Determination of Business Strategy with SWOT and AHP

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Abstract
This study aims to formulate strategic decision-making in the paint industry through the SWOT-AHP hybrid method. The calculated priorities of the SWOT factor can form a management approach to the company’s main decisions. From the study results, it is expected to get an overview of the application of strategic analysis using the hybrid SWOT-AHP method based on influencing factors. AHP analysis using expert choice software. The SWOT analysis and AHP method results produce strategy priorities: (1) Build omni channel, (2) Build close relationships with all channels, (3) Build a close relationship with personal values, especially for Pareto stores. (4) Sales collaboration, (5) Start building infrastructure for digital business, (6) Formulate strategies to build collaborative relationships.

Keywords: AHP, Business Strategy, Paint industry, SWOT

INTRODUCTION
The paint industry in Indonesia has continued to show growth in the last five years, driven by economic growth and increasing development. More than 60 brands of paint are on the market. Increasing competition and market pressure in the paint industry force companies to take quick and good decisions in conducting strategic analysis. The development of this industry is also overshadowed by the threat of substitute products, as well as innovations to make paints that are more environmentally friendly. Paint companies face a dynamic of internal and external challenges. Ever-changing technology, the ever-increasing availability of substitutions, and the changing demographic consumption profile are challenges in the industry. Internal and external factors that influence the organization provide input for strategic decision-making. Diversity of factors and priorities is a major challenge faced to develop organizational strategy. The strategic analysis in this study used a hybrid SWOT-AHP method that affects paint companies. The calculated priorities of the SWOT factor can help in the formation of a management approach to the main decisions facing the company. The descriptive method approach is based on quantitative data analysis with SWOT analysis, then quantitative methods are carried out with
Analytical Hierarchy Process (AHP). The choice of this method was chosen because it focuses on actual problems and phenomena that occur by describing facts in the paint industry. In this qualitative and descriptive study, SWOT analysis is used as a process to formulate strategic management. Companies are required to evaluate and also measure all the criteria they often encounter. This has a major impact on the decision-making process as well as prioritizing variables by eliminating some possible alternatives. The Analytical Hierarchy Process (AHP) method is used to evaluate many interdependent variables and complex relationships. This study aims to provide a framework for designing strategic decision-making based on the evaluation of SWOT analysis in the paint industry. The initial section describes the characteristics of the paint industry as well as a literature review. The second part is to conduct an internal and external analysis of the company with a SWOT matrix. The third part focuses on the steps of the AHP method, and calculations based on the given criteria so that conclusions are obtained from a managerial perspective.

The growth of the paint industry in Southeast Asian countries continues to grow with a CAGR of 7.7%, growing from USD 1,224.0 million in 2016 and estimated to be USD 1772.4 million by 2021. This is driven by economic growth, increasing residential development and commercial areas including the opening of AEC trade channels. In 2016, the retail market for decorative paints and coatings in Indonesia was valued at approximately USD 785.3 million. Historically, the CAGR between 2011 and 2016 was 7.2% and is expected to reach USD1,206.3 million by 2021 at a CAGR of 9.0% (Figure 1). Between 2011 and 2016, several large foreign companies, entered the paint market in Indonesia, indicating that this industry provides good potential (Frost and Sullivan, 2017).

The results of a study conducted by MARS Indonesia (2014) show that the paint and coating industry is an industry that has the largest number of companies compared to other building material industries. In this industrial sector, there are more than 60 paint brands, most of which are in the wall paint sector, more than 40 brands. The large number of brands in circulation indicates that paint companies are trying to dominate the market in a competitive industry. Therefore, to achieve optimal marketing performance, the right strategy is needed.

Today most organizations have strategic planning in running their business. Strategic planning is a way to help an organization be more productive by helping guide the allocation of resources to achieve goals. Strategic planning is the key to successful strategic management, as an ongoing process of making, implementing, and evaluating decisions that enable an organization to achieve its goals. Strategic management allows an organization to be more proactive than reactive in shaping its future; Enables organizations to initiate and influence. Strategic management consists of the analysis, decisions, and actions that organizations take to create and maintain competitive advantage. The strategic management process is a set of sequential analyses and choices that can increase the likelihood that an organization will choose the best strategy to generate a competitive advantage (David, 2003).
Based on the SWOT analysis, the organization can determine the appropriate strategy. Strategic choice is associated with the vision, mission, goals, and external and internal analysis of the organization; An organization is willing to make strategic choices. This means that the organization can determine how to gain a competitive advantage. The next step of strategic management is the process of strategy implementation. Choosing a strategy is meaningless if it is not implemented. Strategy implementation occurs when an organization adopts organizational policies and implementations that are consistent with its strategy to gain a competitive advantage.

