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Analysis Of Economic Opportunities For Farming With Hydroponic Systems In Makassar City

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ABSTRACT
This research delves into the world of hydroponic farming within the vibrant landscape of Makassar City, aiming to uncover the city's untapped economic potential. We meticulously selected a group of dedicated garden owners and experienced hydroponic growers from the city using a systematic snowball sampling strategy to provide insights into this topic. Our analytical framework is built on the SWOT analysis, a strategic tool rooted in logical principles. It harnesses strengths and seizes opportunities while mitigating weaknesses and averting potential threats. As we explore the four key aspects of strengths, weaknesses, opportunities, and threats, an intriguing narrative unfolds, showcasing Makassar City's robust business environment and extensive economic opportunities poised for greater growth and prosperity. These findings are bolstered by a well-executed marketing strategy utilizing various media platforms. Summarizing our observations on the Cartesian diagram, our SWOT analysis confidently resides in the first quadrant, indicating an overwhelmingly positive outlook for hydroponic farming in the city.

ABSTRAK
Penelitian ini menyelidiki dunia pertanian hidroponik dalam lanskap Kota Makassar yang dinamis, yang bertujuan untuk mengungkap potensi ekonomi kota yang belum dimanfaatkan. Kami dengan cermat memilih sekelompok pemilik kebun yang berdedikasi dan petani hidroponik berpengalaman dari kota ini dengan menggunakan strategi pengambilan sampel bola salju yang sistematis untuk memberikan wawasan tentang topik ini. Kerangka kerja analisis kami dibangun di atas analisis SWOT, sebuah alat strategis yang berakar pada prinsip-prinsip logis. Analisis ini memanfaatkan kekuatan dan meraih peluang sekaligus mengurangi kelemahan dan menghindari potensi ancaman. Ketika kami mengeksplorasi empat aspek utama yaitu kekuatan, kelemahan, peluang, dan ancaman, sebuah narasi yang menarik terungkap, menampilkan lingkungan bisnis Kota Makassar yang kuat dan peluang ekonomi yang luas yang siap untuk pertumbuhan dan kemakmuran yang lebih besar. Temuan-temuan ini didukung oleh strategi pemasaran yang dijalankan dengan baik dengan memanfaatkan berbagai platform media. Merangkum pengamatan kami pada diagram Cartesius, analisis SWOT kami dengan percaya diri berada di kuadran pertama, yang menunjukkan prospek yang sangat positif untuk pertanian hidroponik di kota ini.

INTRODUCTION

Indonesia, particularly in South Sulawesi, is an agrarian nation poised for transformation. Among the agricultural sectors ripe for development, horticultural commodities stand out prominently. Horticulture encompasses a diverse range of

agricultural products, including vegetables, fruits, ornamental plants, and biopharmaceuticals. These commodities possess significant economic value, making horticultural agribusiness (encompassing fruits, vegetables, floriculture, and medicinal plants) a potential source of livelihood for local communities. Hydroponic technology represents an innovative approach to farming, employing water, nutrients, and oxygen to nurture crops. When compared to traditional farming methods, hydroponics boasts numerous advantages. These benefits encompass environmental sustainability, the production of hygienic goods, accelerated plant growth, maintenance of crop quality, and increased yields. Hydroponically grown vegetables exhibit superior health qualities as they are devoid of soil-based industrial heavy metal contamination, ensuring freshness, durability, and ease of digestion. The rising consumption of hydroponically cultivated vegetables opens up promising prospects for hydroponic farming enterprises. Ventures employing hydroponic technology offer a plethora of advantages over conventional systems, including environmental friendliness, the production of hygienic and healthful products, expedited plant growth, the sustained quality of crop yields, and enhanced yield quantities.

Vegetables cultivated through hydroponic technology exhibit superior quality, albeit at a higher cost than conventional counterparts. Consequently, the target market segment primarily comprises middle to upper economic strata. Leveraging this high quality and catering to this specific market segment, hydroponic vegetables can command premium prices well above prevailing market rates. These hydroponically grown vegetables find their market through supermarkets, hypermarkets, hotels, and restaurants. The hydroponic vegetable varieties are typically marketed with high commercial value (Indriasti, 2013). As Winardi cited in Sari (2016), income refers to the financial or material returns resulting from utilizing resources or human services. The magnitude of this income serves as a yardstick for evaluating the success of farmers in managing their agricultural endeavors. Success in farming is ultimately gauged by comparing the costs incurred against the revenues generated within a single growing season. A substantial portion of the population still relies on soil-based cultivation methods. This is primarily due to the prohibitive costs associated with hydroponic farming and the requisite training to acquire the necessary knowledge for successful hydroponic cultivation techniques.

