Determining Strategies Based on Strategic Position Analysis in Small and Medium Enterprises

Augustina Asih Rumanti and Kevin Joseph Syauta

***Abstract*—Small and medium enterprises (SME) hold an important role in developing a country's economy. However, many SMEs failed to stay in competition due to a handful of problems, including capital shortage, marketing difficulties, etc. A good choice of strategies will contribute to the SMEs survival, thus strategic management is needed. Strategic position analysis and strategy prioritization is conducted in this research.**

The SPACE Matrix is used to map SME into one of these quadrants: aggressive, conservative, defensive, or competitive. Strategy prioritization is done using QSPM, and the result shows the most attractive strategy to the least attractive for the SME are as follows: adding new product variants; expanding sales area; developing new natural stones products; holding promotional events and placing advertisement; business diversification by opening unrelated new product lines; selling directly to end users; assigning market representatives; acquiring or holding a joint venture with smaller SMEs; and integrating with suppliers.

***Index Terms*—Strategic management, small and medium enterprises, SPACE matrix, QSPM.**

I. Introduction

Small and medium enterprises (SME) hold an important role in developing a country's economy [1]-[3] Indonesian SMEs play a strategic and crucial role viewed from various aspects, i.e. their enormous number of industries, huge employment potential, and significant contribution to Indonesia's Gross National Product (GNP). SMEs in Indonesia's economy have contributed a great deal, be it one of the nation's economy pillar, as the biggest employment provider, as the main non-oil and gas main income source, and so on [4].

SMEs in this era are to produce as many products as they can in shorter time and in a more efficient practice. On the other hand, they are very vulnerable, and their failure rate is very high. The Business Statistics Office (UK) observed that 60 per cent (of small businesses) fail in the first three years of existence [5]. In accordance with that, Indonesian SMEs are experiencing multi-faceted problems such as capital shortage, marketing difficulties, lack of good quality and affordable materials, low-qualifying human resources, absence of entrepreneurial spirit, little access to the market, and weak organizational management [6]. A proper selection of strategies will help the SMEs to survive, and strategic management is necessary at this point.

Strategy is a common facility with a long-term goal to be achieved [7], where strategic management is defined as a set of decisions and actions that result in the design and activation of strategies to achieve the objectives of an organization [8]. Strategic management has been proven advantageous and helpful in driving the success of the company practicing it, as well as raising awareness of external threats, better understanding of competitors' strategy, increasing employee productivity, and reducing reluctance to change. Based on the management strategic model, strategy analysis and choice is needed to implement strategic management [8].

Forward integration, backward integration, and horizontal integration are commonly referred to as vertical integration. Forward integration involves acquisition or increase in control of distributor and retailer. Backward integration is a strategy that seeks bigger control or ownership over firm's suppliers, and aims to secure supply steadiness at a lower rate compared to competitors. Horizontal integration refers to a strategy that seeks ownership or bigger control over competitors.

Intensive strategy includes bigger market share, revenue, or profit from current products and services [9]. Market penetration, market development, and product development are collectively grouped as intensive strategy since they need intensive effort if the firm's competitive position with the current products is attractive. Market penetration is a strategy that seeks an increase in products' or services' current market share through bigger marketing moves. Market development covers introducing current products/services to new geographical areas. Product development is a strategy that seeks better sales through improvement or modification of existing products/services. When a firm owns a product that manages to reach mature state in its product lifecycle; the idea is to attract satisfied customers to experience new products (improved) as a result of positive experience with the firm's current products/services.

There are two major types of diversification strategies; related and unrelated. A business is related when its value chain aligns strategically with valuable businesses competitively [10]. Diversification is developing new products to a fresh market, thus considered harder than other strategies related diversification is a strategy when a company expands or adds production lines or established market, by slipping in new products and or entering a new market [11] and considered less risky than unrelated diversification. Unrelated diversification is a strategy when a company appends new products or even new businesses with no relation to the existing production line (in terms of

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technology or marketing), and selling it to a new market.

TABLE II: EXAMPLE OF QSPM TEMPLATE

STRATEGY ALTERNATIVES				
KEY FACTORS	**Weight**	**Strategy 1**	**Strategy 2**	**Strategy 3**
Key External Factors				
Economy				
Politic/Law/Government				
Social/Culture/ Demographic/ Environment				
Technology				
Competition				
Key Internal Factors				
Management				
Marketing				
Finance/Accounting				
Production/Operation				
R&D				
Management Information Systems (MIS)				

Besides integrative, intensive, and diversification strategies, an organization can also perform retrenchment, divestiture, or liquidation. Retrenchment happens when an organization regroup through assets and costs subtraction to counter decreasing sales and profit. Divestiture is selling a department or part of an organization. Liquidation is an act of selling company's assets separately for its tangible assets.