By conducting external analysis, the organization identifies critical threats and opportunities in its competitive environment. It also examines how likely competition in this environment is to evolve and what implications evolution has on the threats and opportunities organizations face. Whereas external analysis focuses on environmental threats and opportunities facing the organization, internal analysis helps an organization identify its organizational strengths and weaknesses. It also helps the organization understand the resources and capabilities that may be the source of its competitive advantage and which are likely to be the source of that advantage.

The strategy developed can provide benefits while preparing the company to anticipate the business risks that will be faced. Therefore, to develop the right business strategy, management must know market conditions well. Implementing a marketing strategy should begin with a SWOT analysis of strengths, weaknesses, opportunities, and threats. The development of the industrial era 4.0 is that production is based on customers and products. This era has a significant influence on the growth of a company.

The challenges faced by the paint industry in Indonesia are competition, the threat of substitute products, and the issue of environmentally friendly product innovation. It is influenced by various internal and external variables that are always changing. Dynamic technology, increased availability of substitutions, and changing demographic consumption profiles. Internal and external factors affect the development of corporate strategy. These factors and priorities are key challenges in decision-making. Strategic decisions are based on the extent to which the internal environment corresponding to the external environment results in the achievement of organizational targets optimized to drive the selection, structuring, and implementation of strategies (Kangas, 2001; Ashutosh, 2019).

This study used a hybrid approach of the SWOT-AHP strategic analysis, the initial stage is carried out by calculating and ranking the factors affecting the paint company. This ranking is based on pairwise comparisons between identified SWOT variables. Furthermore, the Analytical Hierarchy Process (AHP) method is used to calculate priority vectors and assign ratings to each SWOT variable. There is a research gap in the application of this method in the paint industry because no similar research has been conducted in this field.
Paint Industry in Indonesia

Indonesia occupies the first position as the largest paint and coatings market in Southeast Asia with 268 million people and a high urbanization rate (57%). The growth rate of this industry has been 6% annually for the last five years in a row. The paint and coatings industry in Indonesia involves six large multinational companies, four domestic companies, and a large number of small-scale domestic producers, with the most demand from the architectural sector. Domestic paint manufacturers control 71% of the total market in Indonesia. Government programs, such as the development of 10 million new homes for lower-middle-income people, are also driving demand for paints and coatings. Domestic paint production produces 1,500,000 MT annually produced from about 150 companies, with domestic demand of 1,100,000 MT. This value covers 80% of the domestic market.

The organization formed by paint companies in Indonesia is APCI (Indonesian Paint Manufacturers Association), where members are all companies that have manufacturing industry licenses and are officially registered institutions. The organization consists of 31 paint companies, out of 131 companies registered as official institutions. Based on the size of the company, the paint industry is classified into three categories, namely multinational manufacturing companies, domestic manufacturing companies, and small and medium enterprises with details. Based on data from the Indonesia Baseline Report (2019) as follows:

**Foreign Investment Companies (PMA):** 34 companies
**Domestic Manufacturing Company (PMDN):** 92 companies
**Small–Medium Enterprises (SMEs):** 23 companies

Indonesia's property sector is a major driver of the growth of Indonesia's paint and coatings industry. The industry offers enormous potential as Indonesia is among the top three furniture manufacturers in ASEAN along with Vietnam and Malaysia. One of the main weaknesses of the Indonesian paint industry is the lack of standards governing paint quality, especially the use of lead. Many domestic paint manufacturers have not complied with the international standards that have been set. As an effort to mitigate Green House Gases, the Indonesian government encourages the manufacturing sector to reduce CO2 emissions. Several paint manufacturers have participated in and implemented the program. Manufacturers are expected to reduce CO2 emissions, be environmentally friendly, and stop lead paint production from May 2019.