Residents of South Sulawesi, particularly in Makassar City, have enthusiastically embraced hydroponic farming techniques as a recreational pursuit and for commercial endeavors. One notable commercial venture employing hydroponic techniques is Green Hydroponics, situated along Jalan Hertasning Baru within the Permata Hijau Lestari Complex in Kassi-Kassi Village, Rappocini-Makassar District. Additionally, several other hydroponic gardens have sprouted across Makassar City, borne from concerns stemming from the underappreciation of hydroponics, particularly among the millennial demographic. We recognize the importance of shedding light on the economic advantages of hydroponic systems and forging connections with the proprietors of Green Hydroponics—the author endeavors to expound upon these

aspects within the scope of this research. Green Hydroponics cultivates various vegetable crops, including lettuce, red lettuce, choy sum, spinach, and red spinach. The hydroponic cultivation process follows a structured cycle from initial planting to bountiful harvests. The burgeoning hydroponic green farming sector promises to augment household incomes, underscoring the need to examine the income levels generated from green hydroponic farming in greater detail.

RESEARCH METHOD

The research design employed in this study is qualitative research utilizing a descriptive approach. Qualitative research is rooted in post-positivism or interpretive philosophy and is employed for investigating natural phenomena. In this approach, the researcher is the primary instrument, and data collection employs a triangulation method, incorporating observations, interviews, and document analysis. The data acquired predominantly consists of qualitative data, and the analysis is inductive and qualitative. Qualitative research aims to understand meanings, appreciate uniqueness, construct phenomena, and generate hypotheses (Sugiyono, 2018).

Aligned with the research objectives, this study concentrates on hydroponic farming within Makassar City to assess the economic potential of this agricultural practice. Data for this study can be categorized into two main types: primary data and secondary data.

The analytical framework employed in this research is the SWOT analysis, a strategic tool used to assess an organization's strategic factors. SWOT analysis offers a structured approach to evaluating how external opportunities and threats can be aligned with internal strengths and weaknesses. In this study, a SWOT analysis will be employed to formulate strategies to enhance competitiveness within the tofu industry in Hajoran Village. This analysis can be described as a situational assessment utilizing the SWOT analysis model.

RESULTS AND DISCUSSION

The presentation of this research data maps the results of the interviews systematically with the matrix tables of the SWOT analysis model. SWOT analysis is a tool used by a company to identify or evaluate the company's internal and external factors. The company's internal factors consist of the company's strengths and weaknesses. Meanwhile, the company's external factors consist of the company's opportunities and threats.

a. Internal Environment Analysis

1) *Strength*

(a) Farmers maintain crop quality
(b) The market share tends to be stable and increasing
(c) Farmers whose services are oriented towards customer convenience.
(d) The types of plants that can be planted with a hydroponic system vary and each has its market
(e) Attractive packaging

(f) Utilizing social media in sales

The outcomes of informant interviews about various aspects of business strength corroborate this. In one such instance, the researcher queried Imanuddin about the market share and marketing model employed for the hydroponically cultivated plants, particularly within Makassar City. In response, Brother IMD articulated: "

> " *Makassar City has experienced a powerful metamorphosis, especially from 2019 to 2022, with the proliferation of frozen food outlets and the emergence of numerous Asian and Korean restaurants. The market demand, particularly for hydroponic lettuce and pakcoy, has expanded. Reflecting on our journey, we began marketing 200 kg of lettuce by the end of 2019, which increased to 400 kg by the end of 2020 and further surged to 700 kg by the end of 2021. Presently, we are grappling with the challenge of meeting the demand for up to 1 ton of specific types of lettuce within Makassar City alone. Our marketing approach primarily involves utilizing social media and mobile platforms to connect with restaurants employing hydroponic systems for plant cultivation. We also focus on establishing contracts with critical stakeholders and entrepreneurs in the industry," he articulated.*

Then the researcher returned to continuing the question, meaning that in conclusion as long as you feel hydroponic in the city of Makassar in particular it is still very profitable? Brother IMD replied:

> "*Yes, for hydroponic farming it is still very profitable because the demand is still higher than the supply in the city of Makassar in particular. Because we ourselves are in the group of hydroponic farmers in South Sulawesi that are the 3rd largest in sales and indeed the sales center is in the city of Makassar, what if plus there are many farmers who in this year have hung their pipes because most have a main job and on average they have returned to work. Even though we ourselves have no barriers to sales at all. So when it comes to the potential of farming with a hydroponic system, it is very potential to be a permanent business, of course, in doing business, customer satisfaction is the main thing*"

The researcher again asked, how did you market your hydroponic plants like? brother IMR replied:

> "*The marketing process that we do tends to be the same as that of other hydroponic farmer friends by utilizing links from groups, offering each other's crops to farmer friends throughout Makassar City and offering crops from our plants to WhatsApp, Instagram and Facebook application stories. , for now we haven't got regular customers, most of them buy our crops, itinerant burger sellers and some collectors because we think we still need to learn a lot from other farmer friends, because considering the number of requests from the sale of hydroponic plants is relatively large, it's just that We haven't found a market share that is more than what we have now, but every variation of hydroponic plants is always in the upper middle market in the sense that this is very profitable and a value that indicates the strength of hydroponics is the various types of plants that are offered* "

Then the researchers asked again, how is the supply and demand from farming with this hydroponic system? brother IMR replied:

> *"As I explained before, the demand itself is relatively large, especially in the city of Makassar inversely proportional to the supply, I myself only have 220 hydroponic planting holes for one harvest, I can plant up to 16 kg of lettuce, I don't have a monthly target, because I am currently in my final semester at college and my planting cycle tends to be erratic, but thank God, my faithful planting has never sold out. he said*

Then the researchers asked again, what are the significant differences from crop cultivation with hydroponic and conventional systems? brother IMR replied:

> *"Incidentally, we also studied how conventional plants work and how they compare to hydroponic systems, and for vegetable plants themselves, as far as we are hydroponic farmers, it is quite significant, starting from little land use to fast growth, which is more profitable for vegetables that are used up than conventional ones that are in process. the harvest takes longer and is somewhat less resistant at room temperature when it is harvested"*

Then the researchers again asked, How is the supply and demand for agricultural products with this hydroponic system? Brother YR replied:

> *"We, with a capacity of 120 planting holes, alhamdulillah, per one planting cycle, we can meet up to 25 kg of hydroponic lettuce from our partners, they take 30,000 per kg, the harvest time is 30-45 days per one planting cycle, meaning that one harvest is approx. you can get IDR 750,000 a month, quite profitable for an installation capacity that was originally only for a home scale, and also we rely a lot on attractive packaging in marketing this is a distinct advantage in our sales system"*

2) *Weakness*

(a) Capital can be a weakness of a business, small capital is of course difficult to compete with traders who have large enough capital so they can offer several variants of their products.
(b) The price of supporting materials is expensive
(c) Most farmers make hydroponic farming a side job
(d) Weather becomes very influential on the growth of hydroponic plants.

Evidenced by the results of interviews with informants, when asked a number of things related to business weaknesses. the researcher again asked what are the weaknesses of farming with a hydroponic system? Brother FJR replied:

> *"In my view, the shortcomings are lacking in the farmers because the demand has not been met because one of the reasons is that many farmers make hydroponics a side job or just fill in the gaps amidst the overwhelming demand, while the obstacles are in the pests which are sometimes annoying and the weather affects the growing quality of the plants, especially if the transition from summer to the rainy season makes it prone to root rot, maybe that's all for finding our consumers.*

Researchers ask what are the obstacles or shortcomings of farming with a hydroponic system? brother IMR replied:

> *"We ourselves do not have any significant obstacles other than pests and free time to take care of the plants seriously, and the drawbacks themselves might be in my opinion more capital to start a business. a little bit instead compared to using wood or bamboo and also more towards materials such as seeds and nutrients which are increasing over time, so we also have a bit of difficulty maintaining prices"*

b. External Environment Analysis

1) *Opportunity*
   a. Increasingly Korean and Asean food where most of the food ingredients require products from plants with a hydroponic system
   b. The impact of the pandemic that makes people tend to choose and sort clean and healthy food ingredients offered by hydroponic plants
   c. There is no competition that significantly affects fellow farmers considering that most farmers only make hydroponics a side job amid increasing demand every year.