The city of Tulungagung is filled with high potential of marble an onyx stone. Surya Jaya Stone is a SME producing various natural stone products, in precise wall cladding and floor cladding product. Its market covers Bali and Jogjakarta. Fig. 1 below depicts an example of their products.

Fig. 1. Surya jaya stone's floor cladding and wall cladding products.

Surya Jaya Stone customers are resellers that resell Surya Jaya Stone's wall cladding or floor cladding products to various countries, for instance Netherlands, Germany, and United Kingdom. Its strategic position is analyzed in this case study, thus Surya Jaya Stone will be able to identify some possible strategies to leverage excellence among competitors. When they are already identified, the most likely strategy will be determined in order to be deployed. A few questions that undermine this research are:

1) What is the current strategic profile of Surya Jaya Stone?
2) What are the possible strategies in accordance with the strategic profile?
3) Are there strategies that should be prioritized from several alternatives?

This research which seeks to solve Surya Jaya Stone's problem aims to:

1) Determine the strategic profile of Surya Jaya Stone
2) Determine strategy alternatives that are deployable by Surya Jaya Stone, in align with its strategic profile.
3) Determine the priority of strategy implementation in Surya Jaya Stone

II. LITERATURE REVIEW

Strategic Position and Action Evaluation Matrix or SPACE Matrix is a four quadrant framework that shows whether an organization fits to agressive, conservative, defensive, or competitive strategies (David, 2009). SPACE Matrix shows two internal dimensions, being Financial Strength (FS) and Competitive Advantage (CA), against two external dimensions, being Environmental Stability (ES) and Industry Strength (IS). All four factors are the most important determinants of a company's overall strategic position, and measured a six-point Likert scale to corresponding axes. Table I below shows some factors that map SPACE Matrix dimensions in SME

There is only one analysis technique designed to determine the relative attractiveness of various alternatives, which is Quantitative Strategic Planning Matrix (QSPM). QSPM conceptually determines relative attractiveness from various strategies built on critical internal and external success factors. Relative attractiveness of each strategy is calculated by determining the cumulative impact of each critical internal and external success factors. Shown in Table II is an example of QSPM template.

TABLE I: SOME FACTORS THAT MAP SPACE MATRIX DIMENSIONS IN SME

INTERNAL STRATEGIC POSITION	EXTERNAL STRATEGIC POSITION
Financial Strength (*FS*) **(Rahardjo & Ali, 1993)** • Financial needs • Financial sourcing • Leverage level • Reinvestment	**Environmental Stability (*ES*)** **(Partomo, 2004 ; CRISIL, 2012)** • Price-demand elasticity • Impact from interest rate increase • Effect of material cost fluctuation towards profit
Competitive Advantage (*CA*) **(Rahmana *et al.*, 2010, in Rahmana *et al.*, 2012)** • Modern production technology • Sales increase • Degree of self-funding • Manager-staff knowledge gap • Quality assurance system development • CNC-CAD-CAM-based precision products manufacturing • Cooperation with renowned educational institution • 24-hour customer service • Major industries as main consumers • Subcontracting for major industries • Workforce outsourcing	**Industry Strength (*IS*)** **(David, 2009)** • Growth potential • Resources utilization

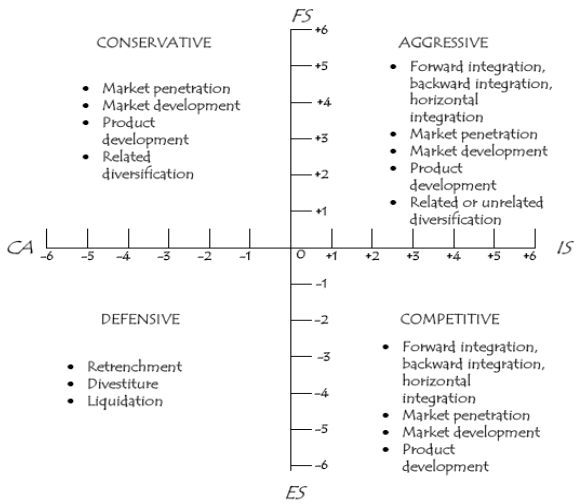

Fig. 2. SPACE matrix.

III. Research Methodology

The research methodology is shown in Fig. 3.

