

# Oasis Pool Corporate Strategy Planning Using AHP-SWOT and ISM Methods

Dede Rukmayadi<sup>\*1</sup>, Yayan Saputra<sup>2</sup>, Rifki Muhendra<sup>3</sup> & Zulfa Fitri Ikatrinasari<sup>4</sup>

Received 10 November 2023; Revised 25 January 2024; Accepted 15 February 2024;  
© Iran University of Science and Technology 2024

## ABSTRACT

*Although the existence of swimming pools is very important for people who need to exercise or just have fun with their families, there are still few studies conducted to explore how to analyze the strategic planning of swimming pool companies in order to grow and develop. For this reason, this research will carry out strategic planning for the company Oasis Pool. The research stage consists of analyzing the internal and external strategies of the Oasis Pool company using the AHP SWOT method. In the second stage, a structural analysis of Oasis Pool's corporate strategy is carried out using the interpretative structural modeling (ISM) method. The results showed that the most appropriate strategy in the development of Oasis Pool's business is a growth strategy. This strategy can be implemented by maximizing fast response services and always maintaining spare parts availability to increase customer satisfaction. Furthermore, the key element of the strategy that will determine the success of Oasis Pool's corporate strategic planning is to maintain fast response to improve service quality. In order to maintain Oasis Pool's business to grow and develop and win the market competition, it is necessary to do the following things such as: design a good work system, active management to make improvements and innovations and keep up with technological developments. The main contribution of this article is to assist swimming pool managers such as Oasis Pool in carrying out effective strategic planning using AHP - SWOT and ISM methods.*

**KEYWORDS:** Strategy; Oasis; AHP; SWOT; ISM.

## 1. Introduction

Oasis Pool is a company that specializes in the construction and maintenance of swimming pools and Koi ponds. Since 2014, it has been dedicated to fulfilling the dreams of its customers.

Oasis Pool prioritizes quality in the use of materials and construction, constantly updating information to ensure that their pools are not only beautiful but also up-to-date. They strive to provide optimum quality at a competitive price.

Oasis Pool is subject to constant change, including increasing competition, rising inflation, decreasing economic growth rates, increasingly sophisticated technological changes, and changing demographic conditions. These factors result in rapid changes in consumer tastes for Oasis Pool's services, making strategic planning necessary. In

the highly competitive swimming pool construction and maintenance industry, Oasis Pool must develop its competitive advantage.

Further research is required to investigate strategic planning for Oasis Pool's business development, which is prospective and provides a competitive advantage in the market. Tiffani [1] has researched the design of a swimming pool in Aceh using a metaphorical architectural approach.

Additionally, Lau et al [2] have conducted research on a user-centred analytical approach to evaluate the performance of sports facilities, specifically studying swimming pools. Furthermore, various studies have utilized the AHP (Analytical Hierarchy Process) method to integrate project management and strategic management concepts in rubber dam projects [3],

\* Corresponding author: Dede Rukmayadi  
[dede.rukmayadi@dsn.ubharajaya.ac.id](mailto:dede.rukmayadi@dsn.ubharajaya.ac.id)

1. Industrial Engineering, Universitas Bhayangkara Jakarta Raya, Bekasi, 17121, Indonesia.

2. Industrial Engineering, Universitas Bhayangkara Jakarta Raya, Bekasi, 17121, Indonesia.

3. Industrial Engineering, Universitas Bhayangkara Jakarta Raya, Bekasi, 17121, Indonesia.

4. Industrial Engineering, Universitas Mercu Buana, Jakarta Barat 11640, Indonesia.

evaluate land suitability for maize cultivation [4], choose transportation modes [5], and assess attribute influence on value during real estate valuation [6]. Furthermore, various studies have utilized SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis. Examples include 'Perspectives for the Development of Sustainable Cultural Tourism' [7], 'Business Strategy for Longer Outfit as a New Fashion Brand' [8], 'Analysis of Amazon: Customer Centric Approach' [9], 'Borneo Project' [10], and 'Implications for Educational Practice and Research' [11]. Research utilizing ISM (Interpretive Structural Modelling) methods includes Covid-19 Pandemic and Welfare of Fishermen Kamal Muara [12], Exploring the Factors for Open Innovation in Post-COVID-19 Conditions [13], and Modelling Enablers of Transporter's Performance in Downstream Logistics of the Indian Oil Sector [14].

However, the discussion of the study is still general and does not specifically address the development potential of swimming pool construction and maintenance service companies. Furthermore, the methodological approaches used, namely AHP, SWOT and ISM, are limited to specific areas or objects and have not yet been implemented in strategic planning for the development of swimming pool companies.

This research will examine the development strategy of swimming pool construction and maintenance service companies, specifically in terms of their potential use of the AHP-SWOT and ISM methods. This is a novel approach to the topic. The research aims to aid swimming pool business managers in devising development strategies for their service companies and analyzing the structural composition of factors that impact their growth, such as the Oasis Pool.

## 2. Literature Review

### 2.1. Strategic planning

Strategy is a complex concept that involves many different processes and activities to achieve a company's goals and objectives. However, the development of these goals requires a strategic management process that must be carried out correctly and thoroughly [15], [16].

Strategic management is a comprehensive process designed to help an organization make the best use of its resources and capabilities. This strategic management consists of analysis, decisions and actions taken by an organization to achieve superior business performance and to create and maintain competitive advantage [17]–[19].

### 2.2. AHP

AHP is a model developed by Thomas L. Saaty during the period 1971-1975 at the Wharton School (University of Pennsylvania), which has become a reliable and efficient technique for solving problems in various fields such as engineering, manufacturing, production, social sciences and others [4], [20].

