

Micro and Small Enterprise (Mse) Development by Using SWOT and Analytical Hierarchy Process Methods Approach (Ahp) (Study Case In Tarlac Agricultural University (Tau) Mushroom Production, Malacamp, Tarlac, Phillipines)

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Abstract.

This research is aimed to identify the competitive advantage of Tarlac Agricultural University (TAU) Mushroom production by using SWOT methods approach and than making a decision by using the Analytical Hierarchy Process (AHP) method Approach. Based on the result of the SWOT, the strategy was formulated is the SO (Strength and Oportunities) Strategy, which its mean that TAU mushroom need to maximalized their strength to reach the industrial oportunites. Based on the AHP result, the fourth alternative strategy has a highest weight, so its mean that to reach the business main goals, business need to (1) proposing to the stakeholder, not only to provide the capital assistance, but also to improve the ability of of the workforce to use existing technology (0,353), (2) establishing a cooperation with partners not only in field of training, but also cooperating in the field of production and marketing (0,223), (3) Innovating the product, in order to expands the range of product marketing (0,216) and (4) Improving the quality of mushroom produces, by switching to using the adequrate technology or moving to semi-modren system (0,208).

1. Introduction

As one of the best performing campuses in the Philippines, Tarlac Agriculture University in the city of Tarlac also plays an active role in conducting SMEs activities in the country. In carrying out the activities of SMEs on campus, TAU established several building units that were designated as the center of the SMEs in the campus, including Food Laboratory unit 1 which produced Nutri tea, Turmeric Tea, Brownies, Tamaryn Candy, Oat cookies and chile garlic. Then Sweet Potato Production which produces sweet potatoes brownies, sweet potatoes buchi, polvoron sweet potatoes, cookies, etc., and also establishes organic oyster mushroom production centers under the auspices of the campus faculty of agriculture.

The oyster mushroom production center business carried out by Tarlac Agriculture University is still classified as a micro category (MSMED Council measured) because it only has an income of less than 3 million pesos per month and has only 4 employees. The mushrooms produced have all applied an organic system but are still classified as conventional because the production system applied is still manual. The mushroom produced is entirely managed by TAU Mushroom Production starting from the preparation of the planting media to the sales process. In its production, TAU Mushroom Production not only sells fresh mushrooms but also sells mushroom growing media at a price of around Php. 100 and the selling price of mushrooms applied at TAU Mushroom Production is around PhP.200 with a margin of around 50-60%.

TAU Mushroom Production in running its business activities does not always run smoothly, this business is often visited by many problems, both large and small scale problems. Like some time ago when the Philippines held elections for the 2019 senator election, capital and financial problems became a problem that slowed company performance, because this business was under the auspices of the government department, of course political uncertainty would have a real impact on the business, which would certainly cause business funding will go down slowly, moreover this business in carrying out its business activities always hold training (short training) which is done to farmers and the general public to motivate them about mushroom business activities such as mushroom production training, mushroom marketing and others, of course this will be a separate threat to the business, because with the training held this business also helps create new competitors, so the biggest risk if there are many businesses engaged in similar fields will have an impact on business competition, both in terms of business standards, products or prices will all experience competition. On the other hand, Mushrrom Production TAU's business has weaknesses in the field of technology. Where with the development of technology that is increasingly developing at this time in the Philippines, it makes it very difficult for businesses to develop, due to the inability of businesses to respond to any technological developments that exist today. So this will be feared as a threat to the business because there will be many competitors of similar businesses that emerge precisely with capabilities far superior to those of TAU Mushroom Production. In addition, technology issues also have an impact on many business problems, both in terms of financial management, marketing and others which have a major influence on the business.

As a result, the formulation of strategies that have been designed by the business, not in accordance with the capabilities of the business, so that businesses often have to be in an unfavorable condition even often experience substantial losses. Therefore, the TAU Mushroom Production needs to improve its current strategy, which not only improves the short-term strategy but also the long-term one, by reformulating alternative strategies that are in line with the business vision, and can be taken into consideration in developing TAU Mushroom Production business. Therefore this research was conducted with the aim to help companies find alternative business development strategies that are in line with the main objectives of the business. Where this research was conducted with data analysis techniques in the form of SWOT analysis (Strength, Weakness, Oportunities and Treat) and Analytical Hierarchy Process (AHP), which was given the title "SME's (Small and Medium Entreprises Development Strategy) Using SWOT Method and Analytical Hierarcy Process (AHP) ".

2. Literature review

This study uses a grand theory of management strategy. According to David (2011) strategy management is the art and knowledge of formulating, implementing, and evaluating cross-functional decisions that enable an organization to achieve its goals. Strategy management focuses on efforts to integrate management, marketing, finance, production, research and development, and computer information systems to achieve organizational success.