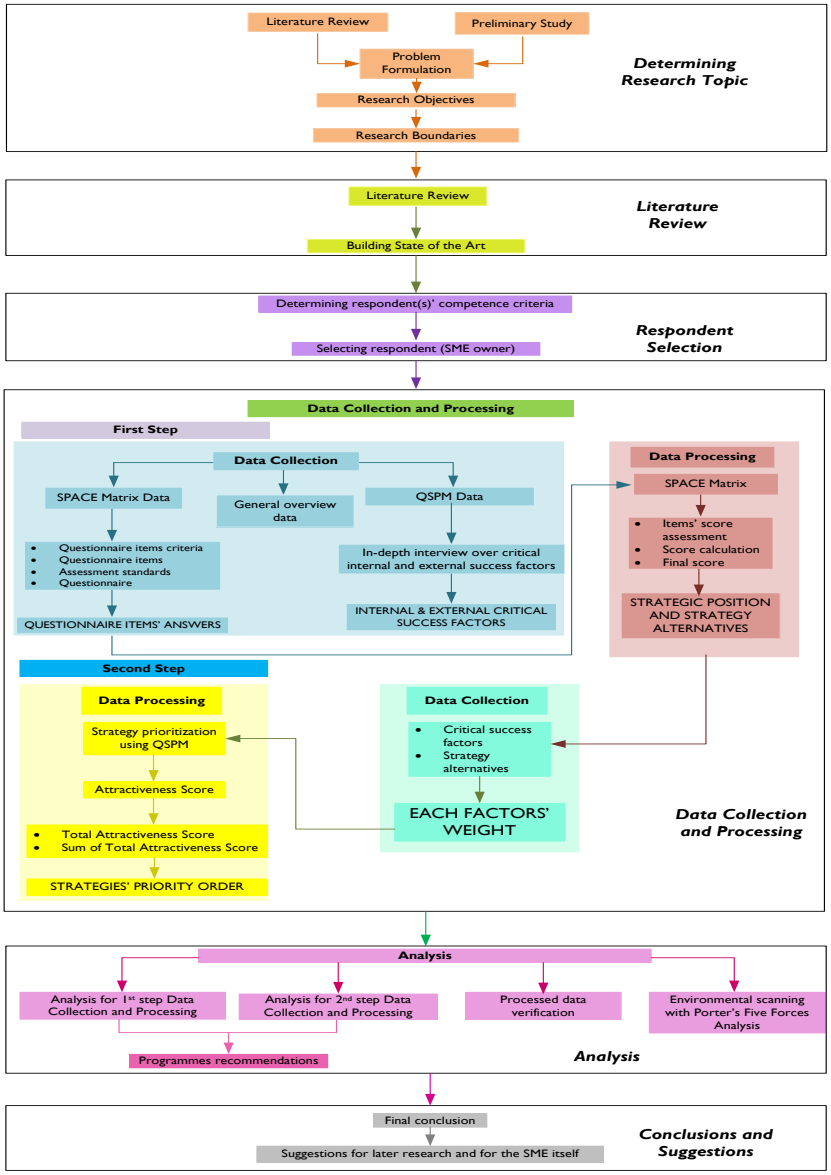

Fig. 3. Research methodology.

IV. Analysis

The questionnaire result for SPACE Matrix is summarized in Table III.

The scores for each criterion based on the above table is as shown:

$$Average\ score\ for\ Competitive\ Advantage\ (CA) = \frac{-37}{13} = -2{,}85$$

$$Average\ score\ for\ Environmental\ Stability\ (ES) = \frac{-10}{3} = -3{,}33$$

$$Average\ score\ for\ Industry\ Strength\ (IS) = \frac{16}{3} = 5{,}33$$

$$Average\ score\ for\ Financial\ Strength\ (FS) = \frac{13}{3} = -4{,}33$$

By using the average score from each criterion, the coordinates for Surya Jaya Stone can be derived as follows:

$$Abscissa = IS\ average\ score + CA\ average\ score = 5.33 + (-2.85) = 2.48$$

$$Ordinate = ES\ average\ score + FS\ average\ score = (-3.33) + 4.33 = 1.00$$

Based on the abscissa and ordinate, the position of Surya Jaya is mapped out by the point S (2.48; 1). Fig. 4 below shows the location of S on SPACE Matrix.

Deployable strategy alternatives based on the strategic position analysis result include:

1) Selling directly to end users.
2) Assigning market representatives together with resellers.
3) Integrating with natural stone suppliers in Java.
4) Acquiring or holding a joint venture with smaller SMEs.
5) Holding promotional events such as giving discounts and placing both printed and electronic advertisement (via internet).
6) Expanding sales area to potential areas (big cities such as Jakarta, Surabaya, etc.)
7) Adding new floor cladding and wall cladding product variants.
8) Developing new products made with natural stones such as placemats and accessories.
9) Business diversification by opening unrelated new product lines (e.g. shoes, food products, apparel, etc.

