DEVELOPMENT OF BUSINESS STRATEGIES USING QSPM AND SWOT ON SNAIL CHIPS

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Abstract Strategy in the snail chips business is the topic of this research. The purpose of this study is to determine the position of the company based on the SWOT results and the sequence of alternative strategies found on QSPM. The stages of this research were to make observations at PT.X to determine the strengths, weaknesses, opportunities, and threats of the snail product. The results obtained by the company lie in quadrant II with a suitable strategy to increase resistance to reduce the danger that comes, while the order of the choice of method is first to strengthen cooperation with new collectors, second to improve quality better than competitors, third to plan delivery schedules if the volume of demand increases. Suggestions that can be used by related companies are implementing alternative strategies on an ongoing basis and periodically evaluating them.

Keywords: QSPM, Snail, Strategy, SWOT

1. Introduction

Today's global market has an impact on companies in terms of ease of marketing their products from within the city and outside the city. Business strategies in each line of fields need to be developed to get and produce company goals [1].

It requires attractiveness to prospective buyers, especially significant agents who are willing to be part of the supplier. Companies will be helped and facilitated in terms of selling their products if there are suppliers. Strategic planning must be able to compete with other competitors [2]. Various strategies exist today, for example, namely selling through digital platforms that can penetrate multiple layers of the market, especially potential buyers who are enthusiastic about online media [3]. If sales of products are carried out online, comprehensive evaluation and development of sustainable strategies are used in the future [4-5]. The more often the application of business strategies is evaluated. It will lead to ideas that are systematic for further study and innovation. Business strategy development innovations will

be diverse [6]. With a business strategy, it begins with knowing the position of the company using a SWOT analysis (Strength, Weakness, Opportunity, and Threat) [7]. Then an alternative plan is selected objectively using QSPM (Quantitative Strategic Planning Matrix) [8]. The use of opportunities based on opportunities, overcoming internal company problems, and avoiding threats that arise are strategies that companies can take when in the Opportunity - Strength position [9].

One of the companies that will develop a business strategy is PT X, which is engaged in the production of snail meat. Snail meat has many benefits for the health of the body if it is the right way of consuming and the right amount. The snail meat produced comes from the forest and is still alive when harvested. When the snail meat arrives at PT X, the size of the snail is selected to meet the productionworthy and marketable standards. If the snails do not meet the criteria, they will be separated for sale to local MSMEs.

This research has a discussion related to the business strategy that will be developed in the marketing of snail meat, which has become a snail chip product. The increasing competition for snail chip products will decrease in sales if a business strategy is not developed. Therefore, the purpose of this study is to determine the

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position of the company and the sequence of techniques that should be used for the sale of snail chips. This study uses the SWOT method to assess the status of the company, the use of the QSPM process to determine the business strategy used, and the results of an alternative approach based on the quadrant of the firm's position. The research assumption used is that there is no change in data related to strengths, weaknesses, opportunities, and threats after the observation. The results of this study are expected to provide insight into business strategies using SWOT and QSPM for readers, companies, and further researchers.

2. Literature Review

Activities carried out in a business strategy function as an operation design for marketing products in the form of goods and services and developing the company as well as knowing the company's position [9-11]. Overall, SWOT analysis can be interpreted as an analytical technique to maximize strengths and opportunities and minimize weaknesses and threats [12-15]. QSPM analysis is a technique to identify the best alternative strategies according to the company's position in the SWOT analysis [16].

3. Research Methodology

This research took place at PT.X, which is located in Kediri, East Java. The use of the research object is the development of a business strategy for snail chip products using the SWOT (Strength, Weakness, Opportunity, and Threat) method and QSPM (Quantitative Strategic Planning Matrix). The operational variable used is the development of a business strategy conceptualized to determine the event of a business strategy using the SWOT and QSPM methods [17-19].

The first indicator used is the SWOT method with factors obtained from the results of observations. including strengths. the weaknesses, opportunities, and threats of the company in selling snail chips. The second indicator is the QSPM method by implementing alternative strategies based on the SWOT results related to the company's position in quadrants I, II, III, or IV [20]. The data used is between others, namely strengths, weaknesses, opportunities, and threats with qualitative data types, then a literature review with quantitative and qualitative data types with secondary data

sources. The first data collection technique was carried out by observation, namely direct observation, recording information related to research materials, secondly conducting interviews with company owners connected to strengths, weaknesses, opportunities, and threats faced in selling snail chips products, third, collecting references that supported the research (Figure 1).