Strategy management is the process and approach to determine organizational goals, develop program policies and paradigms and plan to achieve the goals of a company, and allocate resources to implement policies, programs, paradigms and plans. or in other words, strategic management can be seen as managing the combined components of the three stages of the strategy process namely, strategy development, strategy implementation and strategy evaluation. As represented in Figure 2.1 below

The main objective of the organization is to maximize long-term profitability and sustainable development of competitive advantages over competitive competitors in the external market. The industry-perspective organization (I / O) is the basis of this theory because it views the organization of external market positioning as an important factor for achieving and maintaining profitability, or in other words, the traditional I / O perspective offers a systematic strategic management model for assessing competition in an industry. the same with the economic philosophy of business goals. On the other hand, the competitive advantage of company resources lies in their internal resources, in contrast to their position in the external environment. It is not just evaluating the opportunities and environmental threats of doing business; competitive advantage depends on the unique resources and capabilities of the company. (Omalaja and Eroula, 2011)

3. Discussion

TAU Mushroom Production is a business that was founded in 2010 which was established by the TAU Collage of Agriculture. Tarlac Agricultural University (TAU).

1. Business vision and missions

a. Business Vision

Becoming one of the advanced businesses in the field of mushroom processing in the Philippines and becoming a place of learning for the community regarding mushrooms.

b. Business Mission

- 1) Increasing the quality of mushroom production in every year
- 2) Increasing the quantity of mushroom production in every year
- 3) Conducted the Community Training about mushroom production
- 4) Expanding the business marketing segmentation
- 5) Improve the collaboration quality with the business partners

2. SWOT analyze of TAU mushroom production

Table 1. Result of SWOT analysis in TAU Mushroom Production

STRATEGI S-O	STRATEGI W-O
Improving the Quality of Fungus in production, by switching to using appropriate technologies or turning towards semi-modren.	. Promoting on the basis of the use of social media
Doing product innovation, in order to expand the reach of business marketing.	Start switching by implementing a technology-based financial system
Collaborating with business partners, not only in the field of training, but also in cooperation in the field of	Creating a Marketing Gallery that is outside the campus area, or which is easier for the public to access
	Reducing Marketing Costs by maximizing the use

production and marketing. Propose to stakeholders not only to provide capital assistance but also training to improve the ability of the workforce, especially in terms of the use of existing mushroom production technology.	of technology, such as reducing promotion costs and others
STRATEGI S-T Start doing Product Innovations on the basis of doing product innovations regularly Increasing the capacity of human resources at any time regarding the activities of the oyster mushroom cultivation Improving the quality and quantity of products produced in order to anticipate the threat of new entrants Improve the quality of cooperation with business partners, with the aim of anticipating government policy uncertainty	STRATEGI S-OS-O STRATEGY Maximizing conventional production processes in terms of minimizing production risk Maximizing the use of the existing financial system to overcome unstable production costs

Based on table above, the alternative order of the SWOT strategy, that the Strength-Opportunity (S-O) strategy produces the highest weight, which is a strategy that utilizes all the power to seize and make the most of opportunities. Based on the SWOT matrix tables that have been analyzed, the S-O strategies are:

- a. Improving the Quality of Mushrooms in production, by switching to using appropriate technologies or turning towards semi-modren
- b. Doing product innovation, in order to expand marketing reach.
- c. Collaborating with business partners, not only in the field of training, but also in the fields of production and marketing
- d. Propose to stakeholders to not only provide capital assistance but also training to improve the ability of the workforce in using existing technology, such as the use of technology, financial systems, etc.

After establishing the SO strategy as the highest weighting strategy on the results of the mushroom production TAU marketing strategy analysis, it is necessary to determine the strategic priorities of the four Strength-Opportunity (SO) policy strategies produced through SWOT analysis in this study using The Analytical Hierarchie Process (AHP).

3. Analitical Hierarcy Process

Table 2 : AHP result of TAU Mushroom Productions

	S1	S2	S3	W1	W2	W3	O1	O2	O3	T1	T2	T3	Prioritas
	0,031	0,077	0,019	0,103	0,132	0,083	0,092	0,073	0,115	0,080	0,063	0,100	Global
Strategi 1	0,198	0,239	0,159	0,317	0,177	0,132	0,110	0,207	0,140	0,099	0,138	0,125	0,208
Strategi 2	0,240	0,168	0,249	0,134	0,195	0,190	0,290	0,295	0,440	0,121	0,070	0,217	0,216
Strategi 3	0,205	0,198	0,292	0,134	0,195	0,165	0,303	0,295	0,200	0,250	0,187	0,240	0,224
Strategi 4	0,345	0,495	0,511	0,206	0,444	0,295	0,358	0,207	0,440	0,521	0,606	0,429	0,353
CR	0,07	0,02	0,09	0,02	0,01	0,01	0,02	0,05	0,02	0,08	0,05	0,07	

Globally, the first priority of the TAU Mushroom Production business development strategy lies in the alternative of the fourth (S4) strategy, namely proposing to stakeholders not only to provide capital assistance but also training to Improve Workers' Ability in using existing technology, such as the use of technology, financial system, etc. with a weight (0.353) then followed by an alternative third strategy (S3) namely Establishing Cooperation with business partners, not only in the field of training, but also conducting cooperation in the field of production and marketing with a weight (0.223), followed by an alternative of the second strategy (S2) i.e. To innovate products, in order to expand the range of marketing products with weights (0.216) and finally is the first alternative strategy (S1), namely Improving the Quality of Fungi in production, by switching to using appropriate technologies or switching to semi-modren with weight (0.208). As shown in table above it was decided that the alternative strategy S4 was the strategy chosen.

Refrences

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