AHP has become a reliable and efficient technique for solving problems in various fields such as engineering, manufacturing, production, social sciences, and others. AHP is used to speed up the decision-making process by determining the relationship between the elements of a given problem, then building a hierarchical model, and finally checking the consistency to see whether the solution is feasible or not [21]–[23].

### 2.3. SWOT analysis

The data analysis technique used is SWOT analysis [24]–[26]. SWOT analysis is a business strategy tool to assess how an organization compares to its competitors. SWOT analysis has become a key tool used by organizations for strategic planning [3].

### 2.4. Interpretative structural modelling (ISM)

The ISM technique is a group study process in which structural models are created to represent the complex aspects of a system through carefully designed patterns using graphics and sentences. The ISM technique is primarily intended for the study of a team, but can also be used by an individual researcher [27], [28].

When analyzing the levels and institutional roles of the elements in the problem structure, the problem of strategic planning for the development of the company Oasis Pool was carried out using the ISM method, as done by Rukmayadi [29]–[31] in various research objects.

The stages are carried out by analyzing the activity elements needed to plan a development strategy for the Oasis Pool industry.

Then the sub-elements of the activity elements to be evaluated are identified, and then expert opinions are collected and expressed in contextual relationships. On the basis of these contextual relationships, a structural self-interaction matrix (SSIM) has been created using the symbols V, A, 0. A review is then carried out according to the Transitivity rules by making corrections to the SSIM until it becomes a closed matrix. Tabular processing by completion of forms.

## 2.5. Previous research

Research into swimming pool objects is mostly partial and discusses the architectural design and performance of swimming pools using

architectural metaphors, AHP and SWOT methods. The full position of the research carried out by the researcher with previous research is shown in Table 1.

**Tab. 1. Research position against previous research**

| Research  | Method                           |
|---|----------------------------------|
| Tiffani [1] Designing swimming pools in Aceh.   | Metaphorical Architecture Approa |
| Lau et al [2] User-centric analytic approach to evaluate the performance of sports facilities: A study of swimming pools. | AHP                              |
| Ghorbani et al [3] Project Management and Strategic Management of Rubber Dam Projects.                                    | SWOT – AHP.                      |
| Tashayo et al. [4] Land suitability assessment for maize farming.   | GIS - AHP                        |
| Hruška et al. [5] Selection Of The Transport Mode.  | AHP                              |
| Dmytrów and Gnat [6] assessment of the influence of attributes on value in the process of real estate valuation.          | AHP                              |
| Stoica <i>et al</i> [7], Sustainable Cultural Tourism.  | Benchmarking, SWOT, Pareto       |
| Nuraini and Purwanegara [8] Strategy for Longgar Outfit.  | SWOT                             |
| Frank [9] Analysis Of Amazon: Customer Centric Approach   | SWOT                             |
| Mujahid et al. [10] designing the Borneo Project strategy.  | QSPM                             |
| Farrokhnia et al. [11] Implications for educational practice and research.  | SWOT                             |
| Afriana et al. [12] Covid-19 Pandemic and Welfare of Fishermen Kamal Muara.   | SAST, AHP dan ISM                |
| Ullah et al. [13] Exploring the factors for open innovation in post-COVID-19 conditions                                   | Fuzzy Delphi-ISM-MICMAC approach |
| Malik et al. [14], Modeling Enablers of Transporter's Performance in Downstream Logistics of the Indian Oil Sector.       | ISM                              |
| Rukmayadi et al. (2024) planning Oasis Pool's corporate strategy.   | AHP-SWOT dan ISM                 |

Based on Table 1, previous studies in swimming pool management are still few and generally have not been studied comprehensively. In the field of swimming pools, research is mostly done partially and discusses strategic planning or management of swimming pools using SWOT analysis. So far there has been no research on strategic planning of swimming pool companies such as Oasis Pool using AHP SWOT and ISM methods as designed in this study.

Thus, the novelty of this research is in terms of methods and objects studied. The method used in the AHP-SWOT and ISM integrative model has never been done on the swimming pool object.

## 3. Method

Planning a development strategy for Oasis Pool Company will be of great benefit in preparing swimming pool construction and maintenance services that have a competitive advantage. In this research activity, two stages of work will be carried out, namely data collection and processing. Data collection and processing was carried out to:

analyze the development strategy of the Oasis Pool service company and analyze the levels and institutional roles of the elements in the structure of the Oasis Pool company development strategy planning problem (structural).

### 3.1. Data collection and processing

Data were collected and processed using literature review and field survey methods. Field surveys are used to obtain primary data. The research was carried out by observing, interviewing and completing questionnaires with decision makers involved in this research [32], [33].

### 3.2. Determination of company development strategy

When analyzing the strategic planning for the development of Oasis Pool Company, the method [24], [26] was used.

Firstly, the External Factor Evaluation (EFE) Matrix was used to evaluate the company's external factors, including opportunities and threats.

Secondly, the Internal Factor Evaluation (IFE) Matrix was used to evaluate the company's internal factors, including strengths and weaknesses.

The SWOT matrix utilizes internal strengths of the Oasis Pool company and external influences it faces to obtain a more detailed business strategy at the company level.

The model is used to identify strengths and weaknesses from internal factors, and opportunities and threats from external factors [11].

The AHP method is used to determine the weight of internal and external factors. The steps of the AHP are as follows:

1. Preparation of the goal by assessing the CFs to determine their priority.
2. Formation of a pairwise assessment matrix. Pairwise assessment matrices are formed from experts' feedback. The assessment matrix between factors is created using Saaty's scale (refer to Table 2).