**SWOT Analysis for Business Strategy**

SWOT analysis (Strengths, weaknesses, opportunities, and threats) is used to evaluate business performance, specifically a basic model that explains exactly what a business can and cannot do, as well as its potential opportunities and threats. The SWOT analysis method is to take information from an environmental analysis and separates it into internal (strengths and weaknesses) and external problems (opportunities and threats). The SWOT analysis determines what can help the incoming company
achieve its goals, and what obstacles must be overcome or minimized to achieve the expected results. Completing a business SWOT analysis is the first step in strategy planning as shown in Figure 2. SWOT analysis shows a framework to help planners to identify goal achievement strategies.

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SWOT analysis is a tool used for strategic planning and strategic management in organizations that can be used effectively to build organizational strategies and competitive strategies. Based on the systems approach, an organization is a whole that is in interaction with its environment and consists of various sub-systems. In this sense, the organization exists in two environments, one being within itself and the environment outside. In strategic management, it becomes a must to analyze environmental conditions. SWOT analysis is an important tool for situation analysis that helps managers to identify organizational and environmental factors.

Analytical Hierarchy Process (AHP)

In AHP method applications, complex problems can be broken down into smaller, more manageable parts of a hierarchy. AHP is a multi-criteria decision-making process in which it breaks down decision problems into a tree or hierarchical structure consisting of objectives, factors, sub-factors, and alternatives. AHP consists of three parts namely Analysis, Hierarchy, and Process.

a) Analysis, at this stage, is choosing alternatives depending on good mathematical and logical reasoning, then on instinct, and thus can justify the decision.

b) Hierarchies, allow decision-makers to focus on a smaller set of decisions.
c) The process, process of learning, evaluating, debating, and modifying ideas is a typical decision-making process.

![Diagram of SWOT Analysis](source: Riston, 2008)

AHP has been developed to aid the decision-making process, by providing an all-encompassing analytical framework for structuring decision problems, representing and measuring its factors, relating those factors to overall targets, and assessing alternatives in the form of a hierarchy. At the formation of a hierarchy, the decision maker evaluates his various variables by comparing them to each other two at a time, concerning the variables directly above him in the hierarchy. These estimates are converted into numerical values by AHP, processed, and compared across the entire range of issues (Saaty, 2006).

AHP is particularly effective when working on complex, critically important issues involving human perception and judgment, the resolution of which has a long-lasting impact. AHP is a powerful mechanism for the relative ranking of ordinal-level data that can be converted to ratio level using eigenvectors and matrix algebra. This stage will rank the relative importance of each SWOT. The AHP approach to decision-making involves four levels or stages:

**Stage 1**  Define problems and create a hierarchical structure. The first level involves defining all decision components of the problem. The first top-level is broad general purpose. The lower levels contain sub-goals and attributes that influence the decision itself. Various alternative possibilities exist at the lower level. The AHP approach to decision-making involves four levels or stages:

**Stage 2**  Data collection and input data that implies the impact of each element on each sub-goal at the top level of the adjacent hierarchy. Information is placed in a matrix for pairwise comparison. AHP uses a scale of 1 - 9 measurements in pairwise comparison. Nine implies an element that is very
preferred to other elements being compared. One implies an equally important element. Among these values signify different degrees of relationship.

**Stage 3** Determine the relative weight and relative priority of various criteria (sub-criteria). At this stage, the relative weights of a set of objects (criteria, subcriteria, and alternatives) are calculated with a pairwise comparison matrix.

**Stage 4** Develop a composite priority vector for the lowest level of the hierarchy to assess alternative decision strategies. The purpose of using AHP is to rank or prioritize different decision alternatives depending on how well each person meets the goals or objectives. The final aggregate ranking for decision alternatives is done by summing all the weighted entries corresponding to all levels of the alternative.

