# Strategy Formulation Using SWOT Analysis, SPACE Matrix And QSPM: A Conceptual Framework

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Abstract:- Business development is carried out with the hope of turning small businesses into larger scale. Effective strategy management can bring many benefits organization. Conceptually formulating strategies for large or small organizations, profit or non-profit must be more objective than subjective. One method that can be used is the analysis of Strength, Weakness, Opportunity, and Threat (SWOT-Strengths, weaknesses, opportunities and threats) that are often used compared to other methods in the decision making process. The SWOT analysis is based on the logic that effective strategies maximize strength and opportunity while minimizing their strengths and threats. The data used in the SWOT analysis are taken from the data collection stage using IFE (Internal Factor Evaluation) analysis and EFE (External Factor Evaluation). SWOT analysis itself has limitations in its use, therefore other tools are needed to support the process. Tools that can be used include the SPACE Matrix to find out the types of strategies that the organization must carry out. In addition, the tool used to determine the best strategy which will be taken by the organization is QSPM. OSPM is an excellent tool to assimilate and prioritize important internal. external and competitive information needed to develop strategic and effective plans.

**Keywords:-** EFE and IFE matrices; QSPM; SPACE Matrix; Strategy Management; SWOT analysis.

## I. INTRODUCTION

Every entrepreneur will make an effort to develop their business. The development of these businesses requires foresight, creativity and motivation (Anoraga, 2009: 66). Business development is carried out with the hope of turning small businesses into larger scale. Keep in mind the purpose and direction of a business. Therefore, business development is needed to expand and maintain the business so that the business runs well.

Michael Porter (1998) says that a clear strategy is needed in times of urgency because companies that do not have a clear vision of how to be different by offering something different from competing companies, in groups with different customers, they will become victims of intense competition. To overcome this, the company must find ways to create and develop profits, not only ways to overcome losses. Companies exist side by side, compete and

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work together in a relationship environment. The basis for formulating strategies, decision making and strategic planning is to understand this environment.

Effective strategy management can bring many benefits to any organization. Catley (2004) explains 4 examples of the advantages of effective strategic management, namely: 1) Strategy management can describe clear pathways for organizations. The strategic plan functions like a roadblock that determines the best route for the organization to take in the future; 2) Strategy management brings a sense of focus. Strategic plans can help organizations develop appropriate goals and targets and help all relevant parties focus their efforts on achieving them; 3) Strategic management can increase an organization's self-awareness about its strengths and weaknesses and where the organization stands, both individually and in relation to competitors; and 4) Strategic management gives employees something to do. With a clear mission, goals and objectives to work on, employees will know what efforts need to be made and will be motivated to do their work.

Conceptually formulating strategies for large or small organizations, profit or non-profit must be more objective than subjective. There are many strategic planning tools that enable managers to be able to formulate competitive strategies that fit the requirements of their business environment. One method that can be used is the analysis of Strength, Weakness, Opportunity, and Threat (SWOT-Strengths, weaknesses, opportunities and threats) that are often used compared to other methods in the decision making process. Learned et al. (1969) explain that SWOT analysis has developed as a primary tool for overcoming complex strategic situations by reducing the quantity of information to improve decision making.

The SWOT analysis is based on the logic that effective strategies maximize strength and opportunity while minimizing their strengths and threats. This method is used in large numbers in strategic planning and examines all factors of an effective operational environment. The key point is that the SWOT analysis on all aspects has advantages as an efficient and dynamic framework is offered to choose a strategy.

### II. LITERATURE REVIEW

## A. Strategic Management

Nawawi (2005) defines management strategy as large-scale planning (strategic planning) oriented to achieving the vision of the highest and fundamental decisions of leaders that enable organizations to interact effectively (mission). This is done in an effort to produce operational planning to produce quality goods and / or services and services, which are optimally directed at achieving the goals (strategic goals) and goals (operational goals) of the organization.