3.1. Collecting SWOT Factors

This phase tends to select strengths, weaknesses, opportunities, and threats to the company based on observations and interviews.

3.2. Weighting and Rating Each Factor

Weighing each factor of strengths, weaknesses, opportunities, and threats, each totalled the multiplication result of the weight with the rating. The total strengths and weaknesses must be worth 1.00, while the unlimited opportunity with threats must be worth 1.00. Use of the rating value 1 = notimportant: value 2 = less important: value 3 =important; value 4 = very important applies to strength and opportunity the factors. Meanwhile, the use of a rating of -1 = notimportant; value -2 = less important; value -3 =important; the value -4 = very important applies to the weakness and threat factors [21]. Multiplying the weight with the rating will produce the value of the total value of strengths + weaknesses and opportunities + threats [22].

3.3. SWOT Coordinate Analysis

Multiplying the weight with the rating will produce the value of the total amount of strengths+ weaknesses and opportunities + threats which are used to find the coordinate points of the company's position with the assumption in quadrant I, namely strength and opportunity is the profitable situation, to take advantage of opportunities as extensive as possible or called aggressive growth [23]. In quadrant II, namely strength and threat, by utilizing the power to reduce threats called diversification [24]. Quadrant III, namely weaknesses and opportunities, to take advantage of opportunities by minimizing weaknesses using technology reviews for new product offerings [25]. Quadrant IV, namely weaknesses and threats, it is necessary to do a defense strategy to try to reduce weaknesses and avoid threats [26].



Fig 1 Research Flowchart

3.4. Making SWOT Matrix

The SWOT matrix is a description of the opportunities and threats faced by the company, which is adjusted to the strengths and weaknesses of the company as a matching tool of the four types of strategies S-O, W-O, ST and WT as shown in Table 1 [27-30].

3.5. Identify Alternative SWOT Strategy

Alternative SWOT strategies are obtained from the results of the company's position on the coordinates [32-36].

3.6. Calculating the Total Amount of Attractiveness Value

The alternative SWOT strategy is used to determine the strategy using each total attractiveness value obtained from multiplying the weight value times the attractiveness value. The weighting of each factor of strengths, weaknesses, opportunities, and threats is totaled by the multiplication of the weight with the rating. The strengths and weaknesses in total must be worth 1.00, while the opportunities with threats in total must be worth 1.00. Meanwhile, the value of attractiveness on a scale of 1 = unattractive; scale 2 = slightly interesting; scale 3 =attractive enough and scale 4 = very attractive [37], [38]. If the alternative strategy is unattractive, there is no need to score it. The higher the attractiveness value, the alternative strategy will be used in the development of a business strategy for the snail chip product.

3.7. QSPM Strategy Alternative Decisions

The QSPM decision is the total value of the attractiveness from the highest to the lowest

in the alternative strategies used as shown in Table 2 [39-41].

3.8. Interpretation of Data Processing Results

Discussing the results of data processing clearly and leading to the objectives of the research.

3.9. Closing

The closing series is to answer the research objectives and provide suggestions for the company, future researchers, and for readers.

In this research methodology chapter, a frame of mind is used to make it easier to understand the research flow as follows [42].

Table 1. SWOT Matrix				
S	W			
S-O	W-O			
S-T	W-T			
	1. SWOT Matri S S-O S-T			

Table 2. QSPM Diagram

Strategic Alternative						
Factor	Weight	Attractiveness	Sum of			
		Value Attractivene				
			Value			
	А	В	A x B			
Strenght						
a						
b						
Weakness						
a						
b						
Opportunity						
a						
b						
Threat						
a						
b						

