CHAPTER 2

LITERATURE REVIEW AND THEORETICAL BACKGROUND

Chapter 2 reviews the literature review and theoretical background.

2.1. Literature Review

In this section, previous research of SWOT Analysis on manufacturing Sector is provided.

2.1.1. Previous Research of SWOT Analysis on Manufacturing Sector

Shinno et.al (2006) has conducted SWOT analysis to create effective industrial strategy planning for the machine tool industry which can be carried out by applying the proposed method. The SWOT key words were collected from the related research reports published on the machine tool industry in Japan. In order to proposed quantitative SWOT analysis, the AHP method is combined into weighted score stage in SWOT analysis.

Terblanche (2008) used SWOT analysis to provide an overview of the pressures experienced by the pharmaceutical industry in producing new drugs. SWOT analysis was used to analyze factors with regard to the ability of pharmaceutical industry to produce new drugs.

Milosevic (2010) has conducted SWOT analysis to identify potential risks for both the investor and the contractor that are facing current market economy, and when private interests provide significant financing, also time and budget limitation on construction. This research showed each SWOT Analysis components from the point of view of both investor and the contractor in the planning, contracting, and construction phases of a project.

Dharmaraj et.al (2011) has conducted SWOT analysis on car industry. This study aims to cover the important pre-purchase and post-purchase behavior of consumers relating to the car buying decisions. The method used was SWOT analysis through Test Analysis of Friedman to find the more influencing factors towards the car manufacturers and service provided by the dealers to determine the perceptual ranking. The identification of SWOT component was limited to the pre-purchase and post-purchase behavior of consumers in car buying decisions. Lee (2011) has used SWOT analysis to assess the comprehensive strategic of the overall conditions around the Korean Automobile Industry by analyzing its key areas. While, the Porter's Five Forces model has used to competitive analysis of the Korean Auto Parts Industry. This research aims to give some suggestions for Korean automobile industry continuous growth in the global markets.

Another research with SWOT topic was also conducted by Zardeini and Aghdaie (2011). The aim of this research is to analyze the export of Persian handmade carpet which is facing decrease the share of Persian handmade carpet in foreign markets in recent decade by using the SWOT matrix. The Opportunities, Threats, Strengths and Weaknesses analysis was limited to the available empirical and library studies about handmade carpet industry.

Saghaei (2012) has been used SWOT analysis and QSPM models. This research aims to methodize an appropriate strategy for a lubricant manufacturing company. The SWOT identification process was regarding technological innovation, feasibility study regarding application of current and potential production of company by customers, and the ability of company in production. Based on the acquired data, EFE and IFE matrixes were calculated and the results were analyzed on diagrams. These results were also confirmed by QSPM matrix.

2.1.2. Current Research

The Author has conducted research by SWOT analysis approach in CV. Ash Shaff Offset which an *industri grafika* at Yogyakarta, Indonesia. The objective of this research is to determine the alternative business development strategy for CV. Ash Shaff Offset. The result of SWOT analysis became the basis to develop strategy. While, the IPA used to evaluate the dissatisfaction of customers (services, product quality) and price as sensitive factor in the middle of intense competition. The result of IPA was included to internal analysis during the input stage of strategic formulation.

2.1.3. Differences Between Previous and Current Research

The differences between previous and current research presents in Table 2.1.

| Author | Research Title | Research Object | Research Objective | Method | Analysis Object | | |
|----------------|----------------------------|--------------------|---|----------------|----------------------------------|--|--|
| (Shinno et. | Quantitative SWOT | Machine tool | To create effective industrial strategy | AHP method | The available key words on | | |
| al, 2006) | analysis on global | industry in Japan. | planning for the machine tool industry which | combine into | research reports published on | | |
| | competitiveness of machine | | can be carried out by applying the proposed | weighted score | the machine tool industry in | | |
| | tool industry. | | quantitative SWOT | stage in SWOT | Japan. | | |
| | | | | analysis | | | |
| (T)) | | | T 11 1 1 1 1 1 | OWOT 1 | | | |
| (Terblanche, | New pharmaceutical | Pharmaceutical | To provide an overview of the pressures | SWOT analysis | Factors with regard to | | |
| 2008) | product development: | industry | experienced by the pharmaceutical industry | | pharmaceutical industry ability | | |
| | Barriers to overcome and | | in producing new drugs | | to produce new drugs | | |
| | opportunities to exploit | | | | | | |
| (Milosovic | Practical Application of | Construction | To identify potential risks for both the investor | | The point of view of both | | |
| | | Construction | To identify potential risks for both the investor | SWOT Analysis | | | |
| 2010) | SWOT Analysis in the | Project | and the contractor that are facing current | | investor and contractor point in | | |
| | Management of a | | market economy, and when private interests | | the planning, contracting, and | | |
| | Construction Project | | provide significant financing, also time and | | construction phases of a | | |
| | | | budget limitation on construction. | | project | | |
| | | | | | | | |