Strategy management is the process of revising and analyzing internal and external environments to plan, implement and observe strategies. Basically, strategy management takes place in three stages namely strategy formulation, strategy implementation and strategy evaluation. Strategy management is an important element for company growth, continuous scale expansion and for further development (Shri, Gupta, & Agrawal, 2016).

David (2004: 15) states that a way to achieve longterm goals is by strategy. Business strategies can be expansion, geographical, acquisition, diversification, product development, employee rationalization, market penetration, liquidation, divestment, and joint ventures. David (2004: 285) also states that important techniques for strategy formulation can be integrated into a three-stage decision-making framework. Phase 1 consists of the IFE, EFE, matrix and Competitive Profile Matrix (CPM) which is called the input stage which summarizes the basic information needed in formulating a strategy. Phase 2 is called Matching Staget which focuses on combining external and internal factors so as to produce alternative strategies that can be executed. Phase 3 is called the Phase Decision Stage, using one of the techniques, the Quantitive Strategic Planning Matrix (QSPM).

Competitive strategy according to Porter (1994: 1) is the search for competitive positions that are profitable in an industry, the fundamental area, where competition occurs. Porter (1994: 3) states that basically the competitive advantage develops from the values created by the company for buyers that exceed the costs of the company in creating it. Competitive advantage is the center to face competition of marketing performance. Competitive advantage is defined as a profitable strategy of companies that work together to create a more competitive advantage in the market. This strategy must be designed to achieve sustainable competitive advantage so that companies can dominate the market.

David (2011: 6) says that there are 3 stages of strategy management namely strategic formulation, strategic application and strategic appraisal. The scope of strategy formulation is the development of vision and mission, identification of external opportunities and threats to the organization, internal strengths and weaknesses of the organization, setting long-term goals, exploring alternative strategies and selecting specific strategies to achieve organizational goals. Implementation of the strategy

requires the organization to set goals, create policies, motivate employees and allocate resources so that the strategies that have been formulated can be implemented. Strategy evaluation is the last stage of strategy management. Assessment and evaluation are the main ways to obtain information when certain strategies are not going well. The three basic activities of strategic evaluation are the review of external and internal factors which form the basis of the current strategy, performance measurement and corrective steps. (David, 2011: 7).

The strategy formulation process is carried out through a series of stages. The first stage is to identify the organization's vision and mission to find out what targets to be achieved by the organization in accordance with the vision and mission. An organization must have obstacles that must be faced in its business journey. The obstacles are one of them related to marketing and technology. With so many competitors that continue to emerge, the strategy must continue to change so that the organization can still compete with other competitors. The technology used by the organization also influences the strategy that will be used. This can affect the performance of the organization itself. With the advancement of technology, organizations are also expected to be able to keep up with technological changes in order to maximize the performance and profits of the business. In addition, by following changes in organizations can become technology, sustainable companies.

To get the right business strategy, an analysis of the business environment must be divided into internal and external factors. Internal factors and external factors are used to identify what strategy problems the organization has. Internal factors are in the form of organizational strengths and weaknesses, while external factors are opportunities and threats to the organization. These factors will be analyzed using the IFE and EFE matrices. This matrix will provide an overview of the current state of the organization.

The next stage is the stage of comparison and correspondence. This can be done with a SWOT analysis and SPACE matrix. To avoid manipulation and bias, weights and rankings of the relevant qualitative factors have been determined to achieve effective solutions from focus group discussion inputs. Based on the SPACE matrix, group strategies that are appropriate are identified for the organization. Then QSPM is used because it provides a transparent framework for the priority setting process.

## B. Internal Factor Evaluation Matrix (IFE) and External Factor Evaluation Matrix (EFE)

The External Factor Evaluation (EFE) matrix is a tool that enables strategists to calculate environmental, economic, social, political, cultural, legal, technological, market conditions and competition factors for the area under consideration. These factors must be quantified as much as possible to reduce misinterpretation and misunderstanding. These factors are weighted and ranked according to the opinions of experts during the focus group

session. The Internal Factor Evaluation (IFE) matrix is a tool that reviews organizational strengths and weaknesses. The IFE matrix contains substantial quantitative data. All assessments are based on expert opinions during focus group sessions (Shri et al., 2016).

