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The Impact of Strategic Management Practices on Firm Performance (A Study of Indonesian Construction Companies)

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Abstract : The construction industry is very important in the process for infrastructure development such as dams, irrigation buildings, highways, schools and housing. Indonesia's construction industry has grown significantly. The contribution of the construction sector to the gross domestic product (GDP) of the country has grown from about 7.07% in 2009 to 13% in 2014 and has encouraged the growth of Indonesia's building materials and construction industry. Based on World Bank data in 2014, Indonesia's construction services market with a value of US\$ 267 billion is the largest construction market in ASEAN and number 4 in the world. National construction priorities are centered on infrastructure, housing, mining and energy development. This year, the Indonesian government is experiencing economic growth of 5.8% with the infrastructure sector as the main driving factor. Particularly the power plant construction sector, since 2016 the Indonesian government has been developing power plant projects up to 35,000 MW.

Although the prospects for the construction industry in Indonesia today are very promising, many local construction companies still face serious difficulties, such as poor performance and low competitiveness. There are two main reasons behind this problem: the environment they face unfavorable; the other is the lack of strategic direction to improve competitiveness and performance. Furthermore, although the strategic management have become more widely used by many large construction companies in the developed world, practical examples and empirical studies related to the Indonesian construction industry remain rare. In addition, research efforts related to this topic in developing countries seemed to be limited. It has the potential to be one of the factors that hinder efforts to improve the competitiveness of Indonesian construction company.

The purpose of this study is to identify strategic management practices by construction companies in Indonesia and their impact to performance. Respondents for this study were taken from employees of the construction companies in AKI or ICA member (Indonesian Contractors Association), where they are already at the managerial level. About 28 companies responded to the survey of a total of 29 previously submitted questionnaires. The findings of the study found that construction companies that implemented strategic

management performed better than construction companies that did not implement them. The study also found that the percentage of major construction companies in ICA members have implemented strategic management practices in their organizations.

Keywords: Indonesia, construction companies, competitive advantage, firm performance.

1. INTRODUCTION

According to a report published by PricewaterhouseCoopers (2013), the world's construction market at a critical point that 52% of all construction conditions are in emerging markets. This is expected to increase to 63% by 2025, with China and India will contribute most to growth in emerging markets. China beat the United States to become the largest construction market in the world in 2010, and is expected to increase its global power from 18% to 26% by 2025.

The condition of the global construction market in 2017, especially for roads and bridges, water supply, waste disposal, and conservation and development, will increase. This did not happen in 2016, when roads and roads grew by only 2%, water supply construction fell by 6%, and waste disposal fell by 8% (FMI Research Service, 2017). For the year 2017, FMI is more optimistic to achieve growth of about 2% to 3% in this area.

Overall, the global construction sector's growth is around 6% in 2017. With the Gross Domestic Product (GDP), which recently increased 2.1% in the fourth quarter of 2016, 6% construction growth looks logical. Although this is a decline from the large growth rate from 2013 to 2015, but the growth spurt is over and more normal growth will continue in the next few years.

1.1. Problem Statement

The problems that often occur in the construction services industry lead to a decrease in performance. In general, the problems that often occur in the construction industry in developing countries, are (Sudarto, 2007):

- High imports of capital, labor and materials that can aggravate the balance of payments.
- High currency exchange rates.
- Lack of skills and materials, including managerial and entrepreneurial skills.
- Financial inadequacy and delays in payments.
- Weakness in planning and administration system.
- The dominance of overseas contractors and the lack of capacity of local contractors.
- Lack of planning resulting in irregular job flows, less efficiency and lower quality results.

Indonesia as one of the developing countries experienced some problems that often occur in the construction service industry resulting in low competitiveness, ie.:

- Poor mental attitude and behavior. According to Pranoto (2005), the cause of various problems in the construction and investment sectors in Indonesia is the existence of corruption, collusion and nepotism, monopoly and unfair business competition practices that resulted from moral dilapidation, bad attitude and behavior.

- Lack of competitiveness with foreign contractors due to limited funds and technology. According to Sutjipto (1991), the Indonesian bank contractor's guarantee facility is still frequently rejected by overseas project owners, causing national contractors to struggle to compete with foreign contractors who are able to obtain financially at low interest rates in their country. In addition, due to the limited ability of the government and the private sector to finance the construction of projects with the domestic budget, it causes almost all major projects owned by the government and private financed by foreign loans. By using the excuse that national contractors are inexperienced and technologically capable, foreign investors tend to bring contractors from their countries. As a result, foreign contractors automatically enter together with the coming of foreign loans.

