

# Strategic Planning of Bogor Concrete Products Factory XYZ Tbk

Castri Pratidina<sup>1</sup>, Rina Oktaviani<sup>2</sup>, Kirbrandoko<sup>3</sup>

<sup>1</sup>School of Business, Bogor Agricultural University (IPB), Jl. Raya Pajajaran Bogor Indonesia 16151, Indonesia

<sup>2</sup>School of Business, Bogor Agricultural University (IPB), Jl. Raya Pajajaran Bogor Indonesia 16151, Indonesia

<sup>3</sup>School of Business, Bogor Agricultural University (IPB), Jl. Raya Pajajaran Bogor Indonesia 16151, Indonesia

**Abstract:** *Precast concrete industry has a quite potential market share in Indonesia. In relation to the developmental acceleration by the government, it is projected to increase the growth of infrastructure for the following years. However, Bogor Concrete Product Factory under PT XYZ Tbk faces a challenge in an intense competition i.e. the decrease in production and sales in recent years. In reference to the problem, the objectives of this research are to identify the internal and external factors influencing the present and future conditions; and second, to formulate business strategic plans to overcome the intensity of competition. The formulation of strategic planning is inseparable from both internal and external environmental conditions. Internal environment analysis covers the strengths consisting of competent and experienced human resources, possessing large capacity production capability, product brand image, quality consistency, research program implementation and strategic location; and the weaknesses are consisting of lacking of human resource regeneration, limited field of factory development, and relatively high product prices. Furthermore, the external factor analysis covers the opportunities i.e. the workers' supports from the surrounding areas, government development programs, precast concrete technological development, and infrastructure potential in Indonesia. Meanwhile, the factors examined as threats on external environment are the rise of new competitors in precast concrete industry, policy in the increase of provincial minimum wage, and natural material limitation. In reference to the internal analytical result, IFE value obtained is 3.06, while the from the external analysis result, EFE value obtained is 3.41 in quadrant II. Furthermore, based on the result of QSPM analysis, the strategic alternative priority is to optimize the resources to undertake large production projects, innovate for new products, conduct regeneration of employees in accordance with the qualifications and requirements, optimize the number of workers and working hours, build cooperation with suppliers for material availability. Lastly, rent an area surrounding the factory site for stock yard.*

**Keywords:** Strategic Planning, Bogor Concrete Product Factory, Competition, Precast Concrete Industry

## 1. Introduction

Development in Indonesia has been conducted to increase economic growth by integrating several parties including central and regional governments, state-owned and regional government enterprises, and private parties. The demand for rapid development process can be fulfilled by the use of precast concrete. Pefindo discloses that state-owned enterprises engaged in infrastructure and construction hold a more superior advantage than the similar private companies i.e. holding a greater chance to obtain government-related projects.

Moreover, they also face a smaller financial risk towards unpaid bills on the ongoing project. One of the state-owned construction companies with the highest rating among other infrastructure and construction providers is PT XY Tbk with its subsidiary in the field of precast concrete i.e. PT XYZ Tbk. Up to 2015, the company had the largest production capacity in producing precast concrete with 38.6% of total production capacity in Indonesia.

In running its business, PT XYZ Tbk has eight factories, one of which is Bogor concrete product factory that has the highest production capacity i.e. 26% of the total company's production. Although it has a large capacity, the factory faces some product issues produced by Bogor concrete factory, in which every year, the total production fluctuates making the factory unable to achieve its real capacity, and

the number of product sales has decreased over the past few years.

By looking at the opportunities and problems faced, strategic planning is required. This research has two objectives i.e. identifying external and internal factors influencing present and future conditions, and formulating business strategic plans to face the intensity of competition. As proposed by Pinar and Elcin (2012), contractor companies have largely realized the strategic concept and strategic planning. It is essential for construction companies to prepare and revise their strategic plans within a certain period of time. Their strategic plans generally cover a period of up to five years.

## 2. Literature Review

According to Burhan (2009), strategic planning is an action to organize, motivate, lead, and supervise or control in order to achieve targets and goals of an organization. Furthermore, Ida et al. (2015), Owolabi (2013), and Muhammad (2014) stated that the dimensions of strategic planning have been proven to contribute in achieving better performance. Strategic planning activities of every company can be performed by preparing a detailed strategic document as proposed by Piszczur et al. (2013). This is related to a number of activities such as planning, performance measurement, program budgeting, and etc. Moreover, the qualitative steps inherent in the organization are taken in forms of values, goals, meanings and visions. Leadership with strategic thinking is also important to connect all of the

organization members to jointly achieve goals in reference to Fairholm (2009).