According to David (2009) the External Factor Evaluation (EFE) matrix is used to determine the company's external factors associated with opportunities and threats that are considered important. External data is collected to analyze matters relating to economic, social, cultural, demographic, environmental, political, governance, legal, technological and competitive issues. The Internal Factor Evaluation (IFE) matrix is a strategy formulation tool accustomed to summarize and evaluate key strengths and weaknesses in the functional areas of business, and also provides a basis to identify and evaluate the relationships between these fields.

David (2013) argues that the IFE Matrix (Internal Factor Evaluation) is a matrix that allows strategists to determine whether the strengths and weaknesses of the company can be seen from marketing, finance, management of information systems, operations and production as well as research and development. Strategist uses EFE (External Factor Evaluation) matrix to summarize social, economic, cultural, environmental, demographic, government, political, legal, technological, and competitiveness information.

Data obtained from the input stages will be analyzed descriptively to define the company's vision and mission, internal-external data, and the general condition of the company that represents the company's position in the industry. The IFE matrix is used as a tool to identify dominant internal factors by weighting and scoring to obtain a weighted score on factors that can be classified as strengths and weaknesses of the company. Internal factors are used to measure the performance that has been done by the company.

| Internal Factors | Weight | Rating | Weight x<br>Rating |
|------------------|--------|--------|--------------------|
| Strengths        |        |        |                    |
| Weaknesses       |        |        |                    |
| Total            | 1      |        |                    |

Table 1:- IFE Matrix Source: David, 2009

The EFE matrix is used as a means of identifying dominant external factors by weighting and scoring to obtain a weighted score on factors that can be classified as threats and opportunities for the company. The EFE matrix also places weight and rating values for each external factor in it. The rating is an indication of how effectively the company responds to opportunities and threats that exist.

| External Factors | Weight | Rating | Weight x<br>Rating |
|------------------|--------|--------|--------------------|
| Opportunities    |        |        |                    |
| Threats          |        |        |                    |
| Total            | 1      |        |                    |

Table 2:- EFE Matrix Source: David, 2009

The determination of weights is done by submitting identification of external and internal strategic factors to management using the paired comparison method (Kinnear and Taylor, 1991). Paired comparison is used to give value to each factor. Horizontal indicators are internal or external factors in the horizontal lane in the vertical lane. The form of weighting assessment is as follows:

| Internal Factors | A | В | С | <br>Total |
|------------------|---|---|---|-----------|
| A                |   |   |   |           |
| В                |   |   |   |           |
| С                |   |   |   |           |
|                  |   |   |   |           |
| Total            | 1 |   |   |           |

Table 3:- Internal Factor Weight Assessment Source: Kinnear dan Taylor, 2003

A series of internal and external strategic factors of the company contained in a multiple comparison matrix. These factors will be compared with other factors to determine the weight of a factor relative to other factors. The total weighted value of the overall factor is 1.

| ExternalFactors | Α | В | С | <br>Total |
|-----------------|---|---|---|-----------|
| A               |   |   |   |           |
| В               |   |   |   |           |
| С               |   |   |   |           |
|                 |   |   |   |           |
| Total           | 1 |   |   |           |

Table 4:- External Factor Weight Assessment Source: Kinnear dan Taylor, 2003

The weight of each variable is obtained by dividing the sum of the values of each variable by the sum of the values of the entire variable. This can be done using the formula:

$$ai = \frac{Xi}{\sum_{(i)}^{n} Xi}$$

Note:

ai = Weight of i-th variable

Xi = i-th variable value

i = 1, 2, 3, ..., n

n = Number of variables

Next up is rating 1 to 4 in the third column, on both the IFE and EFE matrices. Then multiply the weights by ranking to get a weighted score. Then, the scores obtained are summed to obtain a weighted total score. The second step is matching or integrating by entering the weighting results on the IFE and EFE matrices in the Internal-External (IE) matrix to obtain a more detailed business strategy at the corporate level. The IE Matrix has nine strategy cells which can be grouped into three main strategy cells. The three cell strategies, namely:

- ➤ Growth and Build are in cells I, II or IV. A suitable strategy is intensive or integration. The intensive strategy is market penetration, market development and product development. While the integration strategy is backward integration, front integration and horizontal integration.
- ➤ Hold and Maintain is performed for cells III, V or VII. The commonly used strategy is market penetration and product development.
- ➤ Harvest or Divest is used for cells VI, VIII or IX. The strategy used is divestment, conglomerate diversification strategy and liquidation strategy.

|                       |        |     | TOTAL SCORE OF IFE |                        |             |  |
|-----------------------|--------|-----|--------------------|------------------------|-------------|--|
|                       |        |     | STRONG             | AVERAGE                | WEAK        |  |
|                       |        | 4.0 | 3.0                | 2.0                    | 1.0         |  |
|                       |        |     |                    |                        |             |  |
|                       | HIGH   |     | I                  | п                      | III         |  |
|                       |        | 3.0 | Growth             | Growth                 | Collapse    |  |
| TOTAL<br>SCORE<br>EFE |        | 5.0 | IV                 | V                      | VI          |  |
|                       | MEDIUM |     | Stability          | Growth or<br>Stability | Collapse    |  |
|                       |        | 2.0 |                    |                        |             |  |
|                       | LOW    |     | VII                | VIII                   | IX          |  |
|                       | 20     | 1.0 | Growth             | Growth                 | Liquidation |  |

Fig 1:- Internal-External Matrix (IE) Source: David, 2010

## C. Strength, Weakness, Opportunity, and Threat Matrix (SWOT)

Strength, Weakness, Opportunity and Threat is shortened as SWOT. SWOT analysis recognizes and focuses on internal and external attributes in order to achieve company goals (Lupu, et al, 2016). These internal and external attributes are needed by the company so that it can be used by the company to help identify, evaluate and choose the most appropriate strategy. The company's strengths and weaknesses will be used to formulate strategies so that the company is superior in business competition. SWOT analysis aims to analyze and evaluate business processes during corporate strategic planning using internal and external factors to achieve goals.

Internal analysis is used to identify the resources, capabilities, core competencies and competitive advantages inherent within the organization. External analysis identifies market opportunities and threats by observing competitor resources, the industrial environment, and also the general environment (Sammut-Bonnici & Galea, 2015). Internal strengths and weaknesses, external threats and

opportunities can be summarized as an SO Strategy or opportunity strength, ST Strategy or threat strength, WO Strategy or opportunity weakness, and WT Strategy or threat weakness (F. R. David, 2009a; Zhikanga, 2017). The aspects analyzed are aspects of marketing, finance, production, people, and resources.

To achieve organizational goals, SWOT can be implemented with strategic planning that can be implemented effectively and can help in gaining insight for solutions related to existing problems. Based on the factors identified, categorization was created in the SWOT matrix to describe the status of the company. (Shri et al., 2016)

Adjusting the main external and internal factors is the most difficult part of developing a SWOT matrix and requires common sense. The 4 types of strategies in the SWOT matrix are SO (Strength Opportunity), WO (Weakness Opportunity), ST (Strength Threat) and WT (Weakness Threat). The SO strategy utilizes the company's internal strengths to take advantage of external opportunities. Initially, an organization will carry out the WO strategy, ST strategy, or WT strategy in carrying out the SO strategy. If an organization is faced with a major threat, then the way to avoid it is to concentrate on opportunities (Purwoko, Gamal, & Kunhadi, 2016). The matrix is used to construct a SWOT analysis. The final results of the analysis will help the organization determine whether objectives, products, services, projects or targets are strategically suitable. The best strategic fit is when the internal environment is aligned with the external environment.

|  | Strength (S) Determine 5-10 internal strength factors             | Weakness (W) Determine 5-10 internal weakness factors                |
|--|---|--|
| Opportunity (O) Determine 5-10 external threat factors | SO STRATEGY<br>Use power to take<br>advantage of<br>opportunities | WO STRATEGY Overcome weaknesses by taking advantage of opportunities |
| Threat (T) Determine 5-10 external threat factors      | ST STRATEGY Use power to avoid threats                            | WT STRATEGY Minimize weaknesses and avoid threats                    |

