

Strategy Development Using Swot Analysis : Case Study In Product Design Study Program Polytechnic State Samarinda

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Abstract: Product Design Study Program is one of study programs in Design Department in Samarinda State Polytechnic. Since more than 15 years ago, the study program organization has been very dynamic with the influences from the external and internal factors. This condition is needed to be reviewed and re-analyzed so that the organization survival will remain to run better. The objective of the research was to set from of the new strategy by using the SWOT analysis along with the help of the SWOT analyzer software. The data taken from 2006 to 2019 was used in this research. The results of the study showed that 1) Targeting the vision and mission achievement gradually and continuously. 2) Promoting continuously to attract the future students. 3) Proposing the scholarship of doctorate programs for the lecturers to the government. 4) Increasing the cooperation between the industry and government in developing the learning program and human resources quality as well as the recipients from the Product Design Study Program graduates. 5). Increasing the number and quality of recipients of research, service, scientific publications and intellectual property rights. 6) Proposing a budget to develop facilities.

Index Terms: SWOT, Internal Factors, External Factors, Strategy.

1 INTRODUCTION

Strategic planning is a step to take a decision in arranging and developing the strategy that influenced the objective achievement. The strategic planning is dealing with the clearly vision identification and prediction. SWOT is a strategic planning method used to evaluate the strength, weakness, opportunities and threats in an organization. These four factors are the abbreviation of SWOT (strengths, weaknesses, opportunities, and threats). SWOT analysis is able to be used to determine the strategy formulation and development. SWOT is conducted by the internal and external matrix evaluation. Some strategy formulation researches more intended to the further usage of SWOT method in helping the strategy formulation in organization because of the consideration as the simple and quick tools in helping the strategy formulation. The SWOT analysis is able to be applied in correcting the internal and external environment conditions. Product Design Study Program is one of Study Program in Design Department of Samarinda State Polytechnic Indonesia. Since more than 15 years ago, the organization life of this study program has run well. The policy strategy used in the last few years was a kind of offensive and aggressive strategy. The external and internal factors influenced the organization were needed reviewing and re-analyzing the strategy development appropriately so that the organization survival keeps running well. The problems needs to be solved in this research was how to develop the competitive strategy for Product Design Study Program.

And this problem was able to be solve in the research purpose that is to arrange and develop the new strategy to increase the competitiveness of Product Design Study Program by using SWOT analysis.

2 LITERATURE REVIEW

Definition of Strategic Management

Strategic management can be defined as the art and science of formulating, implementing and evaluating cross-functional decisions that enable an organization to achieve its objectives.

Strategy Classification

The company's strategy is classified on the basis of task levels. The strategies in question are the Generic Strategy, which will be translated into a grand strategy. This main strategy is further translated into strategies at the company's functional level which is often referred to as functional strategies [1].

Generic Strategy

Understanding generic strategy is an approach to corporate strategy in order to outperform competitors in similar industries. In practice after the company knows its generic strategy for its implementation will be followed by a more operational unification strategy [2]. In principle, generic strategies can be grouped into four groups of strategies:

a. Vertical Integration Strategy

This strategy requires that the company conducts more supervision of distributors, suppliers, and competitors.

b. Intensive Strategy

This strategy requires intensive efforts to improve the company's competitive position through existing products.

c. Diversified Strategy

This strategy is intended to add new products.

d. Defensive Strategy

This strategy is intended for companies to take action -

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rescue measures to be free from greater losses which in the end is bankruptcy.

Strategic Planning and Strategy Development

Strategic planning is a step in making decisions for the formulation and development of strategies that are very influential in achieving an objective. The model of strategy development and development can be adjusted based on the environmental conditions of the organization. Different models of strategy development and development will produce a different impact from the results of its implementation [3]. The strategic planning model can be used together with the SWOT analysis method [4]. The SWOT method is used to identify the organizational situation both internally and externally together in the present and forecast in the future environmental dynamics. Strategic planning is a forecast for future success for organizations by adjusting all organizational capabilities to opportunities from outside the organization. In this study the external factor, namely opportunity, is the dominant factor for developing strategic planning [5]. Organizational environment can only be overcome by doing appropriate planning. Factors that can influence success in strategic planning are internal and external factors of the organization itself [6][7].