| Table 2.1. | Differences | between | Previous | and | Current | Research |
|------------|-------------|---------|----------|-----|---------|-----------|
| | | Notheon | 11011040 | ana | ounone | Resourser |

| Author | Research Title | Research Object | Research Objective | Method | Analysis Object |
|---------------|------------------------|-----------------|---|-----------------|---|
| (Dharmaraj | Car Industry: SWOT | Car Industry | To cover the important pre-purchase | SWOT analysis | Pre-purchase and post-purchase |
| et.al, 2011) | Analysis | | and post-purchase behavior of | through | behavior of consumers in car buying |
| | So S | | consumers relating to the car buying decisions. | Friedman's Test | decisions. |
| (Lee, 2011) | The Rise of Korean | Korean | To give some suggestions for Korean | SWOT analysis, | Key areas of comprehensive strategic of |
| | Automobile Industry: | Automobile | automobile industry continuous growth | Porter's Five | the overall conditions around the Korean |
| | Analysis and | Industry | in the global markets | Forces model | Automobile Industry |
| | Suggestions. | | | | |
| (Zardeini and | A SWOT Analysis of | Persian | To analyze the export of Persian | SWOT matrix | The available key words on empirical and |
| Aghdaie, | Persian Handmade | handmade carpet | handmade carpet which is facing | | library studies about handmade carpet |
| 2011) | Carpet Exports | industry | decrease the share of Persian | | industry |
| | | | handmade carpet in foreign markets in | | |
| | | | recent decade | | |
| | | | | | |
| (Saghaei, | Strategic Planning For | Lubricant | To methodize an appropriate strategy | SWOT analysis | Technological innovation, feasibility study |
| 2012) | A Lubricant | Manufacturing | for a lubricant manufacturing company. | and QSPM | regarding application of current and |
| | Manufacturing | Company | | models | potential production of company by |
| | Company | | | | customers, and company's ability in |
| | | | | | production |

Table 2.1. Differences between Previous and Current Research Continued

| Author | Research Title | Research Object | Research Objective | Method | Analysis Object |
|----------------------|------------------------------------|--------------------|------------------------------|-----------------|------------------------------------|
| Current | Proposed Business Development | CV. Ash- | To determine business | Importance- | External Forces, The Porter's Five |
| Research | Strategies by SWOT Analysis In CV. | Shaff Offset | development strategy for CV. | Performance | Forces model, Value chain analysis |
| (Jovita | Ash-Shaff Offset | | Ash Shaff Offset | Analysis (IPA), | of CV. Ash Shaff Offset. |
| Devilasari, 2013) | S I | | | SWOT analysis | |
| | | | | | |

Table 2.1. Differences between Previous and Current Research Continued

2.2. Theoretical Background

In this section reviews the theoretical background related to the research.

2.2.1. Industri Grafika Definition

According to Kamus Besar Bahasa Indonesia (KBBI), industri defined as kegiatan memproses atau mengolah barang dengan menggunakan sarana dan peralatan. While, Oxford dictionary defines industry as economic activity concerned with the processing of raw materials and manufacture of goods in factories. Later on, the word of Grafika (KBBI) defined as *ilmu tentang cetak-mencetak* (pada kertas atau logam); segala cara pengungkapan dan perwujudan dalam bentuk huruf, tanda, dan gambar yg diperbanyak melalui proses percetakan guna disampaikan kepada khalayak. Through those definitions, can be concluded that *industri grafika* defined as economic activity concerned with embodiment in the form of letters, signs, and images that propagated through the printing process in order to be delivered to the audience. BPS Yogyakarta itself is categorizing *industri grafika* in industrial major group as Paper and Paper Product/Publishing, Printing & Reproduction of Recorded Media.

2.2.2. Customer Satisfaction

Customer satisfaction is defined as the extent to which a perceived performance of a product matches the expectations of buyer Kotler (2001). Customer satisfaction is affected from several factors and it also has an influence towards business development.

A. Customer Defined Value and Customer Satisfaction

According to Kotler and Amstrong (2001) in deciding which products and services to buy, consumers rely on their perception of relative value. Customer value is the difference between the values the customer gains from owning and using a product and the costs of obtaining and using the product. Customer satisfaction depends on perceived performance of a product in delivering value relative to the expectations of buyer. If the performance of product falls short of expectations, the buyer is dissatisatisfied. If performance matches or exceeds expectations, the buyer is satisfied or delighted.

Kotler and Amstrong (2001) Customer satisfaction is closely linked to quality. In recent years, many companies have adopted total quality management (TQM) programs, designed to constantly improve the quality of their products, services, and marketing processes. Quality has a direct impact on product performance and hence on customer satisfaction.

