

CHAPTER II

LITERATURE REVIEW

2.1. Definitions of Strategy

Strategy is an important factor which is applied in many business firms. According to Chandler (1962), strategy is about the arrangement of company's long-term goals, and the application of actions and resources in order to achieve these goals. Thompson et al. (2006) stated strategy as the management's part for maintaining the business, treat the customers, compete successfully, and achieving targeted goals.

Tan (2008) in his study mentioned that strategy for business firms can be explained as to determine company's goals by knowing its competition environment, and then take actions by using company's resources and capability in order to compete successfully so that the company are able to achieve the objectives or goals. A good applied strategy can be indicate from: whether the company is achieving its stated financial and strategic objectives, and whether the company is above average performer (Thompson and Strickland, 2003).

2.2. Competition Environments in Construction Industry

Competition environments can be divided into two environments, external environment and internal environment. According to Tan (2008), external and internal environments have major impact in determining firm's competitive

strategies, and later competitive strategies used will affect firm's performance. In external environment, the industry environment and task environment are analyzed. Meanwhile, in internal environment, the internal resources and capabilities of the contractors are analyzed.

2.2.1. External Environment in Construction Industry

In this study, external environment are divided into 2 environments, industry environment and task environment. In industry environment, Porter's five generic competitive forces is used. According to Porter (1988), there are five generic competitive forces in an industry, namely: (1) threat of new entrants, (2) rivalry among existing firms, (3) bargaining power of clients, (4) bargaining power of suppliers, and (5) threat of substitute services. These competitive forces are normally considered as a useful tool to measure the external environment in industry level (Tan, 2008). Knowing these competitive forces will help firms to understand the competition environment in their business industry. And understanding competition environment will help firms to formulate competitive strategy in their business industry.

Meanwhile, task environment is discussed about firm's relationship with sector which has direct or indirect interactions within the firm's business (Huang et al., 2015). In the context of construction industry, the relationships are between contractors with (1) clients, (2) government departments, (3) consultants, (4) creditors, and (5) suppliers (Tan, 2008). Clients will participate in offering the construction contracts. Government departments is the one who make regulations in

national construction industry. Consultants help clients in consulting service. Creditors give financial support to the contractors. And suppliers provide materials needed for construction project. By maintaining a good relationship with all of the sectors mentioned above, it can help contractors to obtain more contracts and improve efficiency in their work in construction industry.

2.2.2. Internal Environment in Construction Industry

Firm's resources and capabilities are used in this study as a tool to measure the internal environment in a construction industry. According to Tan (2008), there are several internal resources and capabilities which are important for contractors to understand. Those are (1) corporate image (reputation), (2) technology and innovation, (3) marketing capability, (4) financial capability, (5) project management skill, and (6) organization and human resource. Each of these resources and capabilities has more specific indicators which the validity and reliability of each indicators have been tested in Tan (2008) study about "Contractor's Competitiveness and Competitive Strategy in Hong Kong", and will be elaborated in the explanation below.

Corporate Image (Reputation)

Reputation is considered important and it is one way to achieve business success (Griffin, 2002). In construction industry, companies usually display pictures of completed projects in their office or in the company's website. This can be one way to achieve good reputation. According to Tan (2008), good reputation

in construction industry could happen because of the success of projects which continue as time goes by, and must be maintained as a company's capabilities in order for the company to be success. Once contractors has built good reputation, future client will have an assumption of the possibility of good service that the contractors will provide, and this can be a competitive advantage owned by the contractors. Therefore, it is important to analyze company's reputation. In this study, the indicator of corporate image or reputation in a construction industry consists of organization's credibility, qualification of the company, and record of the project performance.

Technology and innovation

Technology and innovation can also be the source of internal capabilities and later are able to help contractors to perform more better. In Goodrum and Haas (2004) study about impact of technology in labors productivity, they found that advancement in technology has a major impact in increasing labors productivity. Another study from Ozorhon and Oral (2016) about the innovation in construction projects found out that innovation process is able to increase the productivity level. Also, they stated that another essential resources which important in order to implement innovation is financial resources. In this study, the indicator of technology and innovation consists of technology know-how, technology advancement, investment on R&D, and conversant with local practice. Technology know-how means the capability of the contractors to use the available technology during the works.