In summary, there are two main reasons behind the low level of profitability and competitiveness, namely: the environment they face is unfavorable, and the lack of strategic direction to improve their competitiveness and performance. Betts and Ofori (1999) argue that in developing countries, large construction companies need to do strategic management and process analysis if they are to survive the attack from foreign construction companies after the adoption of free market economic policies by the government. Small companies will also need a long-term perspective if they want to survive the 'robbery' by big companies, constant changes in public sector development budgets, increased customer needs, and changes in industrial practices.

Although strategic management is now becoming more widely used by large organizations with considerable resources (Price, Ganiev & Newson, 2003), implementation of strategic management for construction companies are still limited (Chinowsky and Meredith, 2000). In addition, the application of strategic management to the Indonesian construction industry is also less serious, and research efforts related to this topic in developing countries appear to be limited.

1.2. Research Objectives

The overall objective of this research is to find solutions to the main issue "How to formulate the influence of strategic management in improving the performance of construction service companies in Indonesia?" This study targets construction service companies in Indonesia which is currently regulated by the Law of the Republic of Indonesia no. 2 Year 2017 (in lieu of Law of the Republic of Indonesia No. 18 of 1999). Definition of construction services is a consultancy services for construction and / or construction work, which in the form of:

- Construction consultancy is an overall service or part of activity which includes assessment, planning, design, supervision, and management of construction of a building. A construction consultancy including general (architecture, engineering, integrated engineering, and landscape architecture and regional planning) and specialists (scientific and technical consultancy, and technical testing and analysis);
- Construction work is the whole or part of the activities which include the construction, operation, maintenance, dismantling, and rebuilding of a building. A construction work including general (civil and buildings) and specialists (installation, special construction, prefabricated construction, completion of buildings, and equipment rental).

- Integrated construction work is classified according to civil and buildings, including design, engineering, procurement, and implementation work.

To achieve the objectives of the study in accordance with this set target, the following specific objectives are formulated:

1. Identify strategic management of construction companies in Indonesia.
2. To know the level of implementation of strategic management in construction companies in Indonesia in terms of achievement of its performance.
3. To study the impact of the implementation of strategic management of this construction company on the performance of the company.

1.3. Strategic Management

Strategic management is the process of formulating, implementing and evaluating decisions about the future direction of the organization. There are many definitions of strategic management defined by strategic management experts in their writing. For example: Chandler (1962), Wheelen and Hunger (1984), Certo and Peter (1991), Viljoen and Dann (2000), Kerzner (2001), and more. Today, strategic management has become an important part of a modern management. Refer to Stahl and Grigsby (1992), strategic management is an crucial role in all of organizations. This allows an organization to be more proactive rather than being reactive in shaping its own future, to start and influence activities and to exert control over its own activities (David, 2003). The benefit of strategic management is to help organizations make better strategies through a more systematic, logical, and rational approach to strategic choice (David, 1991).

According to Carpenter & Sanders (2009), the strategic management process involves four distinct elements: environmental scanning, strategy formulation, strategy implementation, and strategy evaluation. Furthermore, the strategic management process is an ongoing process of anticipating, recognizing, evaluating, completing, controlling, documenting, and learning from previous experiences to maintain the viability of the project or the company as a whole (Ibbs, Wong and Louie, 2001; Arain and Low, 2005). Johnson, Scholes and Whittington (2008), emphasize that organizations that use strategy seek to overcome competitors and other external influences by configuring and using their superior resources to meet the expectations of stakeholders. Dye & Sibony (2007) explains that a good approach to strategic management processes is a key factor of success and growth within the organization and contributes to a higher level of satisfaction among those involved in the process.

1.4. Strategic Management in Construction Industry

According to Bryson (2010), strategic management can be considered as a structured process involving all lines of organization with the main objective to map the organization's mission, outline a shared vision of the direction of the organization and, in particular, involving the structure of long-term goals and objectives that include financial growth and stakeholder appreciation while maintaining moral and ethical considerations in the decision-making process.

According to Nag, *et al.* (2007), this definition includes major initiatives taken by senior management in utilizing organizational resources to improve performance, while reducing external environmental stress.

