

## SWOT Analysis in the Development Strategy of Lettuce Farmer UMKM (Case Study of Umkm Alam Tani Hidrofarm Kudus)

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### ABSTRACT

**Background.** The development of the times brings a number of changes in life. UMKM or Micro, Small and Medium Enterprises have a central function to bring changes in improving the economy of a country. UMKM are also referred to as businesses that are able to survive in crisis conditions. UMKM are usually more elastic, flexible, and adaptive so that capital becomes the beginning in working on their business.

**Purpose.** This study aims to determine the strengths, weaknesses, opportunities, and threats affecting the Kudus Hydrofarm Farming Nature.

**Method.** The method used in this research is qualitative. The data used in this research is primary data by conducting interviews and observations at UMKM Alam Tani Hidrofarm Kudus.

**Results.** The results of this study indicate that the strengths of Alam Tani Hidrofarm Kudus are reducing dependence on large agricultural land, good quality products, appropriate market segmentation. The weaknesses include the unstable availability of hydroponic lettuce to fulfil the demand for vegetables, the lack of variety of vegetable products, and the risk of technical failures in the hydroponic system that can disrupt production.

**Conclusion.** The conclusion of this study is that Alam Tani Hydrofarm UMKM in Kudus has a SWOT analysis that identifies the strengths, weaknesses, opportunities, and threats faced by their business. From this analysis, UMKM have several alternative strategies that can be implemented to optimise their potential. By implementing appropriate strategies, UMKM are expected to overcome the challenges faced, capitalise on existing opportunities, and contribute to the growth of a sustainable agriculture sector as well as the overall economy.

### KEYWORDS

Strategy, SWOT, UMKM

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### INTRODUCTION

Economic actors including consumers, producers, and others have the same goal of achieving prosperity. In the reality of business actors in Indonesia, there are business actors called Micro, Small and Medium Enterprises or UMKM. Micro, Small and Medium Enterprises or UMKM are a category of productive businesses and have experienced very rapid growth in Indonesia to date (Horodnic & Williams, 2022; Sovacool dkk., 2020). Small and Medium Enterprises (UMKM) is the most important pillar in the national economy with an independent outlook has a huge potential in creating a welfare. Welfare can be measured by economic level, quality of life, health, and others.



But in practice, some UMKM still face difficulties in managing their business operations effectively which results in some of them failing. These failures generally occur because UMKM owners lack an adequate understanding of business governance. Based on this critical role of UMKM it is important to continue to encourage the empowerment and sustainable growth of the sector (Andriamihaja dkk., 2019; Li dkk., 2020).

The development of the times brings a number of changes in life. UMKM or Micro, Small and Medium Enterprises have a central function to bring change in improving the economy of a country. UMKM are also referred to as businesses that are able to survive in crisis conditions. UMKM are usually more elastic, flexible, and adaptive so that capital becomes the beginning of working on their business (Palash dkk., 2021; Stock, 2022). With modest capital, UMKM are eager and enthusiastic to develop their businesses. Although doing business is faced with a variety of highly competitive opportunities and challenges, it is important for UMKM to have the right strategy to compete effectively and sustainably so that they can win the competition (Elomäki & Kantola, 2020).

One of the UMKM sectors that attracts attention is the lettuce vegetable hydroponic industry. Lettuce it self is a type of vegetable whose leaves are harvested to be used as salads, fresh vegetables, and other processed dishes (Putri dkk., 2022). Hydroponics as a method of growing without using soil has become an increasingly popular choice among farmers. The hydroponic method has various advantages over traditional farming approaches (Velazquez-Gonzalez dkk., 2022). These advantages include environmentally friendly aspects, clean and hygienic production, accelerated plant growth, maintenance of optimal plant quality, and a significant increase in the amount of yield (Abánades Velasco dkk., 2023). The vegetables produced through hydroponic methods are also of a healthier quality as they are free from exposure to industrial heavy metals that may be present in the soil (Rufi-Salís dkk., 2020). Thus, through this good quality, hydroponic vegetables can compete in the market. The application of the hydroponic method is not affected by seasonal changes and does not require a large area compared to conventional farming methods to achieve equivalent production yields (Khadim dkk., 2023). In addition, the vegetables have optimal freshness, longer shelf life, and better digestibility. The increasing demand for hydroponic vegetables creates significant opportunities in the hydroponic vegetable business industry (Sumei dkk., 2022).