(Goetsch and Davis, 1997) As total quality setting, quality is defined by the customer. It is important for organizations to understand how customers define value. The value of a product or service is the sum of the perceptions of the customer following factors :

- 1. Product/service quality
- 2. Service provided by the organizations
- 3. The personnel of organization
- 4. The image of organization
- 5. Selling price of the product/service
- 6. Overall cost of the product/service

Giorgio Merli on Goetsch and Davis (1997) also stated, some points about customer-defined quality:

- 1. The customer must be the top priority of organization. The survival of organization depends on the customer.
- 2. Reliable customers are the most important customers. A reliable customer is one who buys repeatedly from the same organization. Customers who are satisfied with the quality of their purchases from an organization become reliable customers. Therefore, customer satisfaction is essential.
- 3. Customer satisfaction is ensured by producing high-quality products. It must be renewed with every purchase. This cannot be accomplished if quality, even though it is high, is static. Satisfaction implies continual improvement. Continual improvement is the only way to keep customers satisfied and loyal.

B. Customer Satisfaction, Customer loyalty and Profitability

According to Fen and Lian (2007) quality and customer satisfaction have long been recognized as playing a crucial role for success and survival in today's competitive market. This is inline with Hill, et. al (1999) which stated that competitiveness and profitability are maximized in the long run by doing best what matters most to customers. This is mainly because it is far less costly to keep existing customers than to win new ones. High rates of customer decay therefore have to be countered by high sales and marketing spend to attract new customers unless the organization is to shrink in size. Conversely, if customer decay is reduced but the rate of customer acquisition is maintained, the company will grow. The key to increase customer retention and reduce customer decay is by increasing customer satisfaction Hill, et. al (1999).

In addition, (Fen and Lian, 2007) the importance of maintaining the customer loyalty through customer satisfaction can be seen as follows:

- 1. It is more expensive to win new customers than to keep existing ones (Ennew and Binks, 1996; Hormozi and Giles, 2004).
- 2. Customer replacement costs, like advertising, promotion and sales expenses, are high and it takes time for new customers to become profitable (Athanassopoulos et. al, 2001).
- Increase of retention rate implied greater positive word of mouth, decrease price sensitivity and future transaction costs, and leading to better business performance (Appiah-Adu, 1999; Reichheld and Sasser, 1990; Fornell, 1992; Ennew and Binks, 1996; Bolton, 1998; Ryals, 2003).

C. Product Quality

Product quality is the main factor in affecting customer satisfaction. According to Kotler and Armstrong (2001) defined product as anything that can be offered to a market for attention, acquisition, use or consumption and that might satisfy a want or need. While, according to Stanton (1996) on Wiliam ()a product is a set of tangible and intangible attributes, including packaging, color, price quality and brand plus the services and reputation of the seller. Products fall into two broad classess based on the types of consumers that use them (Kotler and Armstrong, 2001) :

- 1. Consumer product : product bought be final consumer for personal consumption.
- 2. Industrial product : product bought be individuals and organizations for further processing or for use in conducting a business.

According (Kotler and Armstrong, 2001) the meaning of product quality is the ability of a product to perform its functions, it includes the overall product durability, reliability, precision, ease of operation and repair, and other valued attributes. While, (Garvin, 1988) proposed eight dimensions of product quality: 1. Performance: it refers to the primary operating characteristics of a product.

- 2. Features: the secondary characteristics that supplement the basic functioning of product.
- 3. Reliability: the probability of a product failing within a specified period of time.
- 4. Conformance: the degree to which design and operating characteristics of a product match with pre-established standards.
- 5. Durability: it is a measure of product life, having both economic and technical dimensions.
- 6. Serviceability: it refers to speed, courtesy and competence of repair.
- 7. Aesthetics: it refers to as to how a product looks, feels, sounds etc.
- 8. Perceived quality: it refers to assessment of standards relying on indirect measures when comparing product brands.

D. Service Quality

The other main factor which affects customer satisfaction is service quality. Service quality is a measure of how well the service level delivered matches customer expectations. Delivering quality service means conforming to customer expectations on a consistent basis (Parasuraman et al.,1985) on (Aydin and Yildirim, 2012). SERVQUAL (Service Quality Model) as a generic instrument to measure service quality has been developed by Parasuraman et al. In 1985. (Aydin and Yildirim, 2012) SERVQUAL defined as 22-item instrument for assessing customer perceptions of service quality in service and retailing organizations. It consists of five factors of functional quality dimension and contains a two-part 22 scale items, there are:

- 1. Tangible: physical facilities, equipment, appearance of personnel, communication material.
- 2. Reliability: ability to perform the promised service dependably and accurately.
- 3. Responsiveness: the willingness to help customers and provide prompt service.
- 4. Assurance: the knowledge and courtesy of employees and their ability to inspire trust and confidence.
- 5. Empathy: the caring, individualized attention provided to customers.

(Aydin and Yildirim, 2012) The service quality dimensions which include 22items are as follows:

- 1. Tangibles
 - Q1: Modern looking equipment
 - Q2: Physical facilities
 - Q3: Employees good-looking
 - Q4: Materials
- 2. Reliability

Q5: Promise to do something by a certain time

Q6: A sincere interest in solving customer's problem

Q7: Perform the service right the first time

Q8: Provide the service at the time of promise

Q9: Insist on error free records

3. Responsiveness

Q10: Employees tells customers exactly when services will be performed.