Evidenced by the results of interviews with informants, when asked a number of things related to business opportunities the researcher asked, what makes farming with a hydroponic system an opportunity? Brother AMD replied:

> *"Supply demand, from hydroponic farming in my opinion is quite promising, considering I am a person whose main job is in the government, more precisely the protocol of the Deputy Mayor of Makassar, I often visit hydroponic gardens with him in Makassar City, and after being interviewed it hasn't been found that farmers are experiencing losses because they don't find buyers and considering that nowadays Korean and Asean food use mostly hydroponic plants, this is an opportunity to continue to increase the quantity of business, especially after the pandemic a few years ago, people tend to sort and choose ingredients. Food is all the effects of a pandemic and all of this can be met with a non-pesticide hydroponic planting system".*

The researcher again asked, is farming with a hydroponic system according to relatives in the city of Makassar recommended to be made into a permanent business? Brother FJR replied:

> *"Highly recommended, considering that every year there is always an increase in demand for lettuce and pakcoy plants in Makassar City in particular, and in the future the potential will be even greater, especially because of excessive demand, farmers are not competing with each other to get customers but exchanging information so that all requests in Makassar City, so we find minimal market competition between farmers".*

2) *Threat*
   a) Rising raw material prices often make it difficult for hydroponic farmers to maintain prices
   b) Many farmers do not want to try to maintain the quality of their goods and sell goods at low prices resulting in a drop in the price of hydroponic plants

Evidenced by the results of interviews with informants, when asked a number of things related to business opportunities. The researcher again asked what are the drawbacks of farming with a hydroponic system? Brother IMD replied:

"If the threat itself, in my view, is the lack of farmers because there is a lot of demand that has not been fulfilled because one of the reasons is that many farmers make hydroponics a side job, prices are also rather difficult to maintain because the price of materials is increasing day by day, this can be a threat. for hydroponic farmers because if prices rise it could be that most food entrepreneurs who use hydroponic food ingredients will use vegetables with a conventional planting system and there are also farmers who are lazy to market and are not wise in marketing because so that the goods run out quickly they usually lower prices as low as possible especially if their vegetables have entered the harvest schedule but have not sold them because they rely too much on one location to market their products, the price of vegetables has decreased significantly and that has happened before and to stabilize it is very difficult, because we have to discuss again with fellow farmers not to sell outside of the price agreement, ".

The following is the result of strengths, weaknesses, opportunities and threats. As stated in the table below :

Table 1 *SWOT Analysis of Economic Opportunities for Farming with Hydroponic Systems*

Strength 1) Maintained quality 2) Market share increases 3) Service orientation is customer convenience 4) Types of vegetables vary 5) Product packaging is attractive 6) Utilize social media	***Weakness*** 1) Large venture capital 2) The price of staples is expensive 3) Farmers make hydroponics a side job 4) The quality of the plant depends on unstable weather
Opportunity 1) Increasing Korean and ASEAN food using hydroponic plants 2) People are more selective in choosing food ingredients 3) Minim competition	***Threat*** 1) Raw material prices are rising 2) Irresponsible farmers reduce the selling price of hydroponic vegetables

Source Table 1 *Primary Data (Processed Data), 2023*

IFAS (*Internal Factor Analysis Summary*) Matrix

Once the internal strategic factors of a company have been identified, an IFAS (Internal Factor Analysis Summary) table is created to organize these factors within the context of the company's strengths and weaknesses.

Table 2 *Matriks IFAS (Internal Factor Analysis Summary)*

No	Internal factors	Weight	Ratings	Score

	Strength Factors			
1.	Maintained quality	0,17	4	0,68
2.	Market share increases	0,15	4	0,6
3.	Service orientation is customer convenience	0,10	4	0,4
4.	Various types of vegetables	0,11	3	0,33
5.	Attractive product packaging	0,13	3	0,39
6.	Make use of social media	0,16	3	0,48
	Subtotal	0,82		2,88
	Weakness Factors			
1.	Big venture capital	0,10	2	0,2
2.	Expensive price of staples	0,05	2	0,1
3.	Farmers make hydroponics a side job	0,02	1	0,02
4.	The quality of the crop depends on the weather	0,01	1	0,02
	Subtotal	0,18		0,34
	Total	**1**		**3,22**

Source Table 2: Primary Data (Processed Data), 2023

From the results of the analysis contained in table 2 IFAS, the strengths and weaknesses have a total score of 3.22. Because the total score is more than or above 2.5, it indicates that the internal factors in the opportunity for farming with the hydroponic system in Makassar City are so strong.