In business, environmental examination is recorded as one of the important activities in strategic planning. If the business environment has not been analyzed critically, the organization will face difficulty in understanding the internal competencies or business opportunities, which are then utilized to choose which strategy is appropriate to facilitate success, as stated by Robert and Peter (2012). Consequently, according to Adebola (2012), an organization is encouraged to be flexible towards environmental changes and directed to achieve goals and objectives of the organization. Thus, strategic planning can be used to identify the important issues faced by the company as the assistance to overcome issues and reveal the solution, as argued by Ridwan (2012).

Oreski (2012) explains that it is necessary to identify the internal and external factors thoroughly by selecting the prioritized internal and external factors (strategic factors) influencing the future performance of the company. The identification of strength and weakness factors was conducted by using IFE (Internal Factor Evaluation) matrix, while the factors of opportunity and threat were explored through EFE (External Factor Evaluation) matrix.

In reference to the analysis of IFE and EFE, alternative strategy is proposed by using SWOT matrix. SWOT analysis, according to Rangkuti (2008), is a tool in strategic planning to determine alternative strategies. Lastly, as proposed by David (2006), an analysis of Quantitative Strategic Planning Matrix (QSPM) is a tool to determine the best strategy out of several strategic alternatives that have been analyzed by internal and external analyses on SWOT matrix

### 3. Methods

#### 3.1 Data Type and Source

The data utilized in this study were primary and secondary data obtained through FGD, interview, questionnaire and observation. The sampling technique was determined purposively by using purposive sampling, and the selected respondents consisted of Board of Directors and Management Team of Bogor Concrete Product Factory of PT. XYZ Tbk.

The elected respondents were those who have significant contribution to the factory's strategic planning. Meanwhile, the secondary data included the history and general condition of the organization, company's missions and visions, and internal structure. The study was conducted in three months i.e. starting from July to October 2016.

#### 3.2. Methodology

The techniques of data processing and analysis used in this study included qualitative and quantitative methods. Descriptive analysis, as the qualitative method, is utilized to exemplify events on the data being analyzed. Moreover, the utilized methods are explained as follow:

- 1) Assessment Analysis on External and Internal Factors
- 2) The assessment analysis of internal and external factors was conducted through forum group discussion (FGD) with the management team of Bogor concrete product factory. The internal factor analysis contains the analysis of strengths and weaknesses, whereas the external factor analysis contains the opportunities and threats (David 2006). In addition to the use of FGD in the analysis, the data were also obtained through the company's annual report along with the secondary data obtained from Bogor concrete product factory.
- 3) Weighting of Internal and External Factors (IFE & EFE)

The IE matrix analysis was conducted to combine both internal and external analyses. The internal and external factors were compared using paired/pairwise comparison method. Comparison was performed using the scales of 1-3 with the notes as follow:

Score 1 = If the horizontal determinant variable is less important than the vertical determinant variable.

Score 2 = If the horizontal determinant variable is as important as the vertical determinant variable.

Score 3 = If the horizontal determinant variable is more important than the vertical determinant variable.

Source (Kinnear and Taylor, 1991)

The results of this questionnaire analysis were used to determine the internal and external strategic issues influencing the dominant performance of the company.

#### 1. SWOT Matrix Analysis

SWOT analysis is used to thoroughly identify the internal (strengths and weaknesses) and external (opportunities and threats) environments. In reference to these two environmental factor analyses, strategic factors are obtained and included in SWOT matrix (Table 3); thus, matching is conducted to create alternative strategies. Source: Kuncoro 2005

#### 2. IE Analysis

Analysis of IE matrix aims to combine internal and external analyses, with the following steps:

- a) Identifying external and internal factors
- b) Evaluating based on the importance level through scoring technique and average scores
- c) Providing score and determine the position on the matrix
- d) Providing alternative strategies based on IE matrix (David 2006)

#### 3. Quantitative Strategic Planning Matrix (QSPM)

QSPM analysis is a tool to determine the best and prioritized strategies to undertake (David 2006). In this research, the strategy option from the management team of Bogor concrete product factory is based on the attractiveness value of each alternative strategy; with the following stages: listing internal and external factors, evaluating each internal and external factor, writing down all alternative strategies on the top line, determining the Attractiveness Score/AS on each alternative strategy, calculating total attractiveness score/TAS), and calculating the total value of attractiveness of each alternative strategy.

## 4. Result

### 4.1 Internal Factor Analysis

Internal environmental analysis is the identification of strategic factors sourced from Bogor concrete product factory which influences the performance, and this is useful to provide an assessment of present conditions. The strength with the highest score is the quality consistency of 0.54. Quality consistency is the dominant force as Bogor concrete product factory has had experience for about 30 years in precast concrete production.

Thus, the implementation of production in the factory utilizes ISO and SOP standards in order to achieve maximum outcome. In Bogor concrete product factory, each product is undergone quality testing of concrete by sampling the product to maintain its quality. Furthermore, the weakness with the highest score is the lack of human resource regeneration reaching up to 0.20.