Q11: Employees will give prompt service to customer.

Q12: Employees will always be willing to help customers.

Q13: Employees will never be too busy to respond to customers' requests.

4. Assurance

Q14: The behavior of employees will instill confidence in customers

Q15: Customers will feel safe in transactions

- Q16: Employees will consistently courteous with customers
- Q17: Employees will have the knowledge to answer customers' questions

5. Empathy

Q18: Give customers individual attention

Q19: Operating hours convenient to all their customers

Q20: Employees give customers personal attention

Q21: Have customer's best interests at heart

Q22: Understand the specific needs of customers

E. Price

One of factor which affect the value of a product or service is the perceptions towards selling price of the product/service (Goetsch and Davis, 1997). (Kotler and amstrong 2001) price defines as the amount of money charged for a product or service. As customer point of view, the performance of product must be match to the money charged to the product. If the performance of product falls short of expectations, the buyer is dissatisfied.

(Kotler and Armstrong, 2001) argues that there are two factors to consider when setting prices, there are:

- Internal factors affecting pricing decision
 Internal factors affecting pricing include the company's marketing objectives, marketing mix strategies, costs, and organizational considerations.
- 2. External factors affecting pricing decision

External factors that affect pricing decision include the nature of the market and demand, competition, and other environmental elements.

According to (Kotler and Armstrong, 2001), there are four types of objectives in determining prices, there are:

1. Survival objectives

Companies set survival as their major objectives if they are troubled be too much capacity, heavy competition, or changing consumer wants.

2. Current profit maximization objectives

Current profitmaximization as their pricing goal. The company estimate what demand and costs will be at different prices and choose the price that a will produce the maximum current profit, cash flow, or return on investment.

- Market share leadership objectives
 The company believe that the company with the largest market share will enjoy the lowest costs and highest long-run profit.
- 4. Product quality leadership objectives

This normally calls for charging a high price to cover higher performance quality and the high cost of R&D.

While, according to Stanton (1998), empirical indicators characterize the price is as follows:

- 1. The price offered afforded by the customer.
- 2. The price offered is lower than prices of competitor.
- 3. The price offered in accordance with the quality of the product.

2.2.3. Questionnaires design

As quantitative research, questionnaires becomes the main instrument. Questionnaires define as list of questions / statements that must be answered or filled in by the respondent (Hill, 1996).

A. Types of Question

(Hill, 1996) The main distinction between types of question is between closed and the open question. In order to produce quantitative answers for statistical analysis, use mainly closed questions. Closed questions give respondents a fixed selection of answers to choose. Closed questions could be dichotomous (with only two alternative answers possible), multiple choice (enabling respondents to choose from any number of possible answers).

B. Rating Scales

(Hill, 1996) There are several types of rating scales, there are :

- a. Likert scales : designed to measure degrees of agreement with a statement (agree strongly : 5, agree slightly : 4, neither agree or disagree : 3, disagree slightly : 2 disagree strongly : 1).
- b. Semantic differential scales : display an attitude battery between two opposing words.
- c. Numerical rating scales : requires respondents to ascribe a mark, out of 10.
- d. Ordinal scales : requires respondents to indicate the relative strength of his or her attitude to the different criteria by ranking the criteria.
- e. SIMALTO scales : used to collect data on customer priorities and on their range of expectations, from ideal to unacceptable levels.

C. Validity Test

(Sekaran et. Al, 2010) The use of better instruments will ensure more accuracy in results, which in turn will enhance the scientific quality of research. Hence, we need to asses the goodness of the measures developed through reliability and validity. Validity is a test of how well an instrument that is developed measures the particular concept it is intended to measure. (Sekaran et. Al, 2010) There are several types of validity, they are :

- 1. Content validity : ensures that the measure includes an adequate and representative set of items that tap the concept.
- 2. Face validity : indicates that the items that are intended to measure a concept, do, on the face of it, look like they measure the concept.
- 3. Criterion-related validity : is established when the measure differentiates individuals on a criterion it is expected to predict.

- 4. Concurrent validity : is established when the scale discriminates individuals who are known to be different; that is, they should score differently.
- 5. Predictive validity : indicates the ability of the measuring instrument to differentiate among individuals with reference to a future criterion.
- 6. Construct validity : testifies to how well the results obtained from the use of the measure fit the theories around which the test is designed.
- 7. Convergent validity : is established when the scores obtained with two different instruments measuring the same concept are highly correlated,
- 8. Discriminant validity : is established when, based on theory, two variables are predicted to be uncorrelated, and the scores obtained by measuring them are indeed empirically found to be so.