This will create a correlation between strategic management and strategy. As Johnson, Scholes and Whittington (2007), in his book *Exploring Corporate Strategy (8th Edition)*, the strategy provides vision and visual scope that generate profit, both in operational efficiency and financial targets and sustains the organization's mission and vision in challenging environments. The implementation of strategic management in the construction industry is possible to achieve better performance. Technological, communications and market advancements essentially change the global perspective of time, distance, and socioeconomic boundaries. With the advent of industry knowledge and innovation, the construction industry has made tremendous dynamic progress as design progress and project construction work in almost all project sites, thus having a direct impact on competition and market share. So this requires the implementation of strategic management practices within construction companies while considering the use of expert systems, new market expansions and the use of information technology. According to Yates (2007), construction companies must shift from traditional business approaches in their local operating conditions to a global perspective approach characterized by benchmarks and innovative processes to improve efficiency. As described by Blair (2009), construction companies are increasingly required to review and revise their strategies in order to capitalize on volatile markets.

1.5. Indonesia Construction Industry

In developing countries like Indonesia, the construction industry plays an important role in the development process to produce infrastructure such as dams, irrigation buildings, highways, schools and housing. The ability of the construction sector can not only improve the standard of living but also can obtain cost efficiency, time and quality of work and self-esteem as a nation (Chiragi, 2000; Trigunaryah, 2006 and Todaro, 2011).

Indonesia's construction industry has grown significantly, driven by the rapid growth of the property / real estate market in the country, increased private investment and government spending. The contribution of the construction sector to the gross domestic product (GDP) of the country has grown from about 7.07% in 2009 to 13% by 2014 and has encouraged the growth of Indonesia's building and construction industry. The development of the construction sector is followed by an increase in employment in the sector (Quarter IV Final Report, Bappenas).

This rapid growth is also encouraged by the MEA or AEC (ASEAN Economic Community) which is an agreement as a form of strengthening in various sectors, especially for the defense of global "shocks". The implementation of this policy is similar to the Free Trade Area (FTA), but it is still within the ASEAN region. This policy arose because of the increasing need for bilateral cooperation in strengthening ASEAN countries from external product attacks. In addition, growth in the construction sector is also driven by the strengthening of the middle class and the impact of this year's tax amnesty policy.

Although Indonesia's construction market is experiencing rapid growth, State-Owned Enterprises (SOEs) consisting of 14 "Karya" companies, only absorb 10% of the total value of engineering, procurement, and construction (EPC). 70% of the EPC market is dominated by foreign companies, and another 20% by private national companies. Current figures show that the majority of foreign construction companies are from Japan, Europe and China. According Pamulu (2009), there are two main reasons why this happens is the low competitiveness, institutional factors and strategic management factors.

Regarding the important role of construction services in growing the Indonesian economy and amid the onslaught of foreign construction services, we are interested to raise the topic of how appropriate strategic management in the construction industry and the influence of these strategies on firm performance.

1.6. Conceptual Framework

A conceptual framework is used to outline or the preferred approach to an idea. It highlights the independent variable and also shows the dependent variable which is also the outcome. The dependent variable is the firm performance and the independent variable is external environment context, strategic management practices, and internal organizational context.

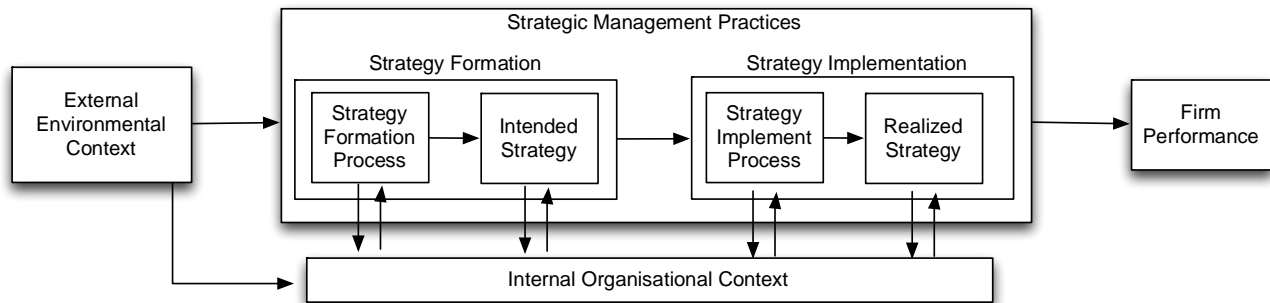


Figure 1: Conceptual Framework

2. METHODOLOGY

This study uses survey methods to collect data where the questionnaire is distributed as the primary source for obtaining primary data. Questionnaires are distributed directly to the construction companies that are members of AKI or ICA (Indonesian Contractor Association) operating throughout Indonesia. Of the 90 companies that are members of AKI (as per 2016 data), we are distributing questionnaires to 30 selected companies already considering the composition of national companies, state-owned companies (SOEs) and FDI (Foreign Direct Investment) companies. From 30 questionnaires, all or 100% of respondents were willing to fill out and return the questionnaire. The questionnaire is divided into three main sections covering: respondent background, strategic management practices, and links to company performance including winning contracts and profit.