Fig 2:- SWOT Matrix Source: David, 2009

WO strategy is to correct internal weaknesses in taking advantage of external opportunities. For example, internal weaknesses are a barrier: there may be a high demand in electronics to control the timing and amount of fuel injection into an engine (opportunity) car, but the parts manufacturer cannot have the technology needed to produce the tool (weakness). One of WO strategies is to obtain this technology through joint ventures with other companies that have competence in this aspect. Another alternative is to recruit and train people to have the required technical skills (Purwoko et al., 2016).

ST strategies use power to avoid or reduce the impact of external threats. This does not mean that strong organizations must always face direct threats in the external environment. For example, when Texas Instruments used the ideal legal entity (power) to get compensation and royalties of \$ 700 from a total of nine Japanese and Korean companies that violated memory chips and semi-conductor patents (threats). This is clearly a big threat for every industry that exists (Purwoko et al., 2016).

The WT strategy is a defensive tactic to reduce internal weaknesses and to avoid external threats. An organization with internal weaknesses and external threats is in a dangerous position and they may have to work to survive, merge, contract, claim bankruptcy, or choose liquidation (Purwoko et al., 2016).

There are eight steps involved in building a SWOT Matrix: (M. E. David, David, & David, 2016)

- List of key external company opportunities (O).
- List of key external threats companies (T).
- List of key internal strengths of the company (S).
- List the company's main internal weaknesses (W).
- ➤ Match internal strength with external opportunities, and record the SO strategies generated in the appropriate cells.
- ➤ Match internal weaknesses with external opportunities, and note the resulting WO strategy.
- ➤ Match internal strength with external threats, and note the resulting ST strategies.
- ➤ Match internal weaknesses with external threats, and note the resulting WT strategies.

## D. Strategic Planning and Action Evaluation Matrix (SPACE)

To identify the right set of strategies from the various options available, many tools can be used such as the Boston Consulting Group (BCG) matrix, the Internal External matrix (IE), the Competitive Profile Matrix (CPM) or the Strategic Planning and Action Evaluation (SPACE) matrix. There are four important elements which are also called the 4 quadrants of the SPACE Matrix. The first two elements are called internal dimensions consisting of Financial Strength (FS) and Competitive Advantage (CA) and the second element is called an external dimension consisting of Environmental Stability (ES) and Industry Strength (IS) (Yaprimadi, 2017).

The SPACE matrix is broken up into four quadrants where each quadrant suggests: (Cyrilla, Purwanto, Atabany, Astuti, & Sukmawati, 2016)

- Financial strength (FS): includes measures to demonstrate the company's financial strength, such as: profitability, liquidity, cash flow, economies of scale;
- ➤ Industry strength (IS): includes measures to demonstrate the strength of an industry or business enterprise, such as: potential for growth, technology, productivity, and capital intensity;
- Competitive strength (CA): includes steps to describe a company's competitive advantage, such as product

- quality, customer loyalty, market share, capital utility; and
- ➤ Environmental stability (ES): includes measures to reflect all of the company's environmental instabilities, including: technological changes, inflation rates, market changes, competition intensity.

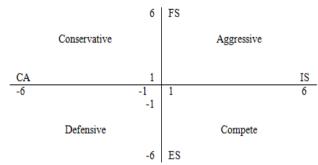


Fig 3:- SPACE Matrix Source: David, 2009

In the Cartesian coordinate system, the results include values summarized from four basic dimensions: Competitive Strength (CS) and Industry Strength (IS) - represent values on the X axis and range from 0 to -6 (CS) and from 0 to 6 (IS); and Financial Strength (FS) and Environmental Stability (ES) - reflect values on the Y axis which can range from 0 to -6 (ES) and from 0 to 6 (FS). Values generated from each of the four basic dimensions are obtained as the average value of all selected factors used for the evaluation of these dimensions (Borocki, Radisic, Sroka, Greblikaite, & Androniceanu, 2019).