This issue occurs as there are a number of senior employees recruited despite having entered retirement age due to the consideration of inability of the younger generation. New employees are not prepared to follow the development of the business environment. The factory has difficulty in finding new employees with the ability to adapt to the type and work environment. By 2016, 13 skilled employees entered the retirement period.

This condition can be overcome by new recruitment as regeneration process adjusted to job position by considering the education background, experience and work expertise. In general, the internal factor analysis consisting of strength and weakness obtained a score of 3.06 (See Table 1).

**Table 1: IFE Table**

No	Internal Factors	Weight	Score	Weighted Scores
<b>Strengths</b>				
1	Competent and experienced human resources (S1)	0.12	4	0.48
2	Production Capability with large capacity (S2)	0.13	3	0.38
3	Product Brand Image (S3)	0.12	4	0.48
4	Quality Consistency	0.13	4	0.54
5	Research Program Implementation (S4)	0.1	4	0.41
6	Strategic Location (S5)	0.09	4	0.38
<b>Weaknesses</b>				
1	Lack of regeneration of human resources (W1)	0.1	2	0.2
2	Limited Field of Factory Development (W2)	0.11	1	0.11
3	High Product Price (W3)	0.1	1	0.1
IFE		1		3.06

### 4.2 External Factor Analysis

The analysis of external environment included the aspects of opportunities and threats derived from external conditions influencing the factory performance. Meanwhile, the internal factors included opportunities that should be benefited and threats that should be avoided by the factory. The highest

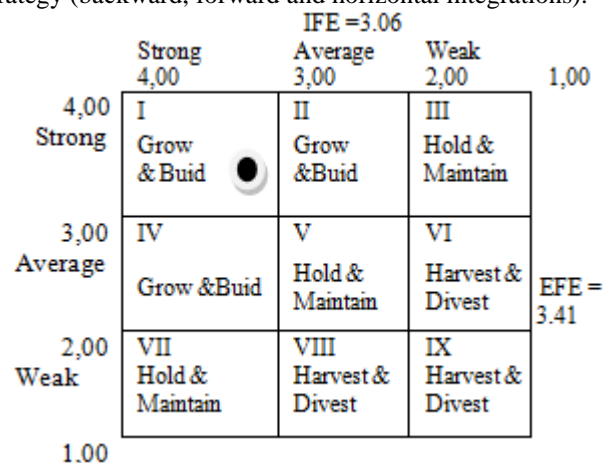
probability is the precast concrete development with a score of 0.50 as the precast concrete is proven to increase productivity and maintain quality consistency. As argued by Tushar (2014), the main advantage of using precast concrete is the rapid development with guaranteed quality. Meanwhile, the threat with the highest score is the rise of new competitors in the precast concrete industry with a score of 0.55. The rapid development of precast concrete industry is inseparable from the excessive precast concrete in the development application. According to Subakti (2012), it relates to the faster project duration compared with casting method on site as the traditional way. In reference to the data obtained from PT XYZ Tbk marketing, in the past 2 years, there has been a number of SOEs opening pre-cast concrete factories since 2015. Along with the vast state-owned enterprises opening similar businesses, new competitors are growing because they market the same products. The calculation result of the external factor analysis has a weighted score of 3.41 (See Table 2).

**Table 2: EFE Table**

No	Internal Factors	Weight	Score	Weighted Scores
<b>Opportunity</b>				
1	Supports of workers from the surrounding areas (O1)	0.11	3.00	0.33
2	Government development programs (O2)	0.12	4.00	0.49
3	Precast concrete development (O3)	0.13	4.00	0.54
4	Growth of Indonesia's construction industry (O4)	0.12	4.00	0.50
<b>Threat</b>				
1	The rise of new competitors of the precast concrete industry (T1)	0.14	4.00	0.55
2	Policy in the Increase of Provincial Minimum Wage (UMP) (T2)	0.12	4.00	0.48
3	Material Limitations (T3)	0.13	4.00	0.51
EFE		0.88		3.41

### 4.3 IE Analysis

An IFE value of 3.06 and EFE value of 3.41 were incorporated in the IE matrix, thus placing Bogor concrete product factory in a moderate position (quadrant II) i.e. growing and developing. Strategies that can be implemented are intensive strategy (market penetration, market development, and product development) or integrative strategy (backward, forward and horizontal integrations).



**Figure 1: Result of IE Matrix**

#### 4.4. SWOT Analysis

SWOT analysis was utilized to create alternative strategies based on the results of follow-up FGD with Bogor concrete product management team. In following, the analysis result shows several alternative strategies to be implemented by SWOT matrix (See Table 3).

