SWOT AND AHP ANALYSIS IN DETERMINING THE STRATEGY OF PRODUCT MARKETING EXCELLENCE IN COMPANIES

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Keywords: AHP, SWOT, Strategy,

Product Marketing,
Business.

ABSTRACT

The development of companies in the digital era especially product business in Indonesia is now increasingly prominent in complexity, competition, change, uncertainty so that the company's marketing and sales systems have not reached a maximal capacity due to the lack of superior and appropriate strategy. The researcher considered several alternatives using SWOT analysis and the Analytical Hierarchy Process (AHP) method to overcome these problems. The results showed that using the SWOT-AHP Analysis, it was found that the Strength parameter got the highest score by 53% and Opportunity parameter by 21%. Through the SWOT sub-criteria, it was found that the Strenghts priority were S2 (Registered patent) with a score of 0.53, S1 (New product) with a score of 0.29, S3 (Mechanical technology) with a score of respectively. While weaknesses 0.28, priority were W2 (in optimal product promotion) with a score of 0.63, W1 (product not widely known) with a score of 0.37. In addition, the Opportunities Priority were the order of O2 (market share's openness) with a score of 0.52, O3 (More efficient products) with a score of 0.29, and O1 (Switching products from manual to automatic) with a score 0.19. And finally, the Threats priority were T1 (raw material) with a score of 0.53, T2 (price competition) with a score of 0.26 and T3 (product fraud)

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with a score of 0.21. The top priority of leading marketing strategy are by increasing product quality by 39.3%, while the second priority is marketing cooperation by 21.4%, the third is the pricing strategy by 20.5% and the last is promotion by 14.8%.

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INTRODUCTION

The development of companies in the digital era especially product business in Indonesia is now increasingly prominent in complexity, competition, change, and uncertainty especially now that the Digital Age is making competition more complex (Till, 2015). This situation creates a fierce competition between companies, due to the increase of competition, product volumes and the rapid development of digital technology (Pershing, 2006). This forces the company to pay more attention to the environment whether it's internal or external that can affect the development of the company so that the company knows what marketing strategies and how should it can be applied in the company (Hutabarat, 2017).

This paper used some literature to support the research, for example paper with title Strengths, Weaknesses, Opportunities And Threats (SWOT) Analysis On Globacom Ltd (Bello, 2013). Strengths vs Strong Position: Rethinking the Nature of SWOT Analysis (Clardy, 2013). SWOT Analysis of strategic Position of Cycling Federation in Iran (Arefeh Jamshidi, 2012). Comparing AHP and ANP: An Application of Strategic Decisions Making in a Manufacturing Company (GÖRENER, 2012). SWOT Analysis (Lalitha Chavali, 2017). The Strategic Planning (SWOT) Analysis Outcomes And Suggestions According To The Students And The Lecturers Within The Distance Education System (Tugba Yanpar YELKEN, 2012). Coping with Imprecision in Strategic Planning: A Case Study Using Fuzzy SWOT Analysis (Hasan Hosseini-Nasab, 2011). Strategic Planning & SWOT Analysis (Kotnal, 2017). SWOT Balanced Scorecard (Rangkuti., 2012). Strategic development and SWOT analysis at the University of Warwick (Dyson, 2004). Combining SWOT and AHP Techniques for strategic planning (Osuna & Aranda, 2007). Prioritiation of e-Govrnment strategies using a SWOT-AHP analysis: the case of Turkey (Kahraman, Cetin, & Demirel, 2007). Studying strategies of sport management using SWOT technique (Leila Asayesh, 2013). Focused SWOT: diagnosing critical strengths and weaknesses (Ronen, 2009). A Synthesis on SWOT Analysis of Public Sector Healthcare Knowledge Management Information Systems in Pakistan (Arfan Arshad, 2017). A SWOT Analysis Tool For Indonesian Small and Medium Enterprise (Husni Thamrin, 2017). Development of Strategic Plan for Hotel Industries through Swot Analysis (C.Kiritharan nair, 2016). Importance-Performance Analysis based SWOT analysis (Boonyarat Phadermrod, 2016).