(Sekaran et. Al, 2010) The validity can be established through :

- 1. Correlational analysis (concurrent, predictive, convergent, discriminant, validity)
- 2. Factor analysis (construct validity)
- 3. The multitrait

(Ghozali, 2006) Tingkat validitas dapat diukur dengan cara membandingkan nilai r hitung (korelasi setiap item dan total item) dengan nilai r tabel dengan ketentuan untuk defree of freedom (df) = n-k, dimana n adalah jumlah sampel yang digunakan dan k adalah jumlah variabel independennya. (Sugiyanto, 2007) Kriteria dalam membandingkan nilai koefisien validitas hasil dengan nilai koefisien korelasi Pearson / tabel Pearson (r tabel) adalah:

- a. Instrumen valid, jika r hitung \geq r tabel
- b. Instrumen tidak valid, jika r hitung < r tabel

D. Reliability Test

Reliability is a test of how consistently a measuring instrument measures whatever concept it is measuring (Sekaran et. Al, 2010). It indicates the extent to which it is without bias (error free) and hence ensures consistent measurement across time and across the various items in the instrument. The reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the "goodness" of a measure (Sekaran et. Al, 2010).

(Sekaran et. Al, 2010) reliability devided in two groups, they are :

- Stability of measures : the ability of a measure to remain the same over time - despite uncontrollable testing conditions or the state of the respondents themselves - is indicate of its stability and low vulnerability to changes in the situation.
- 2. Internal consistency of measures : indicative of the homogeneity of the items in the measure that tap the construct.

(Jogiyanto, 2008) Dalam menghitung reliabilitas konsistensi internal (Internal consistency of measures) dapat dilakukan dengan teknik separuh dipecah/ Split half. Teknik ini dapat dilakukan dengan membagi item-item yang akan di tes menjadi dua separuhan dan dapat dilakukan secara acak atau secara atas bawah atau secara ganjil-genap. Instrument tersebut reliable jika nilai koefisiensi konsistensi internal > 0,60. Kemudian, koefisiensi konsistensi internal dapat diperoleh dari Cronbach's coefficient alpha. Rumus Cronbach's coefficient alpha yaitu :

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\Sigma \sigma_{xi}^2}{\sigma_x^2} \right) \tag{2.1.}$$

Keterangan :

 $\begin{aligned} \alpha &= Cronbach's \ coefficient \ alpha \\ k &= jumlah \ pecahan \\ \Sigma \sigma_{xi}^2 &= total \ dari \ varian \ masing-masing \ pecahan \\ \sigma_x^2 &= varian \ dari \ total \ skor \end{aligned}$

2.2.4. Importance Performance Analysis (IPA)

According to Levenburg and Magal (2005), Importance-performance analysis was introduced by Martilla and James (1977) as a framework for understanding customer satisfaction as a function of both expectations related to salient attributes ("importance") and judgments about their performance ("performance"). By identifying attributes that should be emphasized or deemphasized, IPA guides the prioritization and development of action plans to minimize mismatches between importance and performance, resulting in improved operational efficiencies through resource redeployment recommendations (Graf et al., 1992; Slack, 1994) on (Levenburg and Magal, 2005).

Importance-performance analysis begins with identifying the critical elements to be evaluated and this list is based on a thorough literature review or qualitative research (Martilla and James, 1977; Graf et al., 1992; Duke and Mount, 1996; Skok et al., 2001) on (Levenburg and Maghal, 2005). Further, a survey instrument is developed to collect importance and performance ratings on each element from the sample, it is often using Likert or numerical scales (Skok et al., 2001) on (Levenburg and Maghal, 2005).

The IPA is followed two methodological streams (Levenburg and Maghal, 2005), they are:

- Gap analysis (IPA Gap) : gap analysis focuses on identifying performance Gaps, which are typically measured as performance minus importance (O'Neill et al., 2001; Skok et al., 2001; Shaw et al., 2002).
- 2. IP mapping : it involves plotting the mean ratings for importance and performance on a two-dimensional grid to produce a four-quadrant matrix that identifies areas needing improvement as well as areas of effective performance (Graf et al., 1992, Skok et al., 2001).

According to (Levenburg and Maghal, 2005) the IP map (See Figure 3.1.) consist of 4 quadrants:

1. Quadrant I

(High Importance/Low Performance) is labeled "Concentrate here." Elements located in this quadrant represent key challenges that require immediate corrective action and should be given top priority (Graf et al., 1992).

2. Quadrant II

(High Importance/High Performance) is labeled "Keep up the good work," contains elements that are strengths to the organization, and calls for a maintenance posture (Graf et al., 1992).

3. Quadrant III

(Low Importance/Low Performance) do not represent a threat to the organization (Barsky and Labagh, 1992), it may be candidates for discontinuation of resources/effort (Crompton and Duray, 1985). This quadrant is labeled "Low priority".

4. Quadrant IV

Quadrant IV (Low Importance/High Performance), labeled as "Possible overkill," contains elements that are insignificant strengths to the organization and suggest areas from which resources could be diverted elsewhere.