SWOT Analysis and Strategy Formulation

SWOT is done through evaluation of internal and external matrices. Internal analysis funds indicate that resources need to be improved and maintained, while external analysis allows an organization to align its strategy according to the business environment [8][9]. One important thing in the SWOT method is the external environment. The external environment continues to change so that it impacts on the company's environment [10]. The SWOT method also aims to provide an overview and recommendations regarding internal and external conditions and management policies. This illustration can provide strategic recommendations according to the organization [11]. With SWOT analysis and coordinate disclosure, organizations can realize their position and have a reference to develop a strategy. The SWOT strategy can be shown in the coordinates in the four quadrants as shown figure 1 [12]:



Fig 1. SWOT strategy in four quadrant coordinates

The Role of Promotion Strategies in Organization Progress

Implementation of strategy management includes strategy formulation, strategy implementation, and strategy evaluation.

The strategy formulation process can be carried out by way of deliberations between the management and all staff in the organization or company. Vision changes can also occur if needed to deal with the dynamics of internal and external environments that occur in organizations or companies [13]. Companies or organizations today must be able to determine the right strategy. One way for the company to survive in the dynamics that occur is to promote each of its products, so that it can still survive in increasingly fierce market competition [14][15]. One strategy to maintain market competition is the ball pick-up strategy to promote the company directly to prospective customers [16]

3 METHODS

This research used SWOT method to analyse to produce the new Design Product Study Program strategy. The data used was the internal and external data obtained from 2016 to 2019. SWOT analyzer software was also used to help SWOT analysis. This software placed internal and external factors in the evaluation matrix position of the internal and external environment factors [17]. The matrix contained likelihood, the probability value of the factor occurring. Likelihood value which is the value of opportunity has the lowest limit of 0% and the highest limit of 100%. Next the matrix table will contain Impact, which is the impact caused if the Likelihood occurs. Impact value has the lowest limit is 0 and the highest limit is 100, and the last matrix will also contain a Time Frame which is a description of the time at which the SWOT factors can occur. The time frame will be divided into the current period, medium term and long term. This time frame function will determine what steps and strategies should be carried out in accordance with each time strategy.

4 RESULTS AND DISCUSSION

Internal Factors (Strength and Weakness)

Internal environmental factors is a systematic process for obtaining information both objectively and subjectively about symptoms arising from the internal environment that affect the organization. The purpose of an internal environmental audit is to develop a limited list of strengths and weaknesses of the Product Design Study Program. Key internal strengths include finance, management, marketing, and operations as shown in table 1 and table 2.

Table 1
Internal Strength

Internal Factors			
No.	Internal Strength	Likelihood	Impact
1	Achievement of the vision, and mission achieved gradually.	60	85
2	Clear organizational structure and division of labor.	70	70
3	Quality standards are based on ISO 9001: 2008.	55	60
4	Good information system support.	70	70
5	Student involvement in training and community service activities	60	65

6	Scholarship recipients are increasing	50	50	Current
7	Curriculum according to industry needs.	60	70	Short term
8	Good educational facilities	50	60	Current
9	Activity budget increased	50	70	Current
10	The number of intellectual property rights owned by lecturers increased.	55	60	Long term
11	national-level research increase	60	75	Short term

Table 2
Internal Weaknesses

No.	Internal Factors	Likelihood	Impact	Time Frame
1	The procurement of practical tools is still lacking.	56	65	Short term
2	Lack of Doctoral Educated Lecturers	60	70	Long term
3	Recruitment of new human resources is still lacking.	50	70	Long term

External Factors (Opportunity and Threats)

External environment audit is a systematic process to obtain information both objectively and subjectively about symptoms arising from the organization's external environment. The purpose of an external environmental audit is to develop a limited list of opportunity and threat factors. The results of the audit conducted on the external environment of the Product Design Study Program are shown in tablwl 3 and table 4:

Table 3
External Opportunities

No.	Eksternal Factors	Likelihood	Impact	Time Frame
1	The availability of scholarship assistance from both government and industry.	50	60	Short term
2	The number of high school / vocational graduates who are in the appropriate field in East Kalimantan is increasing.	60	75	Current
3	Entrepreneurship opportunities in the creative industry are increasing.	60	75	Current
4	The only study program based on product design status of the country in eastern Indonesia.	50	60	Short term
5	HR development through industry and government cooperation	55	60	Long term
6	Research grants from national ministries are increasing.	50	70	Current

Table 4
External Threats

No.	Eksternal Factors	Likelihood	Impact	Time Frame
1	Discourse about opening the same	50	50	Short term

2	competitor study program.	60	75	Short term
3	the number of alumni who do not work according to their area of expertise.	60	75	Current
	There are still many people who are not familiar with the Product Design Study Program.			

