#### **CHAPTER 1**

### **INTRODUCTION**

## **1.1 INTRODUCTION**

In this chapter, it will discuss about the problem background, problem statement, research objectives, research questions, scope of study, significant of study, expected outcome and short conclusion for this chapter.

#### **1.2 PROBLEM BACKGROUND**

In Malaysia, construction industry is a major sector as an important part in development. It is because construction industry contribute 3% to 5% for Malaysian Gross Domestic Product (GPD) after twenty years (Nawi, 2007). But, in one research that have been held on construction industry show that 30% to 35% of all construction cost in a project is a waste (Joseplson and Savkkonipi, 2005). It show that construction industry have face the problem with various aspect.

Construction industry is more focused by time, cost and scope to ensure that the construction project will be successful. But the problem that occur in construction industry is low performance and low productivity. Some construction project will be delay because of the various aspect such as lack of funds to finance the project to completion, lack of effective communication between parties and others.

Construction industry faced many problem because they not do the right planning and make the project delay. MBAM (Master Builders Association Malaysia) have make a discussion with government agencies and other parties that involve in construction industry to discuss about shortage of building material and skilled manpower. It show that resource shortage will make the project construction will be delayed and it show that the resource planning is important to make sure that the project will be successful.

A resource plan is use to handle the project; how the project will be resourced, what's supportive services that require in the project and also what are infrastructure and third party service that can do in project. Then, project manager must develop a plan for directing and controlling resource of the manpower, machine, capital and materials in a coordinated and timely in order to finish a project with limited financial and time (Halpin and Woodhead, 1998). Resource planning enable the organization use the resource with maximum and can balance the supply and demand.

Resource type for project is manpower, machine, capital and material. Labour is the worker that divide into two type, skilled and unskilled worker. Skilled labour is referred to labour who have sufficient of training and skill in their field. While unskilled labour is refer to labour that does not require special training or skill. Machine is something that needed in project to ensure that the project will run with smoothly. Capital is very important in project because without sufficient capital the project cannot be accomplished. Lastly, material represent a big expenses in construction. Poor material management will effect to the project.

# **1.3 PROBLEM STATEMENT**

To ensure that the dream and hope of developed nation status will achieve, the achievement in the construction industry must change to positive way. The problem that always occur in construction industry especially in building construction will effect to the developed nation status. The biggest problem that always occur on the project that not very effective with their planning is delay. It is because delay can give negative impact to the project such as increased cost, low productivity of the project, project termination and others.

Besides that, the resource planning in construction project is difficult to handle. Various type of resource need to planning in construction project. The most important resource that have in construction project is manpower, machine, capital and material. Lack of these resource plan will effect to the project such as the project may be will delay. It will occur when the company of construction do not plan well in resource. This study is important to know the problem in resource planning to ensure that project will run smoothly.

In manpower resource, many manpower failed completely or do not reach their full potentially. Mainly because of the mistake that made by Human Resource Manager. Sometime, It will make the project will not run smoothly because some manpower or labour lack in some skill that are requirement by some project. This is will effect to the workplace productivity. When the productivity of the worker is low, the project will exposed to the negative impact by the client. The client will not make a dealing with the company that will make their project failed.

Material is something that important to the project to ensure that the project will run smoothly and will produce a quality project. But, material is one of the resource that always have difficulties that can effect significantly the total cost and also project success. According to the researcher, in a construction housing project 28% from total cost is used to material purchasing, while in transportation and machinery is use 12% from total cost (Joseplson and Savkkonipi, 2005). Because of the problem that occur in material planning, it will give negative impact to the quality of the project. Quality of the material is very important to produce the quality project. When the quality of the material in a project is low, it will make the client will not satisfied with the quality of the project.

Selection and utilization of equipment or machinery in a project is a part of the plan. Machinery or equipment is a part of resource that have face with problem. It is occur when the company construction have many project that have to handle in one time. The type and how much that machinery or equipment are needed in one project is depend on the nature of project The shortage of the machinery will occur when the project manager not plan that resource with well and carefully.

In Malaysia, cost overrun in project is always occur in many construction (Ali & Kamaruzzaman, 2010). Capital or money is the very important and the first resource for construction industry. Without proper planning in capital or money, the management of other resource become useless. It is because management of capital or money is used to