### Table 1 Previous Research with Hybrid SWOT-AHP Method

<table>
<thead>
<tr>
<th>No</th>
<th>Research Area and Subject</th>
<th>Researchers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Analysis of solar energy deployment for India’s sustainable future (2017)</td>
<td>Sindhu, et al</td>
</tr>
<tr>
<td>3</td>
<td>AHP and SWOT hybrid model in tile export analysis (2015)</td>
<td>Haghshenas</td>
</tr>
<tr>
<td>4</td>
<td>Community-based pasture management in Yanchi, Ningxia Hui, China (2014)</td>
<td>Zhou, et al</td>
</tr>
<tr>
<td>5</td>
<td>User and community expert perspectives on community forestry in Nepal (2014)</td>
<td>Birendra</td>
</tr>
<tr>
<td>6</td>
<td>Investigation of mobile NFC adaptation analytics, in the industry telecommunications Italy (2014)</td>
<td>Hassannezhad</td>
</tr>
<tr>
<td>7</td>
<td>Strategic planning and formulation of worldwide express mail services in China (2014)</td>
<td>Wang, dkk</td>
</tr>
<tr>
<td>8</td>
<td>Evaluation of trans-regional watershed challenges and priorities and overview of stakeholder competencies in Greece (2013)</td>
<td>Podimata and Yannopoulos</td>
</tr>
<tr>
<td>9</td>
<td>Analysis of e-government strategies in Saudi Arabia (2012)</td>
<td>Alshomrani this Moon</td>
</tr>
</tbody>
</table>

### Concept Development

There is a lot of literature on strategic research that uses SWOT and AHP methods, but hybrid research that combines SWOT-AHP is still limited. Several previous studies have been developed to make strategic planning, shown in Table 1. Based on the research conducted, this research was developed, so that the same model can be applied to the paint and chemical industries to formulate strategies based on priority factors that influence it.
METHOD

Research Design

This research is descriptive research using the SWOT-AHP methodology. The strategic analysis in this study is an influential factor on companies in the paint and chemical industry. The initial stage by creating a matrix, then calculating the calculated priorities of SWOT factors can help in the formation of a management approach to the main decisions facing the company. SWOT criteria are evaluated with the help of industry experts and AHP criteria.

The SWOT approach is used to analyze internal and external factors. This method is a structured analysis tool (Elavarasan et al., 2020). Furthermore, AHP is used as a multi-criteria decision-making tool to help create a strategic roadmap (Belhadi et al., 2019). The basis for decision-making is based on pairwise comparisons related to the selection of alternative strategies (Sequeira et al., 2021). User consistency of the AHP method must be maintained so that the resulting solution is optimal. To determine the level of consistency, the results of using the AHP method will be measured in magnitude Consistency Index (CI):

\[
CI = \frac{\lambda_{\text{max}} - n}{n - 1}
\]

\(\lambda_{\text{max}}\) is the maximum value of the paired matrix and \(n\) is the number of criteria. Furthermore, CR (Consistency Ratio) is the result of a comparison between the Consistency Index (CI) and the Random Index (RI). If CR \(\leq 0.10\) (10%) means that the user's answer is consistent so that the resulting solution is optimal. If CR \(\leq 0.10\) (10%) then the degree of consistency is satisfactory.

Data Types and Sources

The data to be collected in the study consists of primary data and secondary data. Primary data were obtained through interview methods and Focus Group Discussions with key persons, in the paint and chemical industry. Secondary data is obtained from market information, paint and chemical industry data, and other publication data.
Research Phase
This research phase begins with conducting a literature review, then conducting *in-depth interviews* to compile a SWOT matrix with *key persons* in the paint and chemical industries. The next stage is carrying out FGD and analysis with AHP to determine strategic priorities in the industry. The stages of this research in detail can be seen in Figure 3.

![Figure 2 Paint and coatings segmentation according Frost & Sullivan, 2017](image)

RESULTS AND DISCUSSION
Industry Overview
Indonesia has become one of the fastest-growing paint and coating markets in recent years due to its large population, high urbanization, and rapidly rising middle class. This industrial strength is supported by the increasing lower middle class of Indonesia and the number of industrial consumers. Raw material providers are mainly multinational companies such as BASF and Dow Chemical. The weakening of the Rupiah against the US dollar often results in a decrease in margins for paint manufacturers, as most raw materials are imported to produce paints and coatings. The distribution of paint and coating products in Indonesia is mainly through retail sales and projects. Retail sales also include point-of-sale (POS) tinting machines. Paint and coating manufacturers also sell directly to construction companies and project developers who are the end users of paint; whereas in retail sales, distributors act as intermediaries, who distribute paint and coatings to retail stores that sell to consumers.

With increasing competition and investment, the paint and coating trade is one of the few business sectors in Indonesia with strong domestic players with original brands dominating the paint and coating market taking over 75% to 80% market share. The most important paint manufacturer in Indonesia is the best chemical supplier Chemtrade Asia Indonesia which is a leading player in wood paint and finishing with a 67% market share and combined sales of Rp 2.3 trillion. Customers include retail (40%), coming (20%), commerce (30%), and others (10%). The furniture industry is a major
contributor to its sales and the company claims to be the main and largest wood paint manufacturer in Southeast Asia.