UMKM Alam Tani Hidrofarm is a vegetable cultivation business using hydroponic techniques engaged in agribusiness, which means that this agricultural business does not only focus on production, but also includes all stages including product marketing (Rehman dkk., 2022; Siregar & Razali, 2022). UMKM Alam Tani Hidrofarm was established in 2019, which began with the initiative of the owner, Muhammad Rifan, who conducted research on hydroponic plants. Starting from this research, he concluded that agriculture with a hydroponic system has good prospects in the future (Zhang dkk., 2022). He started his business by growing hydroponic kale vegetables in styrofoam. As time progressed, he tried to grow various types of hydroponic vegetables behind his house such as kale, pokcoy, and lettuce (Kubo & Okoso, 2019; Sisodia dkk., 2021). Of the various types of vegetables, lettuce is a hydroponic vegetable that is in high demand in the market. Regarding this, he then began to expand his hydroponic lettuce farm because he saw good prospects in the future (Lakshmanan dkk., 2020).

**Table 1.** Sales Data

No	Year	Total Sales (Kg)	Percentage
1	2019	1.800	6%
2	2020	3.600	12%
3	2021	6.120	20%
4	2022	7.560	25%
5	2023	12.600	41%
		31.680	100%

Amount

**Source 1:** Alam Tani Hidrofarm Sales Data 2019-2023

Based on the table above, it can be seen that the sales level at Alam Tani Hidrofarm Kudus is increasing from year to year. This is based on sales data in 2019 Alam Tani Hidrofarm Kudus managed to sell 1,800 kg of hydroponic plants with a percentage rate of 6%. Then in 2020 as many as 3,600 kg of hydroponic plants were sold and followed by subsequent years which continued to increase, especially in 2023 Alam Tani Hidrofarm Kudus experienced a very significant increase of 41% compared to previous years (Kour dkk., 2022).

However, in developing UMKM that focus on lettuce hydroponics, it cannot be ignored that there are various complex challenges. These challenges include marketing issues, distribution, competition, regulations, and other factors that UMKM owners must face to achieve sustainable growth (Tikno & Amelia, 2019). Therefore, SWOT (Strengths, Weaknesses, Opportunities, Threats) strategy analysis serves as an effective tool for UMKM owners engaged in lettuce hydroponics to gain a thorough understanding of their business conditions and devise suitable development strategies (Cifuentes-Torres dkk., 2021).

In this context, this study aims to determine how SWOT analysis in the development strategy of lettuce hydroponic UMKM in Alam Tani Hidrofarm Kudus UMKM. This study will provide in-depth insights into the internal strengths and weaknesses of Alam Tani Hidrofarm Kudus UMKM. Thus, this study is expected to provide valuable recommendations and input for the owner of UMKM Alam Tani Hidrofarm Kudus in improving competitiveness, innovation, and business sustainability (Du dkk., 2020).

By understanding the key factors that influence the development of UMKM Alam Tani Hidrofarm Kudus, it is hoped that this research will make a positive contribution to the development of a sustainable agriculture sector and the economy as a whole (Buiru dkk., 2021; Miao dkk., 2022). In addition, the results of this study are expected to serve as a reference and guide for relevant stakeholders, government, academics, and other parties interested in developing the hydroponic industry and UMKM more broadly (Chen dkk., 2020).

## RESEARCH METHODOLOGY

This research uses a qualitative approach with a case study method and descriptive analysis. Qualitative research is research that is carried out to describe an event through data collection in as much depth as possible. This qualitative research involves important steps such as conducting

interviews, collecting specific data, and then interpreting the meaning of the words (Sundler dkk., 2019). The qualitative research method used aims to gain an in-depth understanding of the development of lettuce farmers' UMKM at Alam Tani Hidrofarm Kudus UMKM through the application of SWOT strategies. The qualitative approach was used because this research emphasises the analysis of the meaning, views, and perceptions of the owners of lettuce farmer UMKM in Alam Tani Hidrofarm Kudus and related parties. The research location was at Alam Tani Hidrofarm Kudus UMKM to get an overview of the existing situation and conditions (Rodriguez & Storer, 2020).