**Tab. 2. The fundamental scale of absolute numbers [25]**

| Intensity of interest | Information   | Explanation  |
|-----------------------|---|--|
| 1                     | Equal importance  | Two activities contribute equally to the objective   |
| 2                     | Weak or slight  |  |
| 3                     | Moderate importance   | Experience and judgement slightly favour one activity over another                               |
| 4                     | Moderate plus   |  |
| 5                     | Strong importance   | Experience and judgement strongly favour one activity over another                               |
| 6                     | Strong plus   |  |
| 7                     | Very strong or demonstrated importance  | An activity is favored very strongly over another; its dominance demonstrated in practice        |
| 8                     | Very, very strong   |  |
| 9                     | Extreme importance  | The evidence favouring one activity over another is of the highest possible order of affirmation |
| Reciprocals of above  | If activity I has one of the above non-zero numbers assigned to it when compared with activity j, then j has the reciprocal value when compared with i. | A reasonable assumption.   |

The Eigenvalues and Eigenvectors are determined, and comparative weights are computed by working with the outlined pairwise comparison matrices to establish the relative position of CFs.

The consistency ratio (CR) is then assessed. To confirm the reliability of pairwise comparisons, the consistency ratio (CR) is calculated using the

formula  $CR = CI/RI$ . The consistency index (CI) is calculated as  $(\lambda_{max} - n)/(n - 1)$ , where  $\lambda_{max}$  is the maximum average value, and the random consistency index (RI) is based on the value of n. A CR of  $\leq 0.10$  indicates an improved level of consistency. Table 2 shows the corresponding values of the random index.

**Tab. 3. Random index (R.I.)**

| N    | 1 | 2 | 3    | 4    | 5    | 6    | 7    | 8    |
|------|---|---|------|------|------|------|------|------|
| R.I. | 0 | 0 | 0.58 | 0.98 | 1.12 | 1.24 | 1.32 | 1.41 |

### 3.3. Structural analysis

The ISM methodology and techniques consist of two parts: hierarchical preparation and sub-system classification. The basic principle is that identifying the structure in a system will provide high value in assembling the system effectively and making informed decisions.

The ISM technique involves dividing the program being studied into elements, each of which is then broken down into sub-elements. Related program

planning studies provide a comprehensive understanding of institutional elements and roles, leading to better and more acceptable solutions. The ISM technique offers an analytical foundation that generates valuable information for policy formulation and strategic planning. Saxena in Eriyatno [34] identifies nine program elements:

1. Affected sectors of society.
2. Program requirements.
3. The main obstacles.

4. Potential changes.
5. Program objectives.
6. Benchmarks for evaluating each goal.
7. The activities necessary for action planning,
- 10.
8. Measures of activity to evaluate the results achieved by each activity, and
9. The institutions involved in implementing the program.

**Tab. 4. Relationship between sub-elements in the ISM technique [23]**

| No. | Type                 | Interpretation   |
|-----|----------------------|--|
| 1   | Comparative          | • A is more important/big/beautiful/ than B  |
| 2   | Definitive           | • A is an attribute of B<br>• A is included in B   |
| 3   | Influence            | • A means B<br>• A causes B<br>• A is a partial cause of B<br>• A develops B<br>• A moves B<br>• A increases B |
| 4   | Spatial              | • A is South/North of B<br>• A above B<br>• A to the left of B   |
| 5   | Temporal/ Time Scale | • A precedes B<br>• A follows B<br>• A has more priority than B  |

The ISM technique is an analysis of expert opinions expressed in contextual relationships. A SSIM was prepared based on these relationships using the symbols V, A, X and O, where

V is  $e_{ij} = 1$  and  $e_{ji} = 0$

A is  $e_{ij} = 0$  and  $e_{ji} = 1$

X is  $e_{ij} = 1$  and  $e_{ji} = 1$

O is  $e_{ij} = 0$  and  $e_{ji} = 0$

The symbols 1 and 0 represent the presence or absence of contextual relationships between elements  $i$  and  $j$ , respectively [35].

Once the SSIM is formed, a Reachability Matrix (RM) is created by assigning 1s and 0s to V, A, X, and O. The Transitivity Rules are then applied to the SSIM to correct it until a closed matrix is obtained.

After fulfilling the transitivity rules, the next step is to determine the level partition options. This process involves tabulating the information in the required format.

The ISM technique produces three main outputs: key elements, structure diagrams, and DP-D (Driver Power-Dependence) matrices. These outputs describe the classification of sub-elements, which can be categorized as follows:

1. Weak driver-weak dependent variable (Autonomous), generally the sub elements are not related to the system, and may have little relationship, although the relationship can be strong (Sector I).

2. Weak driver-strongly dependent variables (Dependent), variables are not free and will be affected by the existence of the program as a result of actions on other sectors (Sector II).
3. Strong driver-strongly dependent variables (Linkage), variables must be studied carefully, because the relationship between variables is unstable. Every action on these variables will have an impact on others and the feedback effect can magnify the impact (Sector III).
4. Strong drive-weak dependent variables (Independent), variables have a large driving force on the success of the program but have little dependence on the program (Sector IV).

## 4. Results

### 4.1. Internal analysis

An internal analysis was conducted to identify the strengths and weaknesses of Oasis Pool company's business. The purpose of this analysis is to optimize the company's strengths and mitigate its weaknesses in order to effectively market its products and services.

Table 5 shows the results of weighting and rating the parameters in the internal environment of Oasis Pool company, based on the data processing using the AHP SWOT method.