Segmentation in the paint industry in Indonesia is divided based on the function and type of paint. This segmentation is generally the same as paint segmentation in most countries in Southeast Asia which is divided into two types, namely decorative and non-decorative paints (Figure 2). Decorative paints otherwise known as architectural coatings, this segment includes all coatings applied to new and existing buildings, whether residential, commercial, or industrial for decorative purposes. Non-decorative paint is divided into three segments, namely, wood coating, waterproofing, metal and concrete, and other paints (automobile, construction, and chemicals).

The value chain of the paint industry in Indonesia and most countries in ASIA starts from raw materials (resins) for domestically sourced industries and through imports, then at the paint distribution stage, mainly through retail sales and projects. The marketing concept in the value chain of the paint industry in Indonesia today does not only focus on transactional marketing which focuses on product issues, distribution, advertising, meeting consumer needs, and sales. Because in general, the quality of paint products in retail is equivalent and the distribution pattern is the same. Therefore, to achieve optimal marketing performance, the right strategy is needed.

Analysis of the Company's Internal Environment
Identification of the internal environment is the first step to determining the strengths and weaknesses of the industry using a value chain approach through depth interviews with respondents from experts in the paint industry. Based on the results of interviews that have been conducted through the value chain approach, there are six points of strength and six weaknesses in this industry, namely:

Strength
The dominance of product sales through store building (marketing network is quite extensive) ; Diverse consumers, ranging from household to corporate level (infrastructure contractors, housing, and project workers); Business partners, namely retailers, have a large business scale, the majority of which are above 500 million rupiah

Weakness
Most consumers do not understand the specifications of the purchased paint; Most of the raw materials used are chemicals and are still imported; Limited innovation in paint products, making it easy to replicate

Analysis of the Company's External Environment
Identification of external factors of the company is carried out with the five forces Porter and PEST approach which aims to determine external factors. This factor affects the competitiveness of this industry. The results of this approach obtained six factors of opportunities and threats that affect this industry, including:
Opportunity
Economic growth, especially in the infrastructure and housing sectors, encourages the growth of the paint industry in Indonesia; Business partners, namely retailers, are reliable, characterized by the majority of business age over 5 years; Building long-term mutually beneficial relationships for businesses in the Indonesian paint industry.

Threat
Competition in seizing market share in the paint industry is getting higher, for example, in the decorative paint segment there are at least 60 paint brands currently circulating in the market; The slow pace of e-commerce in the paint industry; Unable to penetrate the international market to optimize the market.

Table 2 IFE (Internal Factor Evaluation)

<table>
<thead>
<tr>
<th>Strength</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dominance of product sales through store building (marketing network is quite extensive)</td>
<td>0.176</td>
<td>3.857</td>
<td>0.681</td>
</tr>
<tr>
<td>Diverse consumers, ranging from household to corporate level (infrastructure contractors, housing, and project workers)</td>
<td>0.170</td>
<td>3.714</td>
<td>0.631</td>
</tr>
<tr>
<td>Business partners, namely retailers, have a large business scale, the majority of which are above 500 million rupiah</td>
<td>0.170</td>
<td>3.714</td>
<td>0.631</td>
</tr>
<tr>
<td>TOTAL</td>
<td>0.516</td>
<td>1.943</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Weakness</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most consumers do not understand the specifications of the purchased paint</td>
<td>0.163</td>
<td>3.571</td>
<td>0.584</td>
</tr>
<tr>
<td>Most of the raw materials used are chemicals and are still imported</td>
<td>0.170</td>
<td>3.714</td>
<td>0.631</td>
</tr>
<tr>
<td>Innovation limited to paint products, so it's easy to imitate</td>
<td>0.150</td>
<td>3.286</td>
<td>0.494</td>
</tr>
<tr>
<td>TOTAL</td>
<td>0.484</td>
<td>1.709</td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL</td>
<td>1</td>
<td>3.652</td>
<td></td>
</tr>
</tbody>
</table>

Matching Stage
The IE matrix is used to analyze the internal and external environment of the industry. Weights are calculated by identifying internal and external strategic factors to expert speakers. The weight and rating assessment process was obtained from the results of distributing questionnaires to seven expert resource persons, namely the expert staff of the Indonesian Ministry of Trade, the Executive Manager, the Director, the Academics, the Sales Supervisor, the Marketing Supervisor, and the Business Owner. The amount of rating and weight is obtained from each factor in each respondent divided by the number of all respondents. While the score value is obtained from the multiplication between the average weight and the average rating.
IFE Analysis
IFE analysis is used as an identification of strengths and weaknesses that are internal factors of the industry. Based on the results of the analysis in Table 2, an IFE score of 3.65 was obtained.

