6%
Conflict Resolution	1	3%

CONCLUSION

Successful construction project managers should have a wide variety of skills and experience to help them to lead a team and oversee various projects. Based on seven skills that needed as a project manager, to have skill in planning and setting target on the construction project is seen as the most important skill acquired among the rest. With today's technology, computers and construction-specific software are constantly used to assist and expedite many different construction projects. Knowing how to correctly use software can significantly cut costs and help to keep the team and project on schedule.

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