**Tab. 5. Evaluation matrix of internal factors for the Oasis Pool company**

| Internal Strategic Factors  | Weight | Rating | Score |
|---|--------|--------|-------|
| (A) A fast response.  | 0.050  | 4      | 0.199 |
| (B) Competitive price   | 0.277  | 4      | 1.108 |
| (C) Good technical skills   | 0.081  | 3      | 0.244 |
| (D) Spare parts are always readily available.                           | 0.130  | 4      | 0.522 |
| (E) Have permanent technicians stationed in each region.                | 0.081  | 3      | 0.244 |
| (F) Technician control in the field is currently a manual process.      | 0.081  | 3      | 0.244 |
| (G) Currently lacks an efficient work system.                           | 0.194  | 2      | 0.388 |
| (H) There is no effective organizational structure                      | 0.050  | 2      | 0.099 |
| (I) The company currently lacks a defined vision and mission statement. | 0.032  | 2      | 0.065 |
| (J) Many technicians have formal education levels below high school.    | 0.023  | 2      | 0.046 |
|   | 1      |        | 3.158 |

Table 5 demonstrates that the competitive pricing factor is the greatest strength of the Oasis Pool industry. This is due to the company's implementation of several strategies, including efficient production costs, a study of target customer needs, a survey of competitor pricing options for similar services, and knowledge of when to use different pricing strategies. However, Table 5 shows that the Oasis Pool company lacks an effective work system, including work rules and procedures to ensure proper work control. A well-implemented system serves as a guide for all involved parties.

#### 4.2. External analysis

The purpose of external analysis is to identify opportunities and threats that Oasis Pool may encounter in marketing its products and services. This understanding will enable the company to develop more effective marketing strategies. Table 6 shows the results of weighting and rating the parameters found in the external environment of the Oasis Pool company, based on the data processing results using the AHP SWOT method.

**Tab. 6. EFE matrix for the oasis pool company**

| Internal Strategic Factors   | Weight | Rating | Score |
|--|--------|--------|-------|
| (A) Customer satisfaction is an important factor that requires significant attention, especially for customers who require similar services. | 0.1538 | 4      | 0.615 |
| (B) Business development has more options based on the current business.   | 0.0407 | 3      | 0.122 |
| (C) According to community opinion, houses with swimming pools have a positive impact on the after-sales value of the property.              | 0.0268 | 4      | 0.107 |
| (D) The public's perception of prestige towards houses with swimming pools.  | 0.0268 | 3      | 0.080 |
| (E) There are many competitors.  | 0.2282 | 4      | 0.913 |
| (F) Customers do not provide personal data for company purposes.   | 0.0643 | 2      | 0.129 |
| (G) Customers who do not adhere to payment schedules.  | 0.0643 | 2      | 0.129 |
| (H) Customer complaints that do not match the conditions.  | 0.0643 | 3      | 0.193 |
| (I) The congestion levels in the Jabodetabek area are increasing.  | 0.1025 | 3      | 0.307 |
| (J) Supplier prices exhibit high volatility.   | 0.2282 | 3      | 0.685 |
|  | 1      |        | 3.280 |

From Table 6 we can see that factor (A) Customer satisfaction is an important factor that needs significant attention, especially for customers who require similar services, and is the factor that needs the most attention. However, Table 4 also

shows that the biggest threat is (E) There are a lot of competitors facing Oasis Pool. Therefore, Oasis Pool entrepreneurs must continue to improve the quality of products/services at competitive prices

in order to dominate the local and even national markets.

### 4.3. The SWOT matrix

Table 7 presents the SWOT Matrix, which is based on the strengths, weaknesses, opportunities, and threats faced by Oasis Pool Company, as discussed with expert respondents. Four alternative SWOT Matrix strategies are available:

1. The SO (Strength-Opportunities) strategy utilizes the company's internal strengths to capitalize on existing opportunities.

2. The Weakness-Opportunities (WO) strategy aims to improve weaknesses by taking advantage of existing opportunities.
3. The Strengths-Threats (ST) strategy aims to maximize strengths to avoid or reduce the impact of threats faced.
4. The Weakness-Threats (WT) strategy aims to reduce internal weaknesses and avoid external threats.

Oasis Pool Company prepares these strategies to anticipate changes in both internal (strengths and weaknesses) and external (opportunities and threats) situations and conditions.

**Tab. 7. Strategy based on a position**

|               |  | Strengths   | Weaknesses  |
|---------------|--|---|---|
|               |  | A fast response.  | Technician control in the field is currently a manual process.  |
|               |  | Competitive price   | Currently lacks an efficient work system.   |
|               |  | Good technical skills   | There is no effective organizational structure  |
|               |  | Spare parts are always readily available.   | The company currently lacks a defined vision and mission statement.   |
|               |  | Have permanent technicians stationed in each region.  | Many technicians have formal education levels below high school.  |
| Opportunities | Customer satisfaction is an important factor that requires significant attention, especially for customers who require similar services. | Maximise rapid response and parts availability to increase customer satisfaction  | Planning and implementation of changes and development of the company's organisation, starting with the definition of the company's objectives in the form of a vision, mission, creating a business process mapping, creating an organisational structure, designing job desks for each department, creating Key Performance Indicators (KPI) for each department, creating Standard Operating Procedures (SOP) in all departments, improving and developing Human Resources (HR), creating a verification system for field technicians based on the Internet of Things (IoT). |
|               | Business development has more options based on the current business.   |   |   |
|               | According to community opinion, houses with swimming pools have a positive impact on the after-sales value of the property.              |   |   |
|               | The public's perception of prestige towards houses with swimming pools.  |   |   |
| Threats       | There are many competitors.  | Quick response to potential new customers is optimised by carrying out an initial survey of sites by technicians per area defined by the company. | The company creates SOPs for accepting new customers (New Customers), both based on manual registration forms and IoT (via goggle form), which contain complete data about the prospective customers, terms and conditions that apply between both parties, then conducts an initial survey of the prospective customers' locations as an initial study.  |
|               | Customers do not provide personal data for company purposes.   |   |   |
|               | Customers who do not adhere to payment schedules.  |   |   |
|               | Customer complaints that do not match the conditions.  |   |   |
|               | The congestion levels in the Jabodetabek area are increasing.  |   |   |
|               | Supplier prices exhibit high volatility.   |   |   |