The research was conducted through in-depth interviews with the owner of Alam Tani Hidrofarm Kudus UMKM and related parties, such as consumers, customers, and others. In addition, direct observation in the field was also carried out to obtain information about the production process and the obstacles faced by UMKM Alam Tani Hidrofarm Kudus.

Through a qualitative approach, this research is expected to be able to contribute and understand the SWOT strategy in the context of UMKM Alam Tani Hidrofarm Kudus. This research is expected to provide valuable guidance and recommendations for lettuce farming UMKM, as well as other stakeholders in developing the potential and competitiveness of their businesses in the market (Palamar & Acosta, 2020).

## RESULT AND DISCUSSION

To determine development strategies in UMKM, SWOT analysis is one of the recommendations used where SWOT analysis (Strength, Weakness, Opportunities, Threats) can be used to evaluate opportunities and challenges in the business environment (Lubis dkk., 2022) (Siregar & Razali, 2022). In conducting SWOT analysis on the business development strategy of Alam Tani Hidrofarm Kudus UMKM, it includes internal and external aspects as follows:

**Table 2.** SWOT matrix of Alam Tani Hidrofarm Kudus

IFAS	<i>Strength (S)</i> <ul style="list-style-type: none"> <li>Reduced dependence on large tracts of agricultural land</li> <li>Products have good quality</li> <li>Appropriate market segmentation</li> </ul>	<i>Weakness (W)</i> <ul style="list-style-type: none"> <li>Unstable availability of hydroponic lettuce to fulfil vegetable demand</li> <li>Lack of variety in vegetable products</li> <li>Risk of technical failures in the hydroponic system that could disrupt production</li> </ul>
EFAS	<i>Strategi S-O</i> <ul style="list-style-type: none"> <li>Retain existing potential markets</li> <li>Take advantage of the high market demand for clean agricultural products by promoting better</li> </ul>	<i>Strategi W-O</i> <ul style="list-style-type: none"> <li>Increase the variety of hydroponic vegetable products by conducting new research and development, and providing more</li> </ul>
Opportunities (O)		
<ul style="list-style-type: none"> <li>Customer loyalty</li> <li>High market demand for cleaner agricultural products</li> <li>Broader marketing network</li> </ul>		

	<p>quality hydroponic products.</p> <ul style="list-style-type: none"> <li>Enhance vegetable marketing activities by utilising various marketing networks.</li> </ul>	<p>options to meet diverse market demands.</p> <ul style="list-style-type: none"> <li>Increase promotion and knowledge of technological advancements in order to gain more demand</li> <li>Optimise the availability of hydroponic lettuce vegetables</li> </ul>
<p><b>Threats (T)</b></p> <ul style="list-style-type: none"> <li>Emerging competition with agricultural products that may be cheaper</li> <li>Uncertainty in marketing</li> <li>Erratic climate change</li> <li>Unstable demand levels</li> </ul>	<p><b>Strategi S-T</b></p> <ul style="list-style-type: none"> <li>Maintain focus on high-quality products and differentiation to compete with cheaper agricultural products in the market.</li> <li>Increase customer trust through the promotion of clean and sustainable products to cope with uncertain climate change.</li> <li>Implement flexible production strategies and effective inventory management to cope with demand fluctuations.</li> </ul>	<p><b>Strategi W-T</b></p> <ul style="list-style-type: none"> <li>Enhance promotional activities by utilising technological advances to expand marketing to increase demand.</li> <li>Address marketing uncertainty by developing diverse distribution channels and collaborating with stable partners.</li> <li>Reduce risk by mitigating the impact of climate change through adjustments to technology and production strategies..</li> </ul>