Identification of critical internal and external success factors result based on in-depth interview is given in Table IV and Table V as follows.

TABLE III: SUMMARY OF SPACE MATRIX QUESTIONNAIRE

Item	Score
COMPETITIVE ADVANTAGE	
Possession of an unique/special machine or production equipment designed to ease production activity and provide better product quality	-1
Some of the production areas are neat, but no application of 5S principles, some of the equipments are messily located	-5
Surya Jaya Stone practices pull system	-1
Information system is enabled through help of softwares but in a very limited scope. Information exchange exists through paperwork and meetings.	-4
No change in sales growth for the last 4 years (0%), whereas the expected growth is 25%	-6
Surya Jaya Stone's capital structure is fully built on self-funding.	-1
Knowledge gap between managers and staffs are very little (almost none), therefore enabling effective information exchange throughout cooperation and well-versed communication	-1
Surya Jaya Stone adopts an integrated quality management system, but it's still on a limited scope and probation stage	-3
Surya Jaya Stone does not practice CNC-CAD-CAM system	-6
No cooperation program is being held with a renowned institution	-6
Forms of customer service provided include dedicated email address, telephone number or visiting the office.	-1
Some of the customers include major industries	-1
Some of the subcontractors include major industries	-1
ENVIRONMENTAL STABILITY	
Price-demand elasticity is zero, meaning that Surya Jaya Stone's demand is perfectly inelastic.	-5
Surya Jaya Stone is not facilitated with a financial institution credit	-1
There is no change in materials price compared to last period	-4
INDUSTRY STRENGTH	
Surya Jaya Stone's marketing area covers seven cities, whereas the targeted marketing areas are also seven cities	6
For the next five years, consumers' population in Surya Jaya Stone's marketing area is foreseen to decrease from the first year until the fifth year.	1
Percentage of local supplies engaged (from Java) in Surya Jaya Stone's products is now roughly 30%, and is sought to escalate to 50%.	4
FINANCIAL STRENGTH	
Company's working capital is sufficient to support operational activities.	6
Surya Jaya Stone has no loans.	6
Most of the SME's profit is not reinvested	1

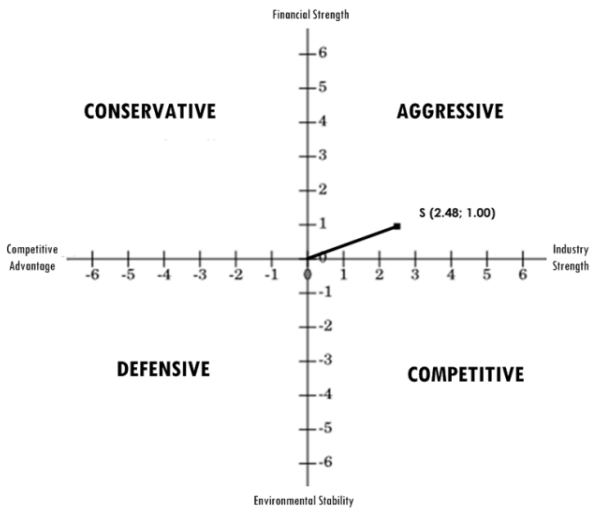

Fig. 4. SPACE matrix for surya jaya stone.

TABLE IV: CRITICAL EXTERNAL FACTORS FOR SURYA JAYA STONE

Critical External Factors	
Opportunity	**Threat**
Population in market areas are increasing each year	Duplicated product designs
Potential consumers (major industries are developing)	Competitors are developing new product variants
Supply prices tend to be stagnant	Substitute products with lower prices are mushrooming
Increasing convention offers in major cities	High competition

Upon weighting each factor and determining Attractiveness Score for each factor towards every available strategy alternatives, a priority order is obtained as summarized in Table VI below.