The collected data were analyzed by using frequency analysis, cross tabulation and correlation analysis. Frequency is used to present the distribution of variables. Cross tabulation is used to analyze information about the relationship of two variables whereas correlation is used to measure the linear relationship between two variables.

The formulation of the questionnaire was conducted by interviewing the professionals in the construction industry in Indonesia. In the interview, the researcher gives an introduction to the study, including research objectives, questionnaire design, and expected results. Later, the interviewee was invited to review the questionnaire and give them comments and suggestions. And the investigator provides a relevant interpretation if the interviewee has questions. With valuable suggestions contributed by the practitioners interviewed, the questionnaire was improved by making the question more appropriate and clear.

3. RESULTS AND ANALYSIS

3.1. Respondents' Background

From the analysis, the job designations of respondents are mainly managers (70%) and director (30%). In term of status of companies, 82% were from private companies and only 18% come from national government link companies.

3.2. Strategic Management Practices

Vision and Mission

From Table 1, it can be seen that most companies surveyed already have vision and mission, although there are still some that do not have vision and mission. The number of companies that have the same vision with the number of companies that have a mission.

Table 1
Company Vision and Mission

		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Vision	Available	25	83.3	83.3	83.3
	Not Available	5	16.7	16.7	100
	Total	30	100	100	
Mission	Available	25	83.3	83.3	83.3
	Not Available	5	16.7	16.7	100
	Total	30	100	100	

Company Objectives

Table 2 shows that 73.3% of respondents have long-term objectives, 80% of respondents have medium-term objectives and 46.7% of respondents have short-term objectives. This means that almost all respondents have realized the importance of having goals.

Table 2
Goal Statement

		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Long Term Objective	Yes	22	73.3	73.3	73.3
	Unsure	8	26.7	26.7	100
	Total	30	100	100	
Middle Term Objective	Yes	24	80	80	80
	No	5	16.7	16.7	96.7
	Unsure	1	3.3	3.3	100
Short Term Objective	Total	30	100	100	
	Yes	14	46.7	46.7	46.7
	Unsure	16	53.3	53.3	100
	Total	30	100	100	

Formal Written of Objectives

Table 3 shows that the majority of respondents (83.3%) have “recording” the company’s objectives meaning that most of these respondents have already made formal strategic management, while the rest (16.7%) do so informally.

Table 3
Formal Written of Objectives

		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Written Objectives	Yes	25	83.3	83.3	83.3
	No	5	16.7	16.7	100
	Total	30	100	100	

General Performance of Company

Table 4 shows the size of respondents for company sales per year (IDR) values regarding to written long-term objective together with company sales, company profit per year, and number of projects. According to table 4, the company which had long-term objective and written objective obtained very high level of

Table 4
General Performance of Company

<i>Long Term Objective</i>	<i>Written Objective</i>	<i>Company Sales per Year (IDR)</i>			<i>Company Profit</i>		<i>Total</i>
		<i>500 billion-1 trillion</i>	<i>1 - 5 trillion</i>	<i>> 5 trillion</i>	<i>< 5%</i>	<i>5 - 10%</i>	
Yes	Yes	5	14	19	3	16	19
		26.30%	73.70%	100.00%	15.80%	84.20%	100.00%
	No	3	0	3	0	3	3
	Total	8	14	22	3	19	22
		36.40%	63.60%	100.00%	13.60%	86.40%	100.00%
Unsure	Yes	5	1	6		6	6
		83.30%	16.70%	100.00%		100.00%	100.00%
	No	2	0	2		2	2
	Total	7	1	8		8	8
		87.50%	12.50%	100.00%		100.00%	100.00%
Total	Yes	5	5	15	3	22	25
		20.00%	20.00%	60.00%	12.00%	88.00%	100.00%
	No	3	2	0	5	5	5
	Total	8	7	15	3	27	30
		26.70%	23.30%	50.00%	10.00%	90.00%	100.00%

performance 14 out of 15 respondent (93%) had gained more than 5 trillion rupiah in the last years. The company which had long term objective with unwritten objective had poorer performance when compared to companies with written performance. All companies (100%) reached the sales achievement in ranging 500 billion – 1 trillion.

Table 5 shows that companies with long term objectives will have more projects than companies that do not have long term objectives (22 firms versus 8 firms or 73%). Companies that have written objectives have more projects as well.