Based on the information in the SWOT matrix table, it is known that the alternative strategies obtained to be carried out by Alam Tani Hidrofarm Kudus are as follows:

#### **S-O Strategy (Strength-Opportunities)**

A strategy that comes from the strengths and opportunities of UMKM Alam Tani Hidrofarm Kudus is a strategy that is created through strengths from the internal environment to take advantage of opportunities from the external environment in an effort to develop UMKM Alam Tani Hidrofarm Kudus (Andrews dkk., 2021; McLeod dkk., 2019). The following are alternative strategies that can be considered to be implemented in UMKM Alam Tani Hidrofarm Kudus,

namely: a) Maintaining the existing potential market, b) Taking advantage of the high market demand for clean agricultural products by promoting better quality hydroponic products, c) Increase vegetable marketing activities by utilising various marketing networks.

#### **W-O Strategy (Weakness-Opportunities)**

The W-O strategy in UMKM Alam Tani Hidrofarm Kudus is a strategy that arises from less than optimal internal factors, with the aim of seizing opportunities that arise from the external environment in an effort to develop the business of UMKM Alam Tani Hidrofarm Kudus. The following is the W-O strategy in UMKM Alam Tani Hidrofarm Kudus: a) Increase the variety of hydroponic vegetable products by conducting new research and development, as well as providing more options to meet diverse market demands, b) Promotion and knowledge of technological advances that need to be improved in order to get a lot of demand, c) Optimising the availability of hydroponic lettuce vegetables

#### **S-T (Strength-Threats) Strategy**

This strategy is formed based on the utilisation of the potential or strengths possessed by UMKM Alam Tani Hidrofarm Kudus, by avoiding or overcoming impacts that may arise as threats. Below are alternative strategies that can be considered to be implemented in UMKM Alam Tani Hidrofarm Kudus: a) Maintaining a focus on high-quality products and differentiation to compete with cheaper agricultural products in the market, b) Increase customer trust through the promotion of clean and sustainable products to deal with uncertain climate change, c) Implement flexible production strategies and effective inventory management to cope with demand fluctuations.

#### **W-T Strategy (Weakness-Threats)**

The W-T strategy in the development of UMKM Alam Tani Hidrofarm Kudus is an approach that arises from efforts to reduce weaknesses originating from the internal environment, with the aim of avoiding potential threats that arise from the external environment in the business. The W-T strategy in the Alam Tani Hidrofarm Kudus business is: a) Increase promotional activities by utilising technological advances to expand marketing to increase demand, b) Overcoming marketing uncertainty by developing diverse distribution channels and collaborating with stable partners, c) Reduce risk by mitigating the impact of climate change through adjustments to technology and production strategies.

### **CONCLUSION**

Based on the results of interviews and observations, it is known that Alam Tani Hidrofarm Kudus UMKM has internal strengths which include the ability to reduce dependence on large agricultural land, good quality products, and appropriate market segmentation. However, they also have weaknesses such as the unstable availability of hydroponic vegetables, lack of product variety, and the risk of technical failures in the hydroponic system.

On the opportunity side, these UMKM can capitalise on customer loyalty, high market demand for clean agricultural products, and a wider marketing network. However, there are also threats such as competition with agricultural products that may be cheaper, uncertainty in marketing, erratic climate change, and unstable demand.

Based on the SWOT analysis conducted, UMKM Alam Tani Hidrofarm has several alternative strategies that can be implemented. These include S-O strategies (maintaining existing markets, capitalising on high market demand, and increasing marketing activities), W-O strategies (increasing product variety, promotion, and product availability), S-T strategies (maintaining focus on high-quality products, increasing customer trust, and implementing flexible production



strategies), and W-T strategies (increasing promotion, addressing marketing uncertainty, and reducing the risk of climate change impacts).

By choosing and implementing appropriate strategies, Alam Tani Hidrofarm UMKM are expected to overcome the challenges faced and capitalise on the opportunities that exist. This will help the UMKM to grow and develop sustainably, as well as increase its contribution to the sustainable agriculture sector and the overall economy.

## AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

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