Figure 2.1. Importance Performance Matrix (Yang, Chou, and Ding, 2011)

2.2.5. SWOT Analysis

According to Zardeini (2011) SWOT framework originally introduced in 1969 by Harvard researchers. During the 1970s the SWOT framework became popular because of its inherent assumption that managers can plan the alignment of a firm's resources with its environment. At the start of the twenty-first century, SWOT is alive and well as the recommended framework for case analysis in many of the leading strategic management and marketing texts (Milorad, et. al, 2009) on Zardeini (2011) .(Nikolaou, etal, 2011) on Zardeini (2011), SWOT method with analyzing the strengths and weaknesses as internal factors and opportunities with threats as the external factors, suggest strategies, for organizations, this strategies divide in four group such as, SO (using the strength for benefit from opportunities), WO (using the opportunities vulnerability), WT (eliminating the weaknesses for reducing vulnerability against threats).

2.2.6. Strategic Management

According to David (2005) strategic management can be defined as the art and science of formulating, implementing, and evaluating cross-functional decisions that enable organizations to achieve its objectives. Strategic management focuses on integrating management, marketing, finance/accounting, production/operations, research and development, and computer information systems to achieve organizational success. The purpose of strategic management is to exploit and create new and different opportunities for tomorrow; long-range planning, in contrast, tries to optimize for tomorrow the trends of today.

A. Strategic-management process

(David, 2005) The strategic-management process consists of :

- Strategy formulation: includes developing a vision and mission, identifying an organization's external opportunities and threats, determining internal strengths and weaknesses, establishing long-term objectives, generating alternative strategies, and choosing particular strategies to pursue.
- Strategy implementation: often is called the action stage of strategic management. Implementing strategy means mobilizing employees and managers to put formulated strategies into action.
- 3. Strategy evaluation: the final stage in the strategic management. Three fundamental strategy-evaluation activities are: reviewing external and internal factors that are the bases for current strategies, measuring performance, taking corrective actions.

B. Level of Strategies

David (2005) divides two level of strategies based on large and small firms. Level of strategies in small firms :

- 1. Company level : owner or president
- 2. Functional level : finance, marketing, R&D, manufacturing, information systems, and human resource managers
- 3. Operational level : plant managers, sales managers, production and department managers

C. Types of Strategies

According to David (2005), the alternative strategies that an enterprise could pursue can be categorized into four strategies and into twelve actions (Table 2.2). While according to Generic Strategies of Michael Porter, there are three types of strategies (Table 2.3).

| Strategy | Strategy | Definition |
|-----------------|------------------------|--|
| Category | | |
| Integration | Forward Integration | Gaining ownership or increased |
| Strategies | | control over distributors or retailers |
| | Backward Integration | Seeking ownership or increased |
| | | control of a firms's suppliers |
| | Horizontal Integration | Seeking ownership or increased |
| | \//tm | control over competitors. |
| Intensive | Market Penetration | Seeking increased market share |
| Strategies | | for present product of services in |
| | | present markets through greater |
| 1. 6 | | marketing effort |
| \sim | Market development | Introducing present products of |
| | | services into new geographic area |
| | Product development | Seeking increased sales be |
| | | improving present products of |
| | | services or developing new ones. |
| Diversification | Concentric | Adding new but related products |
| strategies | diversifications | or services |
| | Conglomerate | Adding new, unrelated products or |
| | diversifications | services |
| | Horizontal | Adding new, unrelated products or |
| | diversifications | services for present customers |
| Defensive | Retrenchment | Regrouping through cost and asset |
| strategies | | reduction to reverse declining |
| | | sales and profit |
| | Divesture | Selling a division or parts of an |
| | | organizations |
| | Liquidation | Selling all of a company's assets, |
| | | in parts, for their tangible worth |

Table 2.2. Types of Strategies According to David (2005)

| Table 2.3. | Types | of S | Strategies | According | to | Generic | Strategies | of | Michael |
|------------|-------|------|------------|-------------|----|---------|------------|----|---------|
| | | | Por | ter (David, | 20 | 05) | | | |

| Strategy | Definition | | |
|----------------------------|-------------------------------|--|--|
| Cost leadership strategies | A strategy that pursuing cost | | |
| | leadership benefits | | |

| Strategy | Definition |
|----------------------------|------------------------------------|
| Differentiation strategies | A strategy that offer different |
| Differentiation strategies | degrees of differentiation |
| Eccus stratogies | A strategy that focused on certain |
| | industry segment |

Table 2.3. Types of Strategies According to Generic Strategies of MichaelPorter (David, 2005) Continued

D. Means for Achieving Strategies

In achieving strategies, there are several strategies that can support the implementation of strategies (David, 2005), they are :

1. Joint Venture/Partnering

Joint venture is a strategy that occurs when two or more companies form a temporary partnership or consortium for the purpose of capitalizing on some opportunity. Often, the two or more sponsoring firms forms a separate organization and have shared equity ownership in the new entity. While, partnering strategy takes many forms, including outsourcing, information sharing, joint marketing, and joint research and development. In addition outsourcing/ business-process outsourcing is a rapidly growing new business that involves companies taking over the functional operations, such as human resources, information systems, payroll, accounting, customer service, and even marketing of other firms.