### 4.4. ISM analysis

The ISM model is utilized during the structural analysis stage to determine the structural composition (leveling) of the elements that impact the strategic planning of Oasis Pool company. The data for this ISM analysis was collected based on the opinions of various parties related to the strategic planning of Oasis Pool company.

The strategy elements of Oasis Pool company comprise of sub-elements. (1) To maintain fast response times and improve service quality, (2) to

increase competitiveness and maintain affordable prices, (3) to continuously improve technician skills in line with industry developments, (4) to ensure consistent availability of spare parts, (5) to have permanent technicians in each region, (6) to optimize customer satisfaction and turn them into promoters, (7) to diversify business development, and (8) to improve service quality to enhance public opinion and prestige towards homes with swimming pools. The ISM method was used to assess related parties, and the following results were obtained.

**Tab. 8. SSIM for oasis pool strategic planning**

| Sub Elements | H | G | F | E | D | C | B | A | DP | Key Elements |
|--------------|---|---|---|---|---|---|---|---|----|--------------|
| A            | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8  | 1            |
| B            | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7  | 2            |
| C            | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7  | 2            |
| D            | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 5  | 3            |
| E            | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 4  | 4            |
| F            | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 4  | 4            |
| G            | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 2  | 5            |
| H            | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 4  | 4            |
| D            | 7 | 8 | 7 | 7 | 5 | 3 | 3 | 1 |    |              |
| Level        | 2 | 1 | 2 | 2 | 3 | 4 | 4 | 5 |    |              |

Once the SSIM has been established, a Reachability Matrix (RM) table is created by replacing V, A, X, and O with the numbers 1 and 0, as demonstrated in Table 9. The SSIM is then

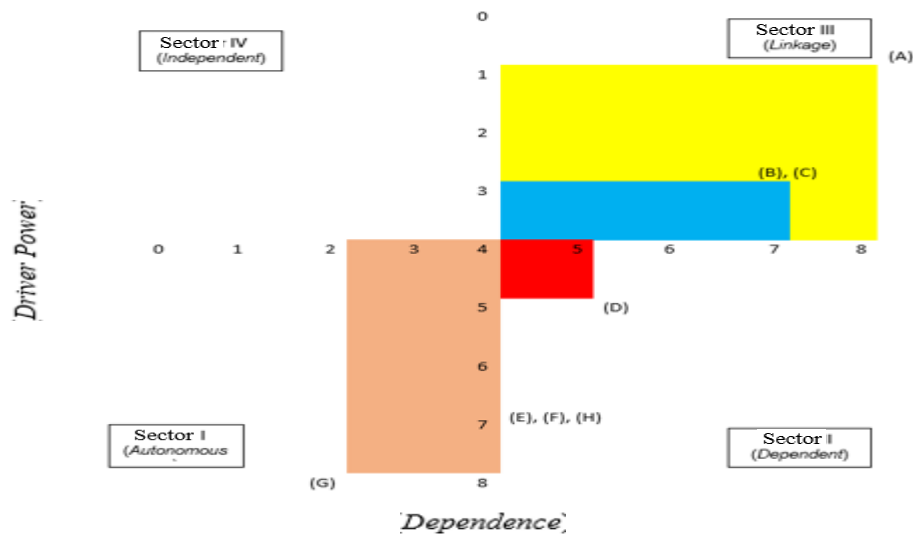
reviewed according to the Transitivity Rules, and corrections are made until a closed matrix is achieved.

**Tab. 9. Final reachability matrix results and their interpretation**

| Sub Elemen   | H | G | F | E | D | C | B | A |
|--|---|---|---|---|---|---|---|---|
| Maintaining fast response to improve service quality.                  | A | V | V | V | V | V | V | X |
| Increasing competitiveness to maintain competitive prices.             | B | V | V | V | V | V | X |   |
| Improving technician skills in line with developments.                 | C | V | V | V | V | V |   |   |
| Increasing the continuity of spare parts availability.                 | D | X | X | V | X |   |   |   |
| Having permanent technicians in each region.                           | E | X | X | V |   |   |   |   |
| Optimizing customer satisfaction to turn them into promotional agents. | F | X | V |   |   |   |   |   |
| Carrying out business development through diversification.             | G | A |   |   |   |   |   |   |
| Improving service quality to influence public opinion and prestige.    | H |   |   |   |   |   |   |   |

Table 9 shows that sub-element (A), maintaining fast response to improve service quality, is a key determinant of the success of Oasis Pool's

corporate strategy planning. This element is located in sector III (Linkage), as shown in Figure 1.



**Fig. 1. Driving force – dependency matrix**



Figure 1 shows that sector III (Linkage) comprises two sub-elements: (B) Increasing competitiveness to maintain competitive prices and (C) Improving technician skills in line with developments. Therefore, it is important to study these sub-elements carefully due to their unstable relationship. Each action in this sub-element will affect other sub-elements, and the feedback on the influence can increase the impact on the success of the Oasis Pool Company's strategic planning program.