EFAS (*External Factor Analysis Summary*) Matrix

In the EFAS matrix, the highest achievable total score is 4.0, while the lowest is 1.0. A total score of 4.0 signifies that hydroponic farmers adeptly seize opportunities and effectively shield themselves from external threats within their industry. Conversely, a total score of 1.0 implies that the strategies implemented by hydroponic farmers either fail to capitalize on opportunities or neglect to mitigate external threats.

Table 3 EFAS (External Factor Analysis Summary) Matrix

No	External Factors	Score	Rating	Weight
	Opportuny			
1.	Increasing Korean and Asean food using hydroponic plants	0,25	4	1
2.	People are more selective in choosing food ingredients	0,23	4	0,92
3.	Farmers who do not compete with each other tend to inform each other about the availability of production results	0,10	3	0,3
	Subtotal	0,58		2,22
	Threat			
1.	The increase in raw materials has an impact on product prices	0,22	3	0,66
2.	Farmers lack coordination with other farmers to reduce prices beyond the agreement of the hydroponic farmer association	0,20	3	0,6
	Subtotal	0,42		1,26
	Total	**1**		**3,48**

Source Table 3: Primary Data (Processed Data), 2023

Based on the analysis in Table 3 of the EFAS, the cumulative score for opportunity and threat factors stands at 3.48. Given its proximity to the maximum score of 4.0, hydroponic farming in Makassar City is adept at capitalizing on existing opportunities and effectively mitigating prevailing threats. Furthermore, when we disaggregate the total scores for each category, we find that strengths score 2.88, weaknesses score 0.34, opportunities score 2.22, and threats score 1.26. Consequently, the disparity between the total scores of strengths and weaknesses amounts to a positive (+) 2.54, while the difference between the total scores of opportunities and threats is a positive (+) 0.96. Below is a Cartesian diagram illustrating the SWOT analysis of hydroponic farmers in Makassar City.

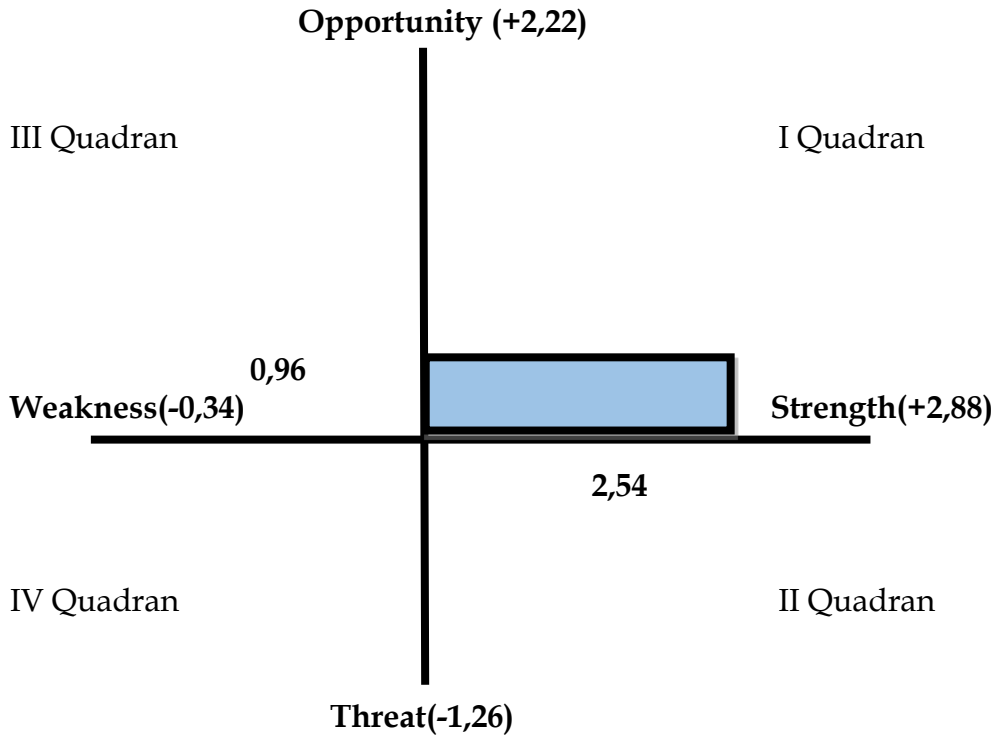

Figure 1. Cartesius diagram SWOT analysis of farming opportunities with hydroponic systems in Makassar City.