Financial Capability

Financial capability is an important capability to be had by contractors in the bidding process of a construction project. Bagaya and Song (2016) identified factors which influence schedule delays in a construction projects and found that poor financial capability of the contractors is the most common delay factor in a projects. Therefore, by having a good financial management, it can help contractors to achieve a better performance in the work. In this study, the indicator of financial capability consists of financial status, credibility grade, payment to subcontractors or suppliers, and loan repayment.

Marketing capability

Marketing capability plays an important role in the successnes of contractors (Yisa et al., 1995). A study by Golob et al. (2013) also found that good marketing management in construction industry could improve the project's quality and reduce delays in the project. They also stated that in order to success in construction industry, the use of marketing management have to be considered. In this study, the indicator of marketing capability in the construction industry consists of market coverage, procurement ability, ability to forecast market changes, and relationship with clients and consultants.

Project management skill

Project manager has an important task to successfully lead the team in order to achieve project objectives. In order to achieve project objectives, balance interpersonal skill and technical skill are needed. Some of the important interpersonal skills that a project manager should have are leadership skill, team building, good conflict management, and good communication (PMBOK® Guide, 2013). Contractors are able to achieve competitive advantage, by maintaining a balance project management skill. In this study, the indicator of project management skills consists of site progress management, quality control, coordination with subcontractors, contract and risk management, environmental and safety management, and knowledge about local construction law.

Organization and human resource

Human resource management plays an important role in the organization and contribute in creating a competitive advantage in an organization (Amit and Belcourt, 1999). Experienced employees are very much needed in the construction industry, since this industry are very related to knowledge-based and people-intensive (Tan, 2008). Therefore, an effective management of human resources are very much needed in construction industry. In this study, the indicator of organization and human resources consists of organizational structure and culture, quality of personnel, effectiveness of training program, and effectiveness of internal cooperation.

2.3. Competitive Strategy in Construction Industry

According to Porter (1988), there are five generic competitive forces in industry environment, namely rivalry among existing firms, threat of new entrants, threat of substitute services, bargaining power of clients, and bargaining power of suppliers. Ho (2016) tried to analyze the relationship between competitive environments and applied strategies in construction industry. He found that some of competitive environments have significant interactions with applied business strategies in the construction firms. Knowing these competitive environments can help firms to analyze their company's strengths, weaknesses, opportunities, and threats. Later, it could help firms to formulate competitive strategy in order to defend their firms against those competitive environments.

Porter (1988) then introduced three generic strategies approach to overcome the competitive forces:

1. Overall cost leadership. In here, cost control management is important. The aim of cost leadership is to have a low cost compared to other competitors. Therefore, quality and services can be ignored.
2. Differentiation. This strategy aims to create unique products or services. In differentiation, the cost is not fully ignored. But, cost is not the primary strategic target.
3. Focus. This strategy believe that the firm able to achieve effective and efficient performance by focus in particular client compare to other firms who are competing more broadly.

In order to compete in dynamic business environment, firms have to apply different competitive strategies from time to time. They execute the competitive

strategy to achieve competitive advantage and to successfully surpass in the competition environment and then achieve superior performance (Porter, 1988).

In this study, the competitive strategies which will be used are based on Tan (2008) study about “Contractor’s competitiveness and competitive strategy in Hongkong”. There are typical competitive strategies and relevant strategic behaviors in construction industry, those are (1) cost leadership strategy, (2) differentiation strategy, (3) focus strategy, and (4) growth strategy. Each of these competitive strategies has more specific indicators and are elaborated in the explanation below.

Cost leadership strategy

In this study, the indicators of cost leadership strategy consists of standardization of products or services, superior training of personnel, effective control of labor and materials, careful selection of subcontractors or suppliers, technological advancement, and incentive programs for productivity improvement or resource saving. Standardization is the process to set up a technical standard. Examples of standardization of products or services are the development of high-quality, development of low-cost products or services, and the standardization of construction documents. A research found that the application of standardized products could increase the company’s performance (Waheeduzzaman and Dube,2002). An integrated training program also could improve productivity and quality of the work (Kumaraswamy, 1997). The usage of labor-only subcontractors could help reducing the labor cost, rather than owning labor resources (Tan, 2008).