Development Strategy Development Plan

The next step is the evaluation of a matrix of internal and external factors which will be followed by a SWOT analysis (Strengths, Weaknesses, Weaknesses, Opportunities-Opportunities, and Threats-Threats). To develop a development strategy SWOT analysis is needed that takes into account current internal and external factors. The results of the SWOT analysis will be displayed on the SWOT strategy quadrant chart. SWOT analysis in this study uses SWOT Analyzer software. An example of internal factors can be seen as figure 2:

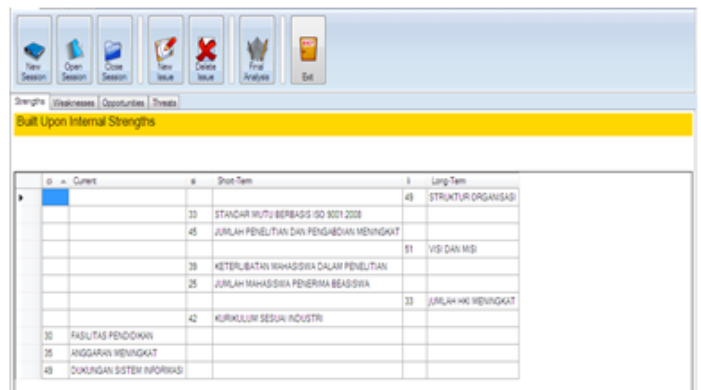


Fig 2. Analyzer SWOT application example

In figure 2 is an exemplified the internal strength factors consisting of 11 lists of factors that influence the Product Design Study Program. In the same way, internal weaknesses data, external opportunities and threats are inputted into the program.

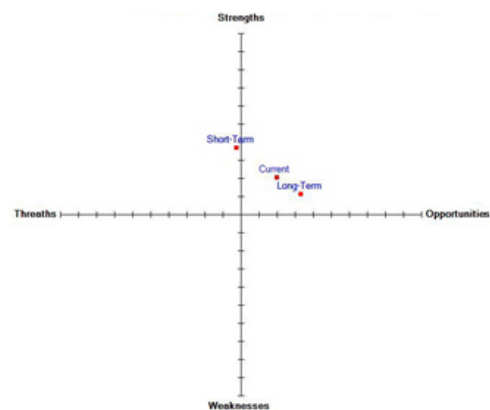


Fig 3. the position of each Time Frames in the SWOT analysis diagram.

Figure 3 is the final display of using the SWOT Analyzer software. This display shows the position of each Time Frames in the SWOT analysis diagram. The strategy that must be applied in the current / short term and long term is a type of strategy that is aggressive because it is in quadrant I. Aggressive strategy is the utilization of opportunities that exist freely as a major player in the market in the field of education, especially product design. For the medium term / short term conditions the position is in quadrant III. This condition requires that the Product Design Study Program must have a conservative strategy covering market penetration, market development, and product development in the Product Design Study Program.

New Strategy

The new strategy from the resulting SWOT analysis is a strategy that will become an initiative strategy, namely:

1. Targeting the vision and mission achievement gradually and continuously.
2. Promoting continuously to attract the future students.
3. Proposing the scholarship of doctorate programs for the lecturers to the government.
4. Increasing the cooperation between the industry and government in developing the learning program and human resources quality as well as the recipients from the Product Design Study Program graduates.
5. Increasing the number and quality of recipients of research, service, scientific publications and intellectual property rights.
6. Proposing a budget to develop facilities.

The new strategy can be implemented from now on to achieve the organizational goals and targets of the Product Design Study Program.

5. CONCLUSION

The SWOT Analyzer is used to help formulate an organization's strategy. The calculation principle is almost the same as the SWOT method. The difference is that the SWOT Analyzer can show risk factors and determine the application of strategies in a particular Time Frame. Alternative strategic initiatives generated through the application of the strategy model are : 1) Targeting the vision and mission achievement gradually and continuously. 2) Promoting continuously to attract the future students. 3) Proposing the scholarship of doctorate programs for the lecturers to the government. 4) Increasing the cooperation between the industry and government in developing the learning program and human resources quality as well as the recipients from the Product Design Study Program graduates. 5) Increasing the number and quality of recipients of research, service, scientific publications and intellectual property rights. 6) Proposing a budget to develop facilities. It is also possible to use other methods besides the SWOT analysis method in developing the Product Design Study Program strategy.

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