Porter's Five Forces analysis is also conducted to better understand the competition climate and its results are as follows:

1) Threat of New Entrants: **medium**
   High entry barriers are present.
2) Bargaining Power of Suppliers: **medium**
   - Suppliers can still depend on other major consumers.
   - Suppliers provide generic but one-of-a-kind products (possibly not available at any other regions).
   - Substitute products are available.
   - Suppliers can threat to do forward integration but they can't compete with Surya Jaya Stone due to their low level of technology.
3) Bargaining Power of Buyers: **low**
   - Surya Jaya Stone has few consumers and each of them purchase in a great quantity, but there is no other business for them.
   - Differentiation level of Surya Jaya Stone's products is high.
4) Threat of Substitute Products/Services: **medium**
   - Other available wall covering or flooring products might have lower prices, but they don't have the uniqueness that wall cladding and floor cladding offer.
   - Buyer switching cost is relatively low.
5) Rivalry among Existing Competitors: **high**

- Many competitors are present but Surya Jaya Stone is currently still dominating due to its high employment rate.
- The industry is growing at a normal pace.
- Exit barriers are high.

TABLE V: CRITICAL INTERNAL FACTORS FOR SURYA JAYA STONE

Critical Internal Factors	
Strength	**Opportunity**
High product quality (marked by low complaints)	Small production capacity
Timeliness in order completion	Small chance for business expansion due to small capacity
Frequently does product improvements	Most of the shop floor is untidy (unclear area division)
Workers frequently contribute improvement ideas	Lack of resources hinders ideas embodiment
Leadership style that treats employees as partners, not subordinates	High practice of manual information systems (paperwork)
Possession of unique pattern that brings product excellence	No significant growth of sales for the last 4 years
Possession of unique production equipment	Limited chance of expansion due to capital structure
Practices pull system	Incomplete implementation of quality management system (still in early stage)
Self-funding capital structure	Does not implement computer-based manufacturing
Miscommunication level is low	Does not hold any agreements with any renowned educational institutions
Flexible forms of customer service	Most of the profit is not reinvested
Customers are big industries	Highly dependent on current product variations
Free of debt risk (self-funding capital)	Reluctant to work with government
Loyal customers	Has not been registered as an enterprise

TABLE VI: STRATEGY PRIORITY FOR SURYA JAYA STONE BASED ON QSPM

Priority Rank	Strategy	Sum of Total Attractiveness Score
1	Adding new floor cladding and wall cladding product variants	5.576
2	Expanding sales area to potential areas (big cities such as Jakarta, Surabaya, etc.)	5.517
3	Developing new products made with natural stones such as placemats and accessories	5.440
4	Holding promotional events such as giving discounts and placing both printed and electronic advertisement (via internet)	5.234
5	Business diversification by opening unrelated new product lines (e.g. shoes, food products, apparel, etc	4.492
6	Selling directly to end users	4.353
7	Assigning market representatives together with resellers	3.933
8	Acquiring or holding a joint venture with smaller SMEs	3.925
9	Integrating with natural stone suppliers in Java	2.990

V. CONCLUSION

The conclusions derived from the research are:

1) Analysis of strategic position has shown that Surya Jaya Stone has an Aggressive profile.
2) Deployable strategy alternatives that can be implemented based on the strategic position are 1) Selling directly to end users, 2) Assigning market representatives together with resellers, 3) Integrating with natural stone suppliers in Java, 4) Acquiring or holding a joint venture with smaller SMEs, 5) Holding promotional events such as giving discounts and placing both printed and electronic advertisement (via internet), 6) Expanding sales area to potential areas (big cities such as Jakarta, Surabaya, etc.) 7) Adding new floor cladding and wall cladding product variants 8) Developing new products made with natural stones such as placemats and accessories, and 9) Business diversification by opening unrelated new product lines (e.g. shoes, food products, apparel, etc.
3) The result of prioritization gives the following priority rank: 1) Adding new floor cladding and wall cladding product variants, 2) Expanding sales area to potential areas (big cities such as Jakarta, Surabaya, etc.), 3) Developing new products made with natural stones such as placemats and accessories Integrating with natural stone suppliers in Java, 4) Holding promotional events such as giving discounts and placing both printed and electronic advertisement (via internet), 5) Business diversification by opening unrelated new product lines (e.g. shoes, food products, apparel, etc., 6) Selling directly to end users, 7) Assigning market representatives together with resellers, 8) Acquiring or holding a joint venture with smaller SMEs, and 9) Integrating with natural stone suppliers in Java.

VI. SUGGESTION AND FUTURE WORK

Ideas that are considerable for a follow up research include:

1) An extensive literature review is compulsory since there are not many literatures available on strategic management application in SME. The context is also to be reviewed whether it fits the SME itself.
2) The following topics can be explored for a follow up research: strategy implementation, strategic control, or strategic issues (globalization, IT culture, strategic change, etc.) that might occur in the SME.
3) Observation and Focus Group Discussion (FGD) can be considered as effective ways to collect data in the next research.

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