Figure 1 shows sub-elements (D) increasing the continuity of spare parts availability, (E) having permanent technicians in each region, (F) optimizing customer satisfaction to turn them into

promotional agents, and (H) improving service quality to influence public opinion and prestige. The location of a house with a swimming pool is in sector II (Dependent), meaning that the strategic planning program of Oasis Pool company will affect all these sub-elements as a result of actions in other sectors. Furthermore, Figure 1 shows that sub-element (G), carrying out business development through diversification, is in Sector I (Autonomous). Sub-elements are generally not related to the system and may have little relationship, although the relationship can be strong. The complete results of the driving force – dependency matrix for the main constraint elements of the program are shown in Table 10.

**Tab. 10. Position of oasis pool company strategy variables in each sector**

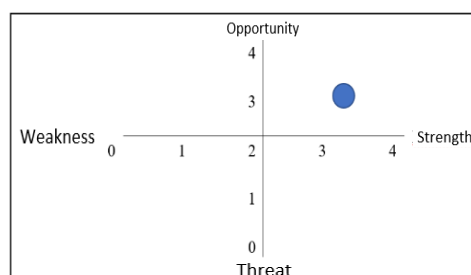
| No. | Sektor              | Variabel   |
|-----|---------------------|--|
| 1   | I<br>(Autonomous)   | (G) Carrying out business development through diversification.   |
| 2   | II (Dependent)      | (D) Increasing the continuity of spare parts availability.<br>(E) Having permanent technicians in each region.<br>(F) Optimizing customer satisfaction to turn them into promotional agents and<br>(H) Improving service quality to influence public opinion and prestige. |
| 3   | III (Linkage)       | (A) Maintaining fast response to improve service quality.<br>(B) Increasing competitiveness to maintain competitive prices and<br>(C) Improving technician skills in line with developments (up to date).  |
| 4   | IV<br>(Independent) | -  |

**5. Discussion**

**5.1. SWOT analysis**

Based on the internal and external evaluation calculations, a SWOT matrix can be prepared by placing the total IFE and EFE scores at each ordinate. The strategic position of the Oasis Pool business is shown in Figure 2, based on the IE matrix results.

By placing the total IFE and EFE scores in Figure 2, it is evident that the Oasis Pool company is located in quadrant I. It can be inferred that the situation is profitable for Oasis Pool company, which has the potential to capitalize on existing opportunities due to its strengths. It is important to maintain objectivity and avoid subjective evaluations.

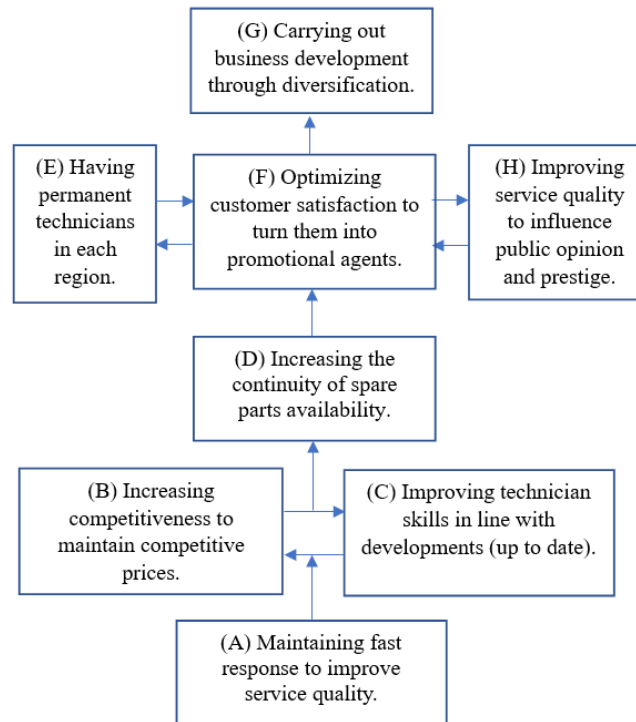


**Fig. 2. Strategic position of the oasis pool company**

The strategy for Oasis Pool company should focus on supporting an aggressive growth policy. This strategy aims to achieve growth in sales, assets, profits, or a combination of the three. To achieve these goals, Oasis Pool should prioritize fast response services and maintain spare parts availability to increase customer satisfaction. This strategy is particularly important if the company faces strong market competition [24].

## 5.2. ISM analysis

The analysis using the ISM method produced a hierarchical structure of Oasis Pool company strategy elements, which are influenced by the existence of the Oasis Pool company strategic planning system, as presented in Figure 3.



**Fig. 3. Hierarchical structure between sub-elements of affected segments**

Fig 3 shows that sub-element (A) Maintaining fast response to improve service quality is a basic level sub-element that can influence other sub-elements. The impact on these sub-elements can affect the strategy (B) Increasing competitiveness to maintain competitive prices and (C) Improving technician skills in line with developments.

At the next level, it will affect the strategy by increasing the continuity of spare parts availability. The impact on these sub-elements can influence the next level, such as having permanent technicians in each area, optimizing customer satisfaction to turn them into promotional agents, and improving the quality of service to enhance people's opinion and prestige towards the house with a swimming pool. At the final stage of strategy (G), diversifying to carry out business development will impact the strategic planning of Oasis Pool company [27], [36], [37].