Financial strength and competitive advantage are two factors that determine the company's strategic position, while industrial strength and environmental stability indicate the position of the characteristics of the overall industry strategy (Borocki, 2011; Harisudin, 2011).

## E. Quantitative Strategic Planning Matrix (QSPM)

Quantitative Strategic Planning Matrix (QSPM) is a technique that shows objectively which alternative strategies are the best. Internal and external factors are identified and evaluated as alternative strategies. QSPM call for subjective decisions, making decisions throughout the process raises the likelihood of a final strategic decision for the company. QSPM analysis functions to determine the application of different methods comparatively. The results of the QSPM analysis are strategies that can be applied by companies (Walukow & Pangemanan, 2015).

David (2009) states QSPM as a tool that allows strategists to evaluate objective alternative strategies based on the determinants of external and internal successes previously identified (F. R. David, 2009a). To analyze the QSPM data the main factors derived from the IFE and EFE Matrix and alternative strategies from the SWOT Matrix, SPACE Matrix, BCG Matrix, Matrix or IE. However, not all alternative strategies must be evaluated using QSPM (Ariendi, Daryanto, & Sanim, 2015).

The limitations of QSPM are 1) QSPM always requires assumptions based on assumptions and intuitive, 2) discussions between strategy planners, managers, and colleagues in the strategy formulation process are constructive and improve the quality of strategy decisions, 3) QSPM can only work with prerequisite information and the appropriate analysis must be based on. Building a QSPM involves a series of six steps: (M. E. David et al., 2016)

- ➤ Make a list of the main external and internal factors. creating QSPM is to produce a list of external opportunities / major threats and internal strength / weakness factors that are determined as the most important for the company to consider in choosing among viable alternative strategies.
- Assign important weights to external and internal factors. creating QSPM requires that weights be assigned to show the perceived relative importance of each external and internal factor to be successful in a given industry. Its weight is industry based, not company based.
- ➤ Make a list of potential strategies. Step 3 requires identifying potential alternative strategies to consider and putting them in the top line in QSPM, as Strategy 1, Strategy 2, etc. Various alternative strategies usually come from a SWOT analysis.
- Assign an attraction score for each strategy. Developing QSPM is setting an attractiveness score (AS) for each strategy. For example the AS value shows the relative attractiveness of the three strategies, given each of the external or internal factors, where 3 = most interesting, 2 = somewhat interesting, 1 = least attractive. The scale for the US can range from 1 to 2 to 1 to 10 depending on marketer preferences. If 10 strategies are being examined, usually a scale of 1-10 is used.
- ➤ Calculate the total attractiveness score (AS). Developing and using QSPM requires calculating the total attractiveness score (TAS), which is determined by multiplying the weight (ie the relative importance of each factor) by the AS (ie the attractiveness of each strategy), to produce an increase (more from SA alone) measures the relative attractiveness of each strategy vs. other strategies that are being examined.
- Add up the traction and TAS. Developing QSPM is to add up the AS and TAS columns for each strategy respectively. The higher the sum of the total attractiveness scores (STAS) for a particular strategy, the more attractive the strategy is, compared to other alternative strategies being considered.

| Alternative Strategies |        |            |     |            |     |  |
|------------------------|--------|------------|-----|------------|-----|--|
|                        |        | Strategy 1 |     | Strategy 2 |     |  |
| Key Factors            | Weight | AS         | TAS | AS         | TAS |  |
| Internal Key           |        |            |     |            |     |  |
| Factors                |        |            |     |            |     |  |
|                        |        |            |     |            |     |  |
|                        |        |            |     |            |     |  |
|                        |        |            |     |            |     |  |
| External Key           |        |            |     |            |     |  |
| Factors                |        |            |     |            |     |  |
|                        |        |            |     |            |     |  |
|                        |        |            |     |            |     |  |
|                        |        |            |     |            |     |  |
| Total amount of        | 1.0    |            |     |            |     |  |
| attractiveness         |        |            |     |            |     |  |
| score                  |        |            |     |            |     |  |