Table 5
Number of Company Project

<i>Long Term Objective</i>	<i>Written Objective</i>	<i>Number of Project</i>			
		<i>< 5 projects</i>	<i>5 - 10 projects</i>	<i>10 - 15 projects</i>	<i>Total</i>
Yes	Yes	5	8	6	19
		26.30%	42.10%	31.60%	100.00%
	No	3	0	0	3
Unsure	Yes	100.00%	0.00%	0.00%	100.00%
		Total	8	8	6
	No	36.40%	36.40%	27.30%	100.00%
Total		5	5	1	6
Total	Yes	83.30%	16.70%		100.00%
		No	2	0	2
	Total	7	1	8	
Total	Yes	87.50%	12.50%		100.00%
		No	5	13	7
	Total	20.00%	52.00%	28.00%	100.00%
Total	No	3	2	0	5
		60.00%	40.00%	0.00%	100.00%
	Total	8	15	7	30
		26.70%	50.00%	23.30%	100.00%

Key Success Factor in Industry

Table 6 shows respondents' perceptions of the factors that are key to success (KSF) in being able to compete in the industry. From the table it can be seen that 100% of respondents agree that excellence in promise and quality service are the most important and very important factors to be able to compete in this industry.

External Environment Assessment

Table 7 shows that market segmentation is a major factor and very important in the work plan. It can be seen as 22 respondents (73%) stated that it is an important factor and 8 respondents (27%) consider this a

Table 6
Importance of Key Success Factor

	<i>Not Necessary</i>	<i>Not Important</i>	<i>Important</i>	<i>Very Important</i>	<i>No Comments</i>	<i>Total</i>
KSF Marketing		6	16	8		30
		20%	53%	27%		100%
KSF Excellence in Promise			15	15		30
			50%	50%		100%
KSF Value Creation		6	9	15		30
		20%	30%	50%		100%
KSF Quality Service			15	15		30
			50%	50%		100%
KSF Customer Satisfaction			30			30
			100%			100%
KSF Management Team			16	14		30
			53%	47%		100%

very important factor. The large companies we surveyed were also considered weather as important (50%) and very important (50%).

Table 7
Importance of External Factors

<i>External Factor Assessment</i>	<i>Not Necessary</i>	<i>Not Important</i>	<i>Important</i>	<i>Very Important</i>	<i>No Comments</i>	<i>Total</i>
Capital Adequacy		7	16	7		30
		23%	53%	23%		100%
Cost Increase		23	7			30
		77%	23%			100%
Government Policy			30			30
			100%			100%
Market Segmentation			22	8		30
			73%	27%		100%
Work Ethic		8	22			30
		27%	73%			100%
Innovation			30			30
			100%			100%
Weather			15	15		30
			50%	50%		100%
Same Supplier			30			30
			100%			100%
Buyer			30			30
			100%			100%

Strength and Threat Assessment

Table 8 shows the number of respondents who stated that the company has strong customer relationships (23%). It can be seen as many as 22 respondents have a strong customer relationship. And only 23% say they have a strong organizational structure.

Table 8
Strength and weakness of companies

<i>Strength & Weakness</i>	<i>Very Strong</i>	<i>Strong</i>	<i>Average</i>	<i>Weak</i>	<i>Very Weak</i>	<i>Total</i>
Organization Structure		7	23			30
		23%	77%			100%
Customer Relation		22	8			30
		73%	27%			100%
Financial & Profitability		15	11	4		30
		50%	37%	13%		100%

Table 9 shows the ability of resource in technology not to be a major threat to the company, they consider the increasing competition and price of materials to be a big threat. Government intervention is still not a major threat since most respondents come from the private sector.

Table 9
Threats Assessment

<i>Threats Assessment</i>	<i>Very Strong</i>	<i>Strong</i>	<i>Average</i>	<i>Weak</i>	<i>Very Weak</i>	<i>Total</i>
Resource Capability		8	22			30
		27%	73%			100%
Government Intervention		14	16			30
		47%	53%			100%
Material Price		30				30
		100%				100%
Competitors	7	15	8			30
	23%	50%	27%			100%
Material Availability		22	8			30
		73%	27%			100%

4. CONCLUSION

The construction industry is closely related to the uncertainty in the environment that may affect the performance of a firm. High competition and many other negative aspects in the external environment, which become threats to firms to develop their business that need to be handled carefully through strategic management approach. The implementation of strategic management practices in organizations can help them to enhance their performance through improved effectiveness, efficiency and flexibility. In order to improve the performance, the implementation of strategic management shall be conducted properly. It

shall analyze the external environment to obtain information in term of threats and opportunities, and carry out the internal environment assessment to evaluate the firm's strengths and weaknesses in order to cope with the threats and opportunities.

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