The application of Analytic Hierarchy Process (AHP), Strengths, Weaknesses, Opportunities, and Threats (SWOT), and Interpretive Structural

Modelling (ISM) methods can have significant managerial implications. These methods can help in identifying the strengths, weaknesses, opportunities, and threats of swimming pool companies such as Oasis Pool. They can also aid in developing effective strategies to improve the performance of such companies and identifying key elements in their strategic planning.

The performance of Oasis Pool Company was improved by creating a favorable business environment and enhancing customer satisfaction. This statement aims to promote the growth and development of Oasis Pool Company and encourage investment activities in the swimming pool industry, particularly within the community.

## 6. Conclusions

The research discussion yielded the following conclusions:

1. The analysis of strategic planning revealed that the most suitable approach for developing the Oasis Pool business is a growth strategy. This

can be achieved by maximizing fast response services and ensuring spare parts availability to enhance customer satisfaction.

2. When planning the strategy for Oasis Pool company, it is important to focus on key strategic elements that determine its success. This includes maintaining a fast response time to improve service quality.

Suggestions based on the research results are:

1. Design a robust system to support the growth and development of Oasis Pool business.
2. Implement active management to drive innovation and improvement at Oasis Pool company.
3. Keep up with technological advancements to stay competitive in the market. If feasible, consider replacing outdated technology with more contemporary and innovative alternatives to enhance the quality of your products or services. This will enable you to compete effectively in both local and national markets.

The structural analysis designed has limitations as it only analyses the key elements of strategic planning. Further research studies in the field of strategic planning for swimming pool companies could include analysis of objectives, main constraints, institutions involved, and other elements.

In the analysis of the strategic planning of Oasis Pool Company, no cost-related data was obtained. The research has not determined the level of productivity and profitability that the company can achieve by implementing the resulting strategies.

### References

- [1] C. N. A. Tifani, *Perancangan gelanggang renang di aceh*. (2020).
- [2] E. Lau, H. (Cynthia) Hou, J. H. K. Lai, D. Edwards, and N. Chileshe, "User-centric analytic approach to evaluate the performance of sports facilities: A study of swimming pools," *J. Build. Eng.*, Vol. 44, No. March, (2021), p. 102951.
- [3] M. K. Ghorbani, H. Hamidifar, C. Skoulikaris, and M. Nones, "Concept-Based Integration of Project Management and Strategic Management of Rubber Dam Projects Using the SWOT-AHP Method," *Sustain.*, Vol. 14, No. 5, (2022).
- [4] B. Tashayo, A. Honarbakhsh, M. Akbari, and M. Eftekhari, "Land suitability assessment for maize farming using a GIS-AHP method for a semi- arid region, Iran," *J. Saudi Soc. Agric. Sci.*, Vol. 19, No. 5, (2020).
- [5] R. Hruška, M. Kmetík, and J. Chocholáč, "Selection Of The Transport Mode Using The Ahp Method Within Distribution Logistics Of Motor Fuels," *Promet - Traffic - Traffico*, Vol. 33, No. 6, (2021).
- [6] K. Dmytrów and S. Gnat, "Application of ahp method in assessment of the influence of attributes on value in the process of real estate valuation," *Real Estate Manag. Valuat.*, Vol. 27, No. 4, (2019).
- [7] G. D. Stoica *et al.*, "Perspectives for the Development of Sustainable Cultural Tourism," *Sustain.*, Vol. 14, No. 9, (2022).
- [8] S. Nuraini and M. S. Purwanegara, "Business Strategy for Longgar Outfit as a New Fashion Brand," *Tour. Sustain. Dev. Rev.*, Vol. 1, No. 1, (2020).
- [9] R. Baboolal Frank, "Analysis Of Amazon: Customer Centric Approach," *Acad. Strateg. Manag. J.*, Vol. 20, No. 2, (2021).
- [10] A. Mujahid, M. E. Isharyani, and D. Widada, "Analisis Strategi Pemasaran Menggunakan Metode Quantitative Strategic Planning Matrik (QSPM) Studi Kasus : Borneo Project," *J. Rekeyasa Sist. Ind.*, Vol. 7, No. 2, (2018).
- [11] M. Farrokhnia, S. K. Banihashem, O. Noroozi, and A. Wals, "A SWOT analysis of ChatGPT: Implications for educational practice and research," *Innov. Educ. Teach. Int.*, (2023).
- [12] W. Afriana, A. Abdulkadir, and H. Azis, "Covid-19 Pandemic and Welfare of Fishermen Kamal Muara," *J. Bus. Behav. Entrep.*, Vol. 5, No. 2, (2022)
- [13] S. Ullah, Z. Jianjun, K. Hayat, D. N. Palmucci, and P. Durana, "Exploring the factors for open innovation in post-COVID-19 conditions by fuzzy Delphi-ISM-MICMAC approach," *Eur. J. Innov. Manag.*, (2023).
- [14] R. S. Malik, M. K. Srivastava, and I. Shaikh, "Modeling Enablers of