2. Merger/Acquisition

A merger occurs when two organizations of about equal size unite to form one enterprise. An acquisition occurs when a large organization purchases (acquires) a smaller firm, or vice versa. When a merger or acquisition is not desired by both parties, it can be called take over.

E. Strategy Formulation

The framework to do the strategy formulation is provided in Figure and explain in the following section.



Figure 2.2. Strategy-Formulation Analytical Framework (David, 2005)

1. The Input Stage of Strategy Formulation

The input stage summarizes the basic input information needed to formulate strategies. According to (David, 2005) there are 3 tools in the input stage of strategy formulation, they are External Factor Evaluation (EFE) Matrix, Internal Factor Evaluation (IFE) Matrix and Competitive Profile Matrix (CPM). EFE Matrix consists of external key factor evaluation through weighted process, while IFE Matrix is concerned with internal key factor. Further, CPM identifies major competitors of a firms and its particular strengths and weaknesses in relation to a sample firm's strategic position.

However, the initial step of input stage is conducting external and internal environment analysis. This step as the basis to obtain the internal and external key factors in EFE and IFE Matrix.

a. External environment analysis

According to David (2005) the purpose of an external analysis is to develop a finite list of opportunities that could benefit a firm and treats that should be avoided. External forces can be divided into five broad categories (David, 2005):

- 1. Economics forces (i.e.: gross domestic product trend, inflation rates, federal government budget deficits, consumption patterns)
- 2. Social, Cultural, Demographic and Environmental forces (i.e.: childbearing rates, number of births, buying habits)
- 3. Political, governmental and legal forces (i.e.: government regulations, political action committees, number of patents)
- 4. Technological forces
- 5. Competitive Forces (competitive analysis porter's five-forces model)

According to Porter's five forces model of competitive analysis on David (2005), the composite of five forces are:

a. Rivalry among competing firms

Rivalry among competing firms is usually the most powerful of the five competitive forces. The strategies pursued by one firm can be successful only to the extent that they provide competitive advantage over the strategies pursued by rival firms.

- b. Potential entry of new competitors
 Whenever new firms can easily enter a particular industry, the intensity of competitiveness among firms increases.
- c. Potential development of substitute products In many industries, firms are in close competition with producers of substitute products in other industries.
- d. Bargaining power of suppliers

The Bargaining power of suppliers affects the intensity of competition in an industry, especially when there is a large number of suppliers, when there are only a few good substitute raw materials, or when the cost of switching raw materials is especially costly.

 Bargaining power of consumers
 When customers are concentrated or large, or buy in volume, their bargaining power represents a major force affecting the intensity of competition in an industry.

b. Internal environment analysis

All organizations have strengths and weaknesses in the functional areas of business. No enterprise is usually strong or weak in areas. Objectives and strategies are established with the intention of capitalizing upon internal strength and and overcoming weaknesses (David, 2005). One of method to analyze the internal strengths and weaknesses is Value Chain Analysis. According to Porter on (Lauridsen, 2011), value chain analysis defined as a "framework for identifying all these activities and analyzing how they affect both a company's costs and the value delivered to buyers". Value chain analysis documents activities involving inbound logistics, operations, outbound logistics, marketing, sales, accounting which are known as linkages across activities, focusing on "value flows across activities and in particular, how activities in one category impact the cost of other activities" (Santos et al., 2009) on (Lauridsen, 2011).



Figure.2.3. Porter's Value Chain Model (Lauridsen, 2011)

One of tools that commonly used to analyze is Ishikawa diagram. (Besterfield, 1994), Ishikawa diagram that referred to as an cause and effect diagram are used to investigate either a "bad" effect and to take action to correct the causes or a "good" effect and to learn those causes responsible. The effect is the quality characteristic that needs improvement. Causes are usually broken down into the major causes of work method, materials, measurement, people, and the environment. Management and maintenance are also sometimes used for the major cause.

c. IFE Matrix

After the external and internal key factors obtained, these key factors directly can be included into EFE and IFE matrix. The EFE matrix can be developed in five steps:

- 1. List key external factors as identified in the external-audit process.
- Assign to each factor a weight that ranges from 0.0 (not important) to 1.0 (very important).
- 3. Assign a 1 to 4 rating to each key external factor to indicate how effectively the firm's current strategies respond to the factor, where 4 = the response is superior, 3 = the response is above average, 2 = the response is average and 1 = the response is poor.
- 4. Multiply each factor's weight by it's rating to determine a weighted score.

5. Sum the weighted scores for each variable to determine the total weighted score for the organization.

d. EFE Matrix

The IFE matrix can be developed in five steps :

- 1. List key internal factors as identified in the internal-audit process.
- Assign to each factor a weight that ranges from 0.0 (not important) to 1.0 (very important).
- Assign a 1-to-4 rating to each factor to indicate whether that factor represents a major weaknesses (rating = 1), a minor weaknesses (rating = 2), a minor strength (rating = 3), or a major strength (rating = 4).
- 4. Multiply each the weight of factor by the rating to determine a weighted score.
- 5. Sum the weighted scores for each variable to determine the total weighted score for the organization.