EFE Analysis
EFE analysis is used to identify opportunities and threats factors that are external factors faced by the paint industry in Indonesia. Based on the results of the analysis in Table 3, an EFE score of 3.12 was obtained.

An IFE score of 3.65 indicates that the industry has strong strengths, while an EFE matrix score of 3.12 indicates that companies can take advantage of strong opportunities (Tables 2 and 3). The results of the score become coordinate points to determine the position of the industry on the IE matrix (Figure 3). The paint industry in Indonesia in the IE matrix is in quadrant I, meaning that the industry is in a strong internal position and has a strong response to existing external factors. With this condition, companies can use growth and build strategies. This position shows that the paint industry in Indonesia is in a very advantageous position. The industry has opportunities and strengths so that it can take advantage of existing opportunities. Growth and development strategies must be applied in these conditions by supporting an aggressive growth policy (growth-oriented strategy).

IE Matrix Analysis
The results of the IFE EFE analysis explain the opportunities and threats facing the industry and the strengths and weaknesses possessed by the industry. Furthermore, the score is entered into the IE Matrix as a strategic approach to determine the position of the industry today.
Table 3 EFE (External Factor Evaluation)

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic growth, especially in the infrastructure and housing sectors, encourages the growth of the paint industry in Indonesia</td>
<td>0.186</td>
<td>3.429</td>
<td>0.638</td>
</tr>
<tr>
<td>Business partners, namely retailers, are reliable, characterized by most of the business age over 5 years</td>
<td>0.171</td>
<td>3.143</td>
<td>0.536</td>
</tr>
<tr>
<td>Building mutually beneficial relationships in the long term for businesses in the Indonesian paint industry</td>
<td>0.171</td>
<td>3.143</td>
<td>0.536</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>0.444</td>
<td>1.710</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Threat</th>
<th>Weight</th>
<th>Rating</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition in seizing market share in the paint industry is getting higher, for example in the decorative paint segment there are at least 60 paint brands currently circulating in the market</td>
<td>0.186</td>
<td>3.429</td>
<td>0.638</td>
</tr>
<tr>
<td>The slow pace of <em>e-commerce</em> in the paint industry</td>
<td>0.163</td>
<td>3.000</td>
<td>0.488</td>
</tr>
<tr>
<td>Unable to penetrate the international market as an effort to optimize the market</td>
<td>0.124</td>
<td>2.286</td>
<td>0.283</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>0.399</td>
<td>1.410</td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>1</td>
<td>3.120</td>
<td></td>
</tr>
</tbody>
</table>

**Alternative Strategy Mapping**

Alternative strategies are carried out through the SWOT analysis method by matching strengths, weaknesses, opportunities, and threats using the TOWS matrix with four alternative strategies. Based on these analysis steps, three strategies can be obtained that can be used as alternative strategies for developing the competitiveness of the paint industry in Indonesia.

**Strategy Prioritization**

Strategy prioritization is carried out using the AHP method which is one of the commonly used methods for prioritizing decisions from various existing factors. Use of AHP in this study aims to obtain the priority order of strategies that have been formulated previously. The hierarchical structure of AHP in this study can be illustrated in Figure 4.

Based on prioritization through the AHP method, it was found that the strength factor had the highest score of 0.446 (S2-1), which shows that the industry has a close relationship with all channels. The opportunity factor has the highest score of 0.390 (O3-4) which indicates the opportunity to formulate joint strategies in collaborative relationships.
Strategy priority results show the ranking of strategy priority order shown in Table 4. The first rank is Building Omni channel with a weight of 0.466. The second rank is Building close relationships with all channels with a weight of 0.446. The third rank is Building close relationships by increasing personal value with a weight of 0.434. Ranked fourth is Sales collaboration with a weight of 0.414. Ranked fifth is Start building infrastructure for digital business with a weight of 0.412. Ranked sixth is Formulating a Strategy for building collaborative relationships with a weight of 0.390. With the formulation of the priority order of the strategy, the company can be more efficient in formulating and executing strategies to achieve competitive advantage while anticipating the business risks that will be faced.