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Company Internal								
No	Strength	Weight	Rating	Score (WxR)				
1	Halal Labeled Products	0.12	2	0.24				
2	Products Have Health Value	0.10	1	0.10				
3	Wide Consumer Reach	0.13	2	0.26				
4	Increase in Demand Volume	0.12	1	0.12				
5	Superior to competitors	0.17	3	0.51				
			Total (S)	1.23				
No	Weakness	Weight	Rating	Score (WxR)				
1	Uneven Consumer Goals	0.10	-2	-0.20				
2	Product Prices are still high	0.06	-3	-0.18				
3	Less than request	0.06	-3	-0.18				
4	Still focusing old customers in service	0.08	-3	-0.24				
5	Raw materials cannot be cultivated	0.06	-2	-0.12				
	Total Internal Factor Weight	1.00	Total (W)	-0.92				
	TOTAL VALUE S + W			0.31				
	Company Extern	nal						
No	Opportunity	Weight	Rating	Score (WxR)				
1	Increased product needs	0.17	2	0.34				
2	Lots of steamers popping up	0.12	1	0.12				
3	Wholesale purchases are discounted	0.14	3	0.42				
4	Many customers match the quality of the product	0.07	2	0.14				
			Total (O)	1.02				
No	Threat	Weight	Rating	Score (WxR)				
1	Emerging competitors at below-standard prices	0.09	-2	-0.18				
2	Steaming-dependent raw materials	0.11	-4	-0.44				
3	Delivery schedules are often late	0.10	-4	-0.40				
4	Harvest raw materials depending on the season	0.20	-4	-0.80				
	Total External Factor Weight	1.00	Total (T)	-1.82				
	TOTAL VALUE O + T			-0.80				

Table 3. Interna	l and Externa	l Factors Rat	ing and '	Weighting
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4. Results

From the data collection and processing, a weight calculation is obtained, a rating with the following score results (Table 3). From the total value of S+W, the strength + weakness is 0,31, while the O+T value is -0,80. The two values coordinates are made to determine the position of the company.

From Figure 2, the position of the company is in quadrant II, namely strength and threat, by utilizing the power to reduce threats called diversification [24]. In this position, the company must be maximized in developing the company's strength to overcome the various threats that come. To find out the suitability of the factors to be formulated in the SWOT, it is necessary to create a SWOT matrix (Table 4).



Fig 2 Company Position

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Table 4. SWOT Matrix					
Strength 1.Products labeled halal	Opportunity Product needs increase Lots of steamers popping up Wholesale purchases are discounted Many customers match the quality of the product Halal label and health value increase product needs 	 Threat 1. Emerging competitors with below standard prices 2. Raw materials depend on the steamer 3. Delivery schedule is often late 4. Harvest raw materials depending on the season 1. Increase cooperation with new steamers to offset increased 			
 2. Products have health value 3. Wide consumer reach 4. Increase in request volume 5. Superior to comptetitors 	 Product quality in accordance with customer expectations, wide reach of consumers and superior from competitors Wholesale prices are superior to competitors that raise 	demand volume and reach consumers more widel.2. Planning the schedule in a timely way in the event of an increase in the volume of request.3. Improve quality better than competitors at affordable prices			
 Weakness 1. Uneven consumer goals 2. Product price is still high 3. Less inventory than demand 4. Still focus old customers in service 5. Raw materials cannot be cultivated 	 The increasing need needs to be segmented by the market to know the targets of old consumers and new consumers The price of the product is still high will not be a problem if the need continues to increase as well as there is a wholesale system and discounts Cooperate with new steamers that can help supply raw materials and reduce constraints because they cannot be cultivated 	 Raw materials depend on the steamer by planning and controlling to cope with the supply of raw materials Approach with new customers to invite cooperation and as a way of knowing the needs of products to be purchased so that there is no shortage of raw materials Cooperation with competitors to mix raw materials to make product prices affordable 			

From the results of the SWOT analysis, the alternative strategy used is based on quadrant II, namely maximizing the power to reduce the threat of sales of snail chips products at PT.X [10]. The proceed to the QSPM method with the results of the interest as shown in Table 5.

Based on the results of the QSPM matrix, 3 alternative strategies were used which were obtained from the results of the SWOT coordinates, then weighted with the weight value equal to the weight on the SWOT, multiplied by the value of attractiveness to produce a total value of attractiveness [43]. Of the three strategies, it will be used based on the order of the highest number of S + W + O + Tvalues [44]. The highest value is strategy I with a total value of 5.21 then the second strategy III with a value of 4.39 and the third is strategy II with a value of 2.83, which is summarized in the following Table 6.