The Cartesian diagram above illustrates that hydroponic farmers in Makassar City position themselves within the first quadrant, denoting an aggressive strategy quadrant—a highly advantageous scenario. With a combination of opportunities and strengths, these farmers are well-poised to capitalize on existing prospects. In this scenario, it is imperative to implement a Growth Oriented Strategy, signifying a robust business environment that has the capacity for sustained growth through the exploitation of available opportunities, ensuring the longevity of the enterprise.

SWOT Matrix

The SWOT matrix is an invaluable tool for comprehensively assessing a company's strategic factors. Within this matrix, the intricate interplay between external opportunities and threats becomes transparent, offering a nuanced understanding of the organizational landscape. It effectively yields four distinct alternative strategy cells, each holding unique potential for strategic direction and decision-making. These cells

serve as pivotal points for strategic analysis, where an organization can discern the most fitting course of action based on its internal strengths and weaknesses in conjunction with the external opportunities and threats it faces. The resulting strategies from this matrix enable an organization to navigate its competitive landscape, make informed choices, and optimize its overall performance. Thus, the SWOT matrix is vital, guiding companies toward successful outcomes in a dynamic and ever-changing business environment:

Table 4 *SWOT Matrix Results*

	STRENGTH	***WEAKNESS***
IFAS / **EFAS**	1) Maintained quality, 2) Market share increases 3) Service orientation is customer convenience 4) Types of vegetables vary 5) Attractive product packaging 6) Utilize social media	1) Large venture capital 2) The price of staples is expensive 3) Farmers make hydroponics a side job 4) The quality of plants that depend on unstable weather
OPPORTUNITY	**S-O Strategies**	**W-O Strategies**
1) Increasing Korean and ASEAN food using hydroponic plants 2) People are more selective in choosing food ingredients, 3) Minim competition,	1) The increase in Korean and Asean food, where most food ingredients use a hydroponic system, can be used to better maintain quality and make packaging more attractive 2) People who are more selective in choosing food ingredients will certainly have an impact on increasing sales due to the cleanliness of the plants with the hydroponic system 3) The lack of competition between farmers is a benefit for farmers	1) Empowering or using cheaper materials in making installations. 2) Focus on farming with a hydroponic system in order to achieve maximum results.

THREAT	S-T Strategies	W-T Strategies
1). The price of raw materials rises 2). Farmers who reduce prices below the agreement of the hydroponic association	1) Sharing market share or being for farmers who are not good at finding markets 2) Setting prices that can still be reached by all groups when raw material prices rise 3) Making various product variants to survive in the midst of intense competition.	1) Maximizing small capital to remain competitive. 2) Hold meetings with fellow hydroponic farmers for agreement and price stability among hydroponic farmers

Source Table 4 *Primary Data (Processed Data), 2023*

Based on the results of the analysis above, it shows that market performance can be determined by a combination of internal factors and external factors. The combination of these factors is shown in the SWOT analysis result diagram. Below is the author's analysis based on the SWOT matrix above:

Strategy SO (Strength – Opportunity)
The SO strategy is a synergy of internal strengths and external opportunities, crafted with a market-centric approach that leverages inherent strengths and aligns them with prevailing market opportunities. In the context of hydroponic farming in Makassar City, the SO strategy encompasses the following key facets:

1. ***Capitalizing on the Surging Demand for Korean and ASEAN Cuisine****: The burgeoning popularity of Korean and ASEAN cuisine, which frequently relies on ingredients cultivated through hydroponic systems, presents a ripe opportunity. Hydroponic farmers can harness this trend to enhance product quality and create more appealing packaging.*
2. ***Meeting the Needs of Discerning Consumers****: As consumers increasingly prioritize the quality and safety of their food ingredients, adopting hydroponic systems can positively impact sales. The perceived cleanliness and reliability of hydroponically grown produce can be a compelling selling point.*
3. ***Benefitting from Limited Competition****: The relative scarcity of competition among hydroponic farmers in the region can be a boon. It allows farmers to operate in a less crowded market, potentially increasing market share and profitability.*

The SO strategy strategically positions hydroponic farmers in Makassar City to seize market opportunities by leveraging their internal strengths, ultimately fostering sustainable growth and success.