**Table 3: SWOT Matrix Analysis**

Internal		
	<i>Strength (S)</i>	<i>Weakness (W)</i>
	S1	W1
	S2	W2
	S3	W3
	S4	
	S5	
	S6	
	Note : Information at Table 1.	Note : Information at Table 1.
Eksternal		
<i>Opportunity</i>	<i>Strategy S-O</i>	<i>Strategy W-O</i>
O1 O2 O3 O4 Note : Information at Table 2.	1. Optimizing the resources to undertake large production project (S1, S2, S5, O2, O4). 2. Innovating new brand products (S5, O3)	1. Conducting employee regeneration suited to qualifications and requirements (W1,O1) 2. Leasing land an area surrounding the factory site for stock yard (W2,O4)
<i>Threat</i>	<i>Strategy S-T</i>	<i>Strategy W-T</i>
T1 T2 T3 Note : Information at Table 2.	1. Establishing cooperation with suppliers to ensure material availability (S2,T4)	1. Optimizing the number of workers and working hours (W3, T3).

The analysis result shows several alternative strategies to be implemented by using SWOT matrix as follows:

- 1) Optimizing the resources to undertake large production project (S1, S2, S5, O2, O4). Bogor concrete product factory has the largest production capacity along with competent and experienced human resources enabling it to handle large projects from both private and government sectors with a tight scheduling system. Its capability is also supported by strategic location making it easier for supplier access and product distribution.
- 2) Innovating new brand products (S5, O3)  
The innovation of Bogor concrete product factory is implemented by adding variations of products; e.g. products for construction and buildings utilized for the wall components of apartments and bathrooms. In addition, the other innovation is conducted through the creation of lighter products.
- 3) Building cooperation with suppliers to ensure the availability of natural materials (S2, T4)  
The on-going production process in Bogor concrete product factory is inseparable from the material availability. Consequently, to maintain its availability, the factory shall continue to maintain cooperation with both existing and potential suppliers (vendors) of materials. Mentoring towards the existing workers is also conducted to convey the material qualifications. On

the other hand, new suppliers are also essential as the alternative replacement in condition when the old supplier is unable to provide the material. In the presence of new alternative supplier, the material availability can be ensured.

- 4) Performing regeneration of employees in accordance with the qualifications and needs (W1, O1)  
As employees entering retirement period, Bogor concrete product factory is urged to recruit new employees on the basis of requirements and qualifications of the production process.
- 5) Leasing land surrounding the factory site for stock yard (W2,O4)  
An effort to overcome the limitations of areas is to rent an area for the stock yard outside the factory i.e. in Tlajung, around 1 km from the factory. Until recently, the stock yard has still been able to accommodate the products produced. Considering that the precast concrete products in post-production state require storage prior to distribution and installation, Kuo-Chuan and Shu-Shun (2010) state that the factory needs to make production plans in which the planners should arrange the availability of appropriate resources for production, storage, and transportation
- 6) Optimizing the number of workers and working hours (W3, T3).  
One of the components in the production cost is worker i.e. how to anticipate the policy of provincial minimum wage (UMP) by regulating the number and working hours of the workers. As the production time increases, the number of workers and working hours also increases; on contrary, as the production time decreases, the number of workers and working hours also decreases.

#### 4.5. QSPM Analysis

QSPM analysis conducted at Bogor concrete product factory created the primary strategic priority i.e. the strategy of optimizing the resources to undertake large production project with the TAS value of 7.22. This strategy aims to Bogor concrete product factory to get ownership of large production project with qualified human resources.

**Table 14: The Result of Analysis QSPM**

Strategy	TAS	Rating
Optimizing the resources to undertake large production project	7.22	I
Innovating new brand products	6.90	II
Performing regeneration of employees in accordance with the qualifications and needs	6.76	IV
Leasing land surrounding the factory site for stock yard	6.21	VI
Building cooperation with suppliers to ensure the availability of natural materials	6.63	V
Optimizing the number of workers and working hours	6.87	III

#### 5. Conclusion

Based on the results of data analysis, a number of conclusions can be drawn as follow:

- 1) The result of IFE internal analysis is 3.06, while the external analysis produce an EFE value of 3.41 in quadrant II. Thus, it places Bogor concrete product factory in a moderate position i.e. growth and development. Strategies to implement in that position are (market penetration, market development, and product development) or integrative (backward, forward and horizontal integration).
- 2) The duration of strategic planning applied in Bogor concrete product factory is three years. In accordance with the tight competition in precast concrete industry, the 2017 program focuses on, optimizing the resources to undertake large production project by analyzing the conditions of the external environment and competitors with marketing areas.

Meanwhile, the upcoming programs to be implemented in 2018 are as follow; innovating new products, optimizing the number of workers and working hours, and employee regeneration in accordance with the qualifications and requirements. Lastly, the planned program in 2019 is to cooperate with suppliers for material availability and land leasing around the factory site for stock yard.

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