PT. X is a company that manufactures products for household needs (Sentot Patria. W. S, 2018). This company's marketing system has not reached its maximal capacity due to the lack of an appropriate strategy. This causes sales to not increase as expected. Until recently, the marketing division has made use of technology through websites, social media, digital marketing, mobile friendly, applications, innovation, and also through brochures (Arys Susanto, 2018). In addition, the company instills motto on employees to provide the best service. However, this marketing media cannot be utilized optimally without a good strategy. This study aimed to determine the right marketing strategy and competitiveness by identifying, assessing the company's internal factors and external environment that affect the company.

Based on the existing problems as mentioned above, the best and most appropriate way to determinate product marketing excellence strategy is by considering several alternatives using SWOT analysis and the Analytical Hierarchy Process (AHP) method.

This Paper is organized as follows. Section 2 is review about the basic ship theory. Section 3 would be about the result of the research and section 4 discussion of research. Finally, while in section 5 we would present the conclusions of this paper.

MATERIAL AND METHODS

Developmental Strategy Marketing Strategy

The success of a predetermined strategy is largely determined by how much the level of suitability of the strategy is with changes in the environment, competitors, and organizational situation factors in formulating a strategy. In Conditions of Strong Competition Position Strengthens the Power of Development.

- a. Type of Development Strategy
 - To find out its competitiveness in every power, Porter advises organizations to use one of three strategies: differentiation, cost leadership, or focus. Organizational characteristics that can be associated with each strategy.
 - Differentiation Strategy
 - New competitors through customer loyalty that are difficult to overcome.
 - 3. Focus Strategy Leadership Strategy
- b. Formulating a Development Strategy

An effective way to formulate a strategy is the five strengths and development strategies. Researching a number of organizations

and stating that business-level strategies are the result of five developmental strengths within the organization. Five Porter Development strengths. The development forces that exist within the organization and show the influence of internet technology on each power.

These forces help determine the position of the organization versus its competitors in the industrial world.

- 1. New potential competitors.
- 2. Bargaining power of buyers
- 3. The bargaining power of suppliers
- 4. Threat of replacement output
- 5. Inter-competitor competitors

Marketing strategy is a way to achieve goals by knowing where we are and what goals will be achieved.

- The marketing mix is a combination of marketing tools that can be used to affect and retain consumers (Ussahawanitchakit, 2011).
 - 1. Product
 - 2. Price
 - 3. Place
 - 4. Promotion
- b. Production Strategy

Production strategy is an effort to manage the use of resources or factors of production such as labor, machinery, equipment, raw materials and so on optimally in the process of transforming raw materials and labor into various products or services (Volkova, 2015).

- 1. Selection
- 2. Planning
- 3. Operation
- 4. Supervision
- 5. Renewal
- c. Operational Strategy

Operational strategy is a vision of operating functions that establishes the overall direction or driving force for decision making. This vision must be integrated with business strategies but not always reflected in formal planning (Pereira, 2015).

- 1. Capacity and preparations
- 2. Quality
- 3. Dissemination
- 4. Marketing and operations

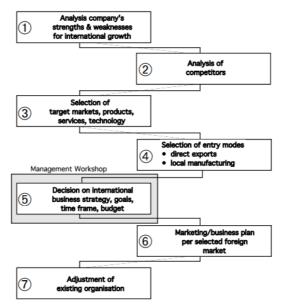


fig. Steps In The International Business Strategy Formulation Process

SWOT Analysis

SWOT analysis is a strategic planning method used to evaluate strengths, weaknesses, opportunities, and threats in a project or a business speculation (Hajikhani & Jafari, 2013). These four factors form the acronym SWOT (Strengths, Weaknesses, Opportunities, and Threats). This process involves determining the specific objectives of business or project speculation and identifying internal and external factors that support these goals (Yogi, Rizal, & Ahmadi, 2017). SWOT analysis can be applied by analyzing and sorting things that affect all four factors, then applying it in the SWOT matrix image, where the application is how strengths are able to take advantage of opportunities, how to overcome weaknesses which prevents advantages from opportunities that exist, then how strengths are able to deal with existing threats, and finally how to overcome weaknesses that can make threats real or create a new threat (Lumaksono, 2014). SWOT analysis compares between external opportunities and threats with internal factors of strengths and weaknesses. Internal factors are included in the matrix called the internal strategy factor matrix or IFAS (Internal Strategic Factor Analysis Summary). External factors are included in the matrix called the EFAS external strategy factor matrix (External Strategic Factor Analysis Summary). After the internal and external strategy factor matrix was completed, the results were included in the quantitative model, namely the SWOT matrix to formulate an organizational development strategy. The hierarchical representation of the SWOT structure is shown in Figure 1 (Chermack & Kasshanna, 2007).