- Transporter's Performance in Downstream Logistics of the Indian Oil Sector," *Adv. Oper. Res.*, (2021).
- [15] A. A. A. Ali, M. AlZgool, M. Alzoraiki, M. Milhem, and M. S. M. Al-Absy, "Moderating Effect of Strategic Planning on the Relationship between Career Path Planning and Job Performance," *Sustain.*, Vol. 15, No. 11, (2023)
- [16] L. Alcaide Muñoz, M. P. R. Bolívar, and C. A. Muñoz, "Political determinants in the strategic planning formulation of smart initiatives," *Gov. Inf. Q.*, Vol. 40, No. 1, (2023).
- [17] S. Chelliah and S. A. Muhammad, "Organisational Innovation, Competitive Advantage, and Export Performance," *Int. J. Innov. Learn.*, Vol. 1, No. 1, (2024).
- [18] M. Gupta and R. Kumar, "The role of supply chain management's key dimensions on supply chain performance and competitive advantage in Indian SMEs," *Int. J. Manag. Decis. Mak.*, Vol. 1, No. 1, (2024).
- [19] O. A. Alghamdi and G. Agag, "Competitive advantage: A longitudinal analysis of the roles of data-driven innovation capabilities, marketing agility, and market turbulence," *J. Retail. Consum. Serv.*, Vol. 76, (2024).
- [20] D. A. Pramandika and U. M. Siahaan, "Inorganic Strategy Priority and The Company Valuation Analysis of Pt Bank Bni Syariah to Become Buku III Bank," *Eur. J. Bus. Manag. Res.*, Vol. 5, No. 5, (2020).
- [21] C. F. dos Santos, E. de Freitas Rocha Loures, and E. A. P. Santos, "The Perception of Sustainability in an Ethernet Network Cable: A Qualitative Analysis Using the AHP Method," in *Lecture Notes in Mechanical Engineering*, (2024).
- [22] A. N, A. R, B. Ramasamy, and G. R, "Supplier selection and evaluation using Alteryx tool AHP in gear manufacturing industry," *Int. J. Enterp. Netw. Manag.*, Vol. 15, No. 1, (2024).
- [23] H. Dhumras and R. K. Bajaj, "On potential strategic framework for green supply chain management in the energy sector using q-rung picture fuzzy AHP & WASPAS decision-making model," *Expert Syst. Appl.*, Vol. 237, (2024).
- [24] R. W. Puyt, F. B. Lie, and C. P. M. Wilderom, "The origins of SWOT analysis," *Long Range Plann.*, Vol. 56, No. 3, (2023).
- [25] C. Vlados, "On a correlative and evolutionary SWOT analysis," *J. Strateg. Manag.*, Vol. 12, No. 3, (2019).
- [26] B. Phadermrod, R. M. Crowder, and G. B. Wills, "Importance-Performance Analysis based SWOT analysis," *Int. J. Inf. Manage.*, Vol. 44, (2019).
- [27] S. Savabieh, S. Nayebzadeh, R. Abghari, and S. H. Hataminasab, "A Comprehensive Review of International Research on Market Orientation and the Development of an Applied Model," *Iranian journal of Management Studies*, Vol. 15, No. 4. (2022).
- [28] S. Ullah, N. Ahmad, F. U. Khan, A. Badulescu, and D. Badulescu, "Mapping interactions among green innovations barriers in manufacturing industry using hybrid methodology: Insights from a developing country," *Int. J. Environ. Res. Public Health*, Vol. 18, No. 15, (2021).
- [29] A. A. Hidayat, M. Kholil, J. Haekal, W. E. Sandra, and D. Rukmayadi, "Lean Manufacturing Design to Reduce Waste in Customer Complaint Services Using Lean Principles in Coil Industry Companies, of Indonesia," *Int. J. Eng. Res. Adv. Technol.*, Vol. 07, No. 09, (2021).
- [30] I. Almahdy, M. Kholil, J. Haekal, A. Firmansyah, and D. Rukmayadi, "Implementation of Lean Manufacturing to Reduce Waste in the Maintenance Section in National Automotive Sub Companies of Indonesia," *Int. J. Eng. Res. Adv. Technol.*, Vol. 07, No. 09, (2021).

- [31] D. Rukmayadi, Marimin, U. Haris, and M. Yani, "Rubber agro-industry green logistic conceptual model," *Int. J. Supply Chain Manag.*, Vol. 5, No. 3, (2016).
- [32] L. Liu, Q. Yang, and Z. Zhu, "Industrial Internet Data Collection and Processing Technology Research," *Acad. J. Sci. Technol.*, Vol. 5, No. 1, (2023).
- [33] C. Baquero *et al.*, "The CoronaSurveys System for COVID-19 Incidence Data Collection and Processing," *Front. Comput. Sci.*, Vol. 3, (2021).
- [34] N. Noywuli, A. Sapei, N. H. Pandjaitan, and E. Eriyatno, "Model Kelembagaan Pengelolaan DAS Aesesa Flores, Provinsi NTT," *J. Ilmu Lingkungan*, Vol. 16, No. 2, (2018).
- [35] M. Balaji, V. Velmurugan, M. Prapa, and V. Mythily, "A fuzzy approach for modeling and design of agile supply chains using interpretive structural modeling," *Jordan J. Mech. Ind. Eng.*, Vol. 10, No. 1, (2016).
- [36] A. Bagherian, M. Gershon, S. Kumar, and M. Kumar Mishra, "Analyzing the relationship between digitalization and energy sustainability: A comprehensive ISM-MICMAC and DEMATEL approach," *Expert Syst. Appl.*, Vol. 236, (2024).
- [37] N. K. Durge, S. S. Mantha, and V. M. Phalle, "Interpretive Structural Modeling (ISM) for Analysis of Factors Affecting Marketing Efficiency of Fresh Mango Supply Chain: Indian Perspective," *Int. J. Supply Oper. Manag.*, Vol. 8, No. 4, (2021).

Follow this article at the following site:

Dede Rukmayadi, Yayan Saputra, Rifki Muhendra & Zulfa Fitri Ikatrinasari. Oasis Pool Corporate Strategy Planning Using AHP-SWOT and ISM Methods. *IJIEPR* 2024; 35 (1) :1-13  
URL: <http://ijiepr.iust.ac.ir/article-1-1961-en.html>