2. The Matching Stage of Strategy Formulation

The matching stage is matching process of a organization between its internal resources and skills and the opportunities and risks created by its external factor. According to (David, 2005) there are 5 tools in the matching stage of strategy formulation, they are :

a. SWOT Matrix

The SWOT Matrix is a matching tool that helps to develop four types of strategies : SO (Strengths-Opportunities) strategies, WO (Weaknesses-Opportunities) strategies, ST (Strengths-Threats) strategies, and WT (Weaknesses-Threats).

- b. SPACE Matrix is a matching tool that develop strategies based its axes on internal dimensions (financial strength and competitive advantage), and external dimensions (environmental stability and industry strength).
- c. BCG Matrix : graphically portrays differences among divisions in terms of relative market share position and industry growth rate.
- d. IE Matrix : positions an organization's various divisions in a nine-cell display and involve plotting IFE total weighted scores on the x-axis and EFE total weighted scores on the y-axis.

e. Grand Strategy Matrix : is a matching tools which based on two competitive position and market growth.

a. SWOT Matrix

(David, 2005) There are eight steps involved in constructing a SWOT Matrix:

- 1. List the key external opportunities of firm
- 2. List the key external threats of firm
- 3. List the key internal strengths of firm
- 4. List the key internal weaknesses of firm
- 5. Match internal strengths with external opportunities, and record the resultant SO Strategies in the appropriate cell.
- 6. Match internal weaknesses with external opportunities, and record the resultant WO Strategies.
- Match internal strengths with external threats, and record the resultan ST Strategies.
- Match internal weaknesses with external threats, and record the resultant WT Strategies.



Figure 2.4. SWOT Matrix (David, 2005)

b. Internal-External Matrix

Further, David (2005) explains that the IE Matrix is based on two key dimensions : the IFE total weighted scores on the x-axis and the EFE total

weighted scores on the y-axis. The IE Matrix can be divided into three major regions that have different strategy implications (See Figure 5.5.), there are :

1. Cell I, II, IV (grow and build)

Intensive (market penetration, market development, product development), integrative (backward integration, forward integration, and horizontal integration), can be most appropriate for these.

2. Cell II,V, VII (hold and maintain)

Market penetration and product development

3. Cell VI, VII, IX (harvest or divest)



Figure 2.5. IE Matrix (David, 2005)

3. The Decision Stage of Strategy Formulation

The last stage of strategy formulation is the decision stage. According to (David, 2005), the steps involved in constructing a Quantitative Strategic Planning Matrix (QSPM) :

- 1. Make a list of the firm's key external opportunities/threats and internal strengths/weaknesses in the left column of the QSPM
- 2. Assign weights to each key external and internal factor.
- 3. Examine the stage 2 (matching) matrices, and identify alternative strategies that the organization should consider implementing.
- 4. Determine the Attractiveness Scores (AS)

Attractiveness Scores (AS) defined as numerical values that indicates the relative attractiveness of each strategy in a given set of alternatives. Attractiveness Scores (AS) are determined be examining each key external or internal factor, one at a time, and asking the question, "Does this factor

affect the choice of strategies being made?" if the answer to this question is yes, then the strategies should be compared relative to that key factor. The range of AS is 1 = not attractive, 2 = somewhat attractive, 3 = reasonable attractive, and 4 = highly attractive. If the answer of to the above question is no, indicating that the respective key factor has not effect upon the specific choice being made, then do not assign at attractiveness scores to the strategies in that set.

- Compute the Total Attractiveness Scores (TAT)
 Total Attractiveness Scores are defined as the product of multiplying the weight (step 2) by the attractiveness scores (step 4) in each row.
- 6. Compute the Sum Total Attractiveness Score (STAS).

Add total attractiveness scores in each strategy coloumn of the QSPM. The Sum Total Attractiveness Score (STAS) reveal which strategy is most attractive in each set of alternatives. Higher scores indicates more attractive strategies, considering all the relevan external and internal factor that could affect the strategic decisions.

| | | STRATEGIC ALTERNATIVES | | | | |
|---|--------|------------------------|------------|------------|--|--|
| Key Factors | Weight | Strategy 1 | Strategy 2 | Strategy 3 | | |
| Key External Factors | | | | | | |
| Economy | | | | | | |
| Political/Legal/Governmental | | | | | | |
| Social/Cultural/Demographic/Environmental | | | | | | |
| Technological | | | | | | |
| Competitive | | | | | | |
| Key Internal Factors | | | | | | |
| Management | | | | | | |
| Marketing | | | | | | |
| Finance/Accounting | | | | | | |
| Production/Operations | | | | | | |
| Research and Development | | | | | | |
| Management Information Systems | | | | | | |

Figure 2.6. QSP Matrix (David, 2005)