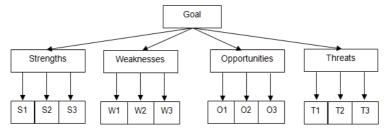


fig. Hierarchical structure of the SWOT matrix

The use of an effective SWOT analysis provides 4 benefits for managers in creating marketing strategies; 1) simplicity: SWOT analysis does not require special training or technical skills; 2) collaboration: because of its simplicity, SWOT analysis encourages collaboration and information exchange between managers from different functional areas; 3) flexibility: it can enhance the quality of organizational strategy planning even without marketing information systems; 4) integration: SWOT analysis can be related to various sources of information (Setiarso, 2018).

To analyze the determination of the strategy to be clear, there are nine types of matrices that can be used namely as follows:

- 1. Matrix of External Factor Evaluation (EFE)
- 2. Matrix of Internal Factor Evalution (IFE)
- 3. Matrix of Competitive Profile (CP)
- 4. Matrix of SWOT
- 5. Matrix of Strategic Position and Action Evalution (SPACE)
- 6. Matrix ofInternal-Exsternal (IE)
- 7. Matrix of Boston Consulting Group (BCG)
- 8. Matrix of Grand Strategy
- 9. Matrix of Quantitative Strategies Planning (QSP)

SWOT Matrix

The tool used to compile the strategic factors of the organization is the SWOT matrix. This matrix can clearly describe how the external opportunities and threats faced by the organization can be adjusted to the strengths and weaknesses it has. This matrix can produce 4 sets of possible strategic alternatives (Saaty, 1980).

- a. Strategies (Strength-Opportunities)
 This strategy is based on the mindset of the organization, namely by utilizing all the power to seize and take advantage of the greatest opportunities
- b. ST Strategy (Strenghts-Threats) It is a strategy to use the strength of the organization to overcome threats.
- c. WO (Weknesses-Opportunities) Strategy This strategy is implemented based on utilization opportunities that exist in a way minimize existing weaknesses.

d. WT Strategy (Weknesses-Threats) This strategy is based on defensive activities and seeks to minimize existing weaknesses and avoid threats.

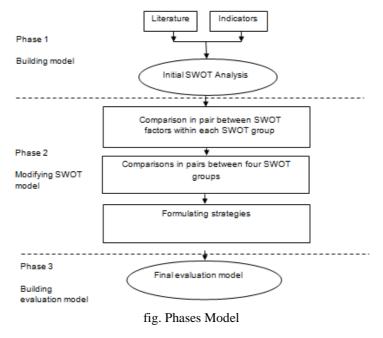
Analytic Hierarchy Process

Analytic hierarchy process (AHP) was developed by Thomas L. Saaty in the early 1970s (Saaty, 1980). The AHP method is one of the most popular pairwise comparison methods used for decision making on the Multi-Criteria Decision Making (MCDM) problem (Gorener, Toker, & Korkmaz, 2012). The AHP approach is designed to help decision makers to combine qualitative and quantitative factors from a complex problem.

The working principle of AHP is to form a problem structure. In solving problems, the AHP method used as a tool to help formulate strategies requires the preparation of hierarchies in the process. The hierarchy in question starts from the Goal, groups of factors, strategic factors and strategic alternatives (Kangas, Pesonen, & Mikko, 2001).

SWOT-AHP Method

In this research, the AHP structure obtained from the SWOT matrix and divided into three parts (Devi Cipta Anggraini, 2018). To create a SWOT-AHP based strategic management model, we designed the phases model. Firstly, we identified the SWOT through SWOT analysis, then found external and internal environment that relevated. Secondly modifying factors and third building an evaluation model (Figure 2) (Arica dwi susanto, 2019).



Technical Concept

Data collection methods used were survey methods and direct observation. The data obtained include primary data and secondary data. Primary data were obtained directly from the sample/respondent with a purposive sampling method through interview techniques and assisted with a questionnaire in the form of written questions and alternative answers provided (Hunger & Wheelen, 2010). Interviews were conducted with the Division Manager of PT. X Industry and marketing operational manager of PT. X Industry. Data collection also used documents provided by companies, especially the PT. X related to the product marketing planning process.