Therefore, an effective strategy to control the labor can help to reduce the total cost of the project. Construction industry normally related with a subcontractors or suppliers. Therefore, by carefully select a subcontractor or supplier and establishing a good relationship with them, it can helps to reduce the transaction cost and improve productivity of contractor (Tan, 2008). Also, a study by Goodrum and Haas (2004) found that advancement in technology has a major impact in increasing labors productivity.

Differentiation strategy

In this study, indicators of differentiation strategy consists of building company's reputation, offering higher quality of product, faster project completion, innovative financing methods, innovative project management methods, sustainable practice and social responsibility, and offering additional services to clients. Build a trustworthy company's reputation is certainly useful as a good competitive strategy in order to compete in the competitive environment. Clients in commercial projects normally expect that their project can be completed faster so that the client can get their investment back (Tan, 2008). Therefore, apply a faster project completion as a strategy in the construction industry could be a different advantages in competing in construction industry. Applying innovative methods in managing financial and project in a company can be a distinct advantage that a company can gained. Construction industry has an important part in the sustainability of an environment. Also, nowadays sustainability practices are becoming very important. Therefore, applying sustainability practice and social

responsibility in the firms can be one of the competitive advantage. Next, to gain a good image from a client, contractors can provide additional services to their clients. For example, provide advice in feasibility analysis, helping in financing of the project, or planning the maintenance and operation of the project. This way also can be the distinct advantage for the contractors.

Focus strategy

In this study, the indicators of focus strategy consists of offering a certain type of projects, operating in a particular region, and serving a certain type of clients. By focusing to deliver work on may be hospital or housing only, contractors are able to show their best experience and work in the construction projects efficiently than its competitor who are competing more broadly and then can gain competitive advantage (Tan, 2008). By operating in particular region, contractors may have a better relationship with local clients, suppliers, subcontractors, and governments in that particular region. This way can help contractors to bring more local knowledge and gain competitive advantage. Same with others variabels in focus strategy, by serve only a particular type of clients, contractors are able to have better knowledge of particular client's needed and then contractors can offer a better quality of products or services which suitable to what their clients need.

Growth strategy

In this study, indicators of growth strategy consists of entry into new locations or regions, entry into new types of construction projects, engaging in new

businesses, and expanding their company by acquisition (purchase another company) or merger (combine with another company). According to Langford and Male (2001), there are some reasons why a construction firms broaden their business, such as stagnant condition of existing market, there are booming in new market, and competitive use of resources. Contractors can develop new competitiveness by entering into new locations or regions where the competitors are still low and aim to growth their business in that new locations. Engaging their company into new types of business is also one of the strategy to growth their business (Tan, 2008). Contractors may engage in new types of projects such as highways, tunnel, or dam projects. Another way to achieve business growth is by expand their business into new businesses such as real estate, design, operation, and maintenance. A research have been study about Hong Kong contractors which enter into real estate business, and it found that the contractors can achieve a significant growth in their business (Rowlinson and Walker, 1995).

2.4. Contractor's Performance

According to Tan (2012), performance can be an indicator to measure the successness of competitive strategies in construction industry. In Sudarto et al. (2008) study about the influence of market forces to construction companies' performance, he stated that there are four indicators that a company should have in order to gain a better performance. Those indicators are ability to gain profit, ability to growth, ability to obtain project and sustain, and ability to compete either with foreign or local companies.

Another study that measures about firm performance is from Deng (2013). He analyzed papers which discuss about construction firm performance and he found that profitability, growth in contract awards, and also cost performance, quality performance, and schedule performance are frequently used to measure the performance of a firm in construction industry. In this study, the performance level are measured by growth of contract awards, profit achieved by the firms, schedule performance, cost performance, quality performance, and also contractor's relationship with external parties such as subcontractors and suppliers.