Table 5:- Quantitative Strategic Planning Matrix (QSPM) Source: David, 2009

A positive feature of QSPM is that a number of strategies can be evaluated at the same time or in a set of strategies. Another positive characteristic is that strategist needs the QSPM analysis to integrate the external and internal factors involved in the decision making process. QSPM can be used by small and large organizations, for profit and non-profit. Unlike a SWOT analysis, marketers assign numerical values to reveal decisions about the relative importance of factors and the relative attractiveness of strategies which QSPM analysis enables (M. E. David et al., 2016).

## III. DISCUSSION

SWOT analysis (Strengths, weaknesses, opportunities and threats) is a planning methodology that helps organizations build strategic plans to meet objectives, improve operations, and keep business relevant. During the SWOT analysis activity, the organization identifies strengths, weaknesses, opportunities and threats associated with organizational growth, products and services, business objectives and market competition.

SWOT analysis can be used in a variety of situations, not limited by certain industries or departments. SWOT can be used to explore new businesses, products, acquisitions or mergers. The use of SWOT can help businesses change projects, plan ways to invest money, understand participants, and identify the organization's mission. SWOT can also help nonprofit companies and government agencies manage or allocate grants, donations, and funding. A range of business situations associated with everything from information technology, marketing to operations can be applied to a flexible tool that is SWOT analysis.

The data used in the SWOT analysis are taken from the data collection stage using IFE (Internal Factor Evaluation) analysis and EFE (External Factor Evaluation) analysis. The IFE matrix is used as a tool to identify dominant internal factors by weighting and scoring to obtain a weighted score on factors that can be classified as strengths and weaknesses of the company. The EFE matrix

is used as a means of identifying dominant external factors by weighting and scoring to obtain a weighted score on factors that can be classified as threats and opportunities for the company.

SWOT is intended as a starting point for discussion and cannot in itself show managers how to achieve competitive advantage. This requires another tool to obtain a list of alternative strategies that can be applied by the organization. The SPACE (Strategic Planning and Action Evaluation) matrix is a management tool used to analyze companies. This is used to determine what type of strategy the company must do. The SPACE matrix focuses on the formulation of strategies especially those related to an organization's competitive position.

Two internal strategic dimensions and two external strategic dimensions to assign the organization's strategic posture within the industry are what SPACE matrix analysis functions on. The SPACE matrix is based on four areas of analysis, namely, financial strength (FS), competitive advantage (CA), environmental stability (environmental stability (ES), and industrial strength (IS strength). The SPACE matrix can help find a strategy. But if 2-3 strategies are found, then we need another tool to determine which is the best strategy. QSPM (Quantitative Strategic Planning Matrix) can be used as a decision making tool.

QSPM (Quantitative Strategic Planning Matrix) is a strategic management oncoming for assessing strategies. When a company executive thinks about what to do and where the company is going, a list of prioritized strategies will be made. But this process is very subjective and intuitive. Therefore, the best strategy which objectively chosen using input from other management methods and some easy calculations is what QSPM seeks. In general, variety of other strategies may be included within the QSPM analysis. QSPM is an excellent tool to assimilate and prioritize important internal, external and competitive information needed to develop strategic and effective plans. This provides a clear framework for the priority setting process.

### IV. CONCLUSION

SWOT analysis is one way to formulate strategies for organizations. SWOT analysis identifies strengths, weaknesses, opportunities and threats for organizations to assist in making strategic plans and decisions. SWOT is a simple but comprehensive way to assess positive and negative forces inside and outside the organization. This can help the organization to be better prepared to act effectively. The SWOT analysis has four angles that ask the organization to move in a balanced manner throughout the section. SWOT analysis itself has limitations in its use, therefore we need other tools that can support the process. Tools that can be used include the SPACE Matrix to find out the types of strategies that the organization must carry out. In addition, the tool used to determine which strategy is

best to be pursued by the organization is QSPM. This decision making is objective with easy calculations.

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