Weighting of internal and external strategic factors and group factors was performed through pairwise comparison methods. After an alternative strategy was created, the AHP method was used to prioritize the alternative. The AHP method produces the best strategy from various alternative strategies recommended through the SWOT matrix (Mehmet, 2011).

RESULT

The first step in analyzing SWOT is to make an analysis of internal and external factors from PT. X.

Table. SWOT factors and sub-factors for the strategy selection

Table. SWOT factors and sub-factors for the strategy selection				
Strength (S)	Weakness (W)			
(S1) New Product (S2) Registered patent (S3) Mechanical technology	(W1) Product not widely known (W2) Inoptimal product promotion			
Opportunities (O)	Threats (T)			
(O1) Switching products from manual to automatic (O2) Market share's openness (O3) More efficient products	(T1) Raw Materials (T2) Price Competition (T3) Product Fraud			

Alternative strategies based on the SWOT factors and sub-factors are developed using the SWOT matrix.

- 1. Increasing promotion program (A1)
- 2. Increasing product quality (A2)
- 3. Pricing strategy (A3)
- 4. Marketing cooperation (A4)

DISCUSSION

The next step was pairwise comparison of SWOT factors by using Saaty (1-9) scale. The comparison results are shown in Table 3.

Table. Pairwise comparison of SWOT factors

With Respect To The Goal	Strengths	Weak ness	Opport unities	Threats	Importance Degrees of SWOT Groups
Strength s	1,00	5,00	3,00	3,00	3,00
Weakne sses	0,20	1,00	0,71	0,58	0,62
Opportu nities	0,33	1,41	1,00	2,00	1,18
Threats	0,33	1,73	0,50	1,00	0,89

CI=0,028 CR=0,03

Table. Geometric mean matrix score of sub-criteria - Alternative expert 1

	A1	A2	A3	A4	Local Weight	Global Weight
S1	0,17	0,15	0,25	0,36	0,140	0,072
S2	0,12	0,32	0,14	0,42	0,528	0,273
S3	0,18	0,17	0,27	0,36	0,333	0,172
W1	0,13	0,15	0,29	0,43	0,500	0,043
W2	0,10	0,25	0,21	0,41	0,500	0,043
01	0,12	0,23	0,20	0,40	0,250	0,055
02	0,14	0,18	0,21	0,41	0,500	0,111
03	0,21	0,20	0,16	0,36	0,250	0,055
T1	0,13	0,20	0,23	0,45	0,443	0,077
T2	0,12	0,16	0,18	0,47	0,387	0,067
Т3	0,20	0,21	0,14	0,38	0,169	0,029
	0,57	0,83	0,85	1,62	3,87	0,997
Matrix Score	0,148	0,207	0,214	0,393	0,961	

Based on the calculation of the geometric mean, it is found that the first priority is on improving product quality (0.393), the second is marketing cooperation (0.214), the third priority is pricing strategy (0.207) and the last is promotion (0.148).

CONCLUSION

The results showed that the SWOT-AHP analysis on the formulation of superior product marketing strategies stated that the most important priority strategies is the Strength-Opportunity strategy. Strength got the highest score of 53% and Opportunity by 21%. The SO strategy focuses on the strengths the company has to seize the opportunities. Through the SWOT sub-criteria, it was found that the Strenghts priority were S2 (Registered patent) with a score of 0.53, S1 (New product) with a score of 0.29, S3 (Mechanical technology) with a score of 0.28, respectively. While weaknesses priority were W2 (inoptimal product promotion) with a score of 0.63, W1 (product not widely known) with a score of 0.37. In addition, the Opportunities Priority were the order of O2 (market share's openness) with a score of 0.52, O3 (More efficient products) with a score of 0.29, and O1 (Switching products from manual to automatic) with a score 0.19. And finally, the Threats priority were T1 (raw material) with a score of 0.53, T2 (price competition) with a score of 0.26 and T3 (product fraud) with a score of 0.21. Based on the alternative selection results on the formulation of a marketing strategy for electric battery sprayer knapsack products, it can be concluded that the main priority are increasing product quality by 39.3%, the second priority were marketing cooperation with a score of 21.4%, the third is pricing strategies by 20.5% and finally the promotion by 14.8%.

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