Strategy ST (Strength – Threat)
The ST strategy represents a harmonious integration of internal strengths and external threats to empower street vendors to effectively address and mitigate potential challenges. In the context of hydroponic farmers in Makassar City, the ST strategy encompasses the following key initiatives:

1. ***Market Collaboration and Alliances****: Collaborating and sharing market access can be a robust approach for hydroponic farmers to assist those struggling with market penetration. By leveraging their strengths, these farmers can help others gain a foothold in the market.*
2. ***Pricing Flexibility in Response to Rising Costs****: In the face of escalating raw material prices, hydroponic farmers can employ pricing strategies that remain accessible to many consumers. This adaptability ensures continued affordability, even during times of increased input costs.*
3. ***Diversification of Product Offerings****: Diversifying product variants is critical to the ST strategy. In a highly competitive landscape, offering a broad array of products can bolster farmers' resilience and competitiveness, enabling them to thrive amidst intense market rivalry.*

The ST strategy empowers hydroponic farmers in Makassar City to confront external threats while capitalizing on their internal strengths. By proactively addressing challenges and offering innovative solutions, these farmers can navigate the complexities of their operating environment and maintain a strong market presence.

Strategy WO (Weakness-Opportunity)
The WO strategy represents a fusion of internal factors (Weakness) and external factors (Opportunity), designed to harness opportunities while simultaneously mitigating weaknesses. Hydroponic farmers in Makassar City have embraced the WO strategy, which encompasses the following pivotal elements:

1. ***Optimizing Resource Efficiency****: One approach within the WO strategy involves empowering farmers by utilizing cost-effective materials in their installation processes. This resource optimization minimizes weaknesses tied to expenditure and enhances overall operational efficiency.*
2. ***Focused Hydroponic Cultivation****: The core emphasis of this strategy lies in dedicated hydroponic farming practices aimed at capitalizing on the maximum potential of available opportunities. Farmers can align their efforts with the opportunities within this specific domain by focusing on hydroponic systems, ultimately leading to enhanced outcomes.*

The WO strategy empowers hydroponic farmers in Makassar City to capitalize on external opportunities while proactively addressing internal weaknesses. This strategic approach allows them to enhance their competitive edge and make the most of favorable market conditions.

Strategy WT (Weakness-Threat)
The WT strategy represents an amalgamation of internal factors (Weaknesses) and external factors (Threats). This defensive strategy aims to mitigate weaknesses and proactively avoid potential threats. Hydroponic farmers in Makassar City have implemented the WT strategy, which encompasses the following critical components:

1. ***Resource Maximization for Sustainable Farming**: Within this strategy, there is a concerted effort to maximize the utility of limited capital, enabling farmers to initiate and sustain their hydroponic farming endeavors effectively.*
2. ***Collaborative Agreements for Price Stability**: Hydroponic farmers engage in collaborative discussions and meetings to foster agreements and stabilize prices within their community. This approach enhances the collective strength of hydroponic farmers, helping them navigate external threats more effectively.*

The WT strategy empowers hydroponic farmers in Makassar City to fortify their positions by addressing internal weaknesses and preemptively safeguarding against external threats. This proactive stance enables them to maintain stability and resilience in their farming operations.

CONCLUSIONS

Based on the results derived from the comprehensive SWOT analysis conducted on hydroponic farming traders, it is discernible that they have strategically positioned themselves along the path of a Growth Oriented Strategy. This strategic choice reflects their commitment to fostering aggressive growth policies that align with the prevailing market dynamics and opportunities. The empirical evidence from this study underscores the effectiveness of the existing robust business conditions within Makassar City, which have laid a fertile ground for hydroponic farming entrepreneurs to thrive.

Furthermore, the research findings highlight the existence of substantial economic opportunities poised to drive continued growth and contribute to the overall economic advancement of the city. These opportunities are particularly accentuated by adopting innovative marketing strategies, predominantly characterized by the astute utilization of social media platforms. This approach enables hydroponic farming traders to efficiently connect with a broad spectrum of consumers, particularly within the restaurant industry, thus further propelling their growth trajectory.

The manifestation of these insights is vividly illustrated in the Cartesian diagram representing the SWOT analysis. Here, the total score conspicuously resides within the confines of the first quadrant, signifying a remarkably favorable business landscape for hydroponic farming traders in Makassar City. In this context, the first quadrant symbolizes a highly advantageous condition that positions these entrepreneurs for sustained success and prosperity in their endeavors.

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