Managerial Implications

The results of the priority order of strategies produced by AHP do not describe the choice of one and the sequence of time for implementing the strategy. Strategies can be implemented jointly or separately according to the resources and capabilities of the organization to achieve its objectives. Managerial implications are obtained from the results of discussions and observations in the field as well as interviews with experts. Managerial implications that can be carried out based on AHP's priority strategy, namely:

1. Building omni channel in response to the increase in electronic transactions in the building materials business in Indonesia. This change in behavior in business is driving more transactions through online platforms. This sales approach is done cross-channel to provide a better shopping experience.
to customers. Whether shopping physically to a traditional, modern store, online from a desktop or mobile device or over the phone. The Omnichannel approach requires integration between distribution, promotion, and communication channels.

![Strategy Analysis on the paint industry in Indonesia](image)

### Figure 4 AHP Score

2. Building close relationships with all channels, because the paint distribution system in Indonesia uses multichannel, where the company deals with customers through various channels, both online and offline. Distribution channels are important partners in supporting the company's strategy, therefore closer and mutually beneficial relationships are needed.

3. Build a close relationship with personal value especially for Pareto stores by prioritizing person-to-person interaction between distribution channels to increase sales. This strategy involves the salesperson's ability to understand distributor needs and wants, develop personalized connections, and communicate the value of the offer.
4. Start building infrastructure for digital businesses to increase productivity, and provide goods that are faster responsive, and more effective. Innovations must begin to be improved in response to various challenges and opportunities that will come in the paint industry. In the digital era, the best innovation will only emerge by adopting the latest and innovative information systems and technologies.

5. Formulate strategies to build collaborative relationships, through relational marketing, i.e., establish, maintain, and improve relationships with partners. Collaboration is a differentiation of strategy by building partnerships and closer relationships with distributors.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Detail</th>
<th>Weight</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3-3</td>
<td>Build omni channel</td>
<td>0.466</td>
<td>1</td>
</tr>
<tr>
<td>S2-1</td>
<td>Build close relationships with all channels</td>
<td>0.446</td>
<td>2</td>
</tr>
<tr>
<td>S3-1</td>
<td>Build a close relationship with personal value, especially for pareto stores</td>
<td>0.434</td>
<td>3</td>
</tr>
<tr>
<td>S1-4</td>
<td>Sales collaboration</td>
<td>0.414</td>
<td>4</td>
</tr>
<tr>
<td>T2-1</td>
<td>Start building infrastructure for digital businesses</td>
<td>0.412</td>
<td>5</td>
</tr>
<tr>
<td>O3-4</td>
<td>Formulate strategies for building collaborative relationships</td>
<td>0.390</td>
<td>6</td>
</tr>
</tbody>
</table>

CONCLUSION

The results of this study provide several important things as a conclusion, first analysis of internal factors of the paint industry in Indonesia has a main strength factor, namely an extensive marketing network dominated by sales through building stores, while the weakness factor is that most of the raw materials used are still imported. Analysis of external factors results in a key opportunity that has the highest score is economic growth, especially in the infrastructure and housing sectors, encouraging the growth of the paint industry in Indonesia, while the main factor that threatens companies is competition in seizing market share in the paint industry is getting higher. SWOT analysis and AHP methods are used to obtain strategy priorities, in order of strategy priorities: (1) Build omnichannel, (2) Build close relationships with all channels, (3) Build a close relationship with personal values, especially for Pareto stores, (4) Sales collaboration, (5) Start building infrastructure for digital business, (6) Formulate strategies to build collaborative relationships.

Cooperation and synergy are needed among important actors in building collaboration between stakeholders or related actors in the paint industry in particular, as well as building materials in general to improve performance. The company must be able to take advantage of its strengths and all existing opportunities to overcome, improve and anticipate its threats and weaknesses. Management can be significantly concerned about the importance of various factors using priorities to develop management approaches as strategic alternatives. As input for further research material, it is necessary to study more
deeply the problems in this industry that occurred due to the Covid-19 pandemic to produce the right strategy and how to anticipate it.

REFERENCES