The order of alternative strategies is the

decision taken is to increase cooperation with new collectors to process the inventory so that it can be used if there is an increase in demand, on the other hand, it also provides supplies to reach consumers outside the city and wider so that demand is met. In addition, planning is also carried out in production control[10]. In this case, the collectors who have subscribed for the raw material for the snail chip product have already provided the main supplies to the company because they already have an agreement to take care of orders for raw materials for the company.

Mixing quality raw materials with quality below one high-quality level, to maintain affordable prices, but not reduce product quality to below standard. Mixing of raw materials is used to get affordable prices to be marketed and to increase the loyalty of middle to lower class consumers. Because the problem of affordable prices will attract consumers if the raw material

Table 5. QSPM Diagram								
	Internal Company		Strategy I		Strategy II		Strategy III	
N o	Variable	Weight	Attractiven ess Value	Total Attractiveness Value	Attractiven ess Value	Total Attractiveness Value	Attractiven ess Value	Total Attractiveness Value
Stre	engths (S)							
1	Halal Labeled Products	0.12	2	0.24	3	0.36	3	0.72
2	Products Have Health Value	0.10	1	0.10	3	0.30	3	0.30
3	Wide Consumer Reach	0.13	4	0.52	4	0.52	2	1.04
4	Increase in Demand	0.12	3	0.36	4	0.48	4	1.44
5	Superior to	0.17	4	0.68	2	0.34	4	2.72
Wa								
1	Uneven Consumer	0.10	1	0.10	2	0.20	4	0.40
2	Product Prices are still	0.06	1	0.06	2	0.12	2	0.12
2	nign Loss then request	0.06	2	0.12	1	0.06	2	0.24
1	Still focusing old	0.00	2	0.12	1	0.00	2	0.24
- 5	customers in service Raw materials cannot	0.06	2	0.24	2	0.12	1	0.24
5	be cultivated	0.00	т	0.24	2	0.12	1	0.24
Op	portunities (O)							
1	Increased product needs	0.17	4	0.68	4	0.68	1	0.68
2	Lots of steamers popping up	0.12	2	0.24	2	0.24	2	0.48
3	Wholesale purchases	0.14	4	0.56	4	0.56	2	1.12
4	Many customers match the quality of the	0.07	4	0.28	4	0.28	1	0.28
	product							
Thr 1	eats (T) Emerging competitors at below-standard	0.09	4	0.36	2	0.18	1	0.36
2	prices Steaming-dependent	0.11	1	0.11	1	0.11	1	0.11
3	raw materials Delivery schedules are	0.10	2	0.20	2	0.20	1	0.20
1	often late Harvest raw materials	0.20	1	0.20	1	0.20	2	0.40
7	depending on the	0.20	1	0.20	1	0.20	2	0.40
TO	TAL VALUE S+W+O+T			5.21		2.83		4.39
	Table 6 OSPM Strategy Order							
0-	d		1 a01		alogy Order		Attractiv	anace Valua
er Alternative Strategy					$\frac{(S+W+O+T)}{(S+W+O+T)}$			
1	Increase cooperation with new steamers to offset increased demand volume and reach consumers more widely				lume and	5	,21	

2 Improve quality better than competitors at affordable prices Planning schedules in a timely way in the event of an increase in the volume of 3 requests opinion on the quality of raw materials has become a snail chip product [10]. To achieve this achievement, collectors who have

subscribed will be sorted from the raw material supply of the snails for quality selection. Quality selection is made to measure the quality of the raw material if it is used for snail cracker products. In addition, collectors and companies must discuss with each other regarding pricing, in order to create inexpensive prices but an

according to the standard of snail chips.

4,39

2,83

5. Conclusion

From the results of the discussion, the conclusion obtained in accordance with the purpose of the research is that the company's position is at the coordinates of S+T by utilizing the power of reducing threats and the sequence of strategies used that is the first strategy is to increase cooperation with new steamers to offset the increasing volume of demand and reach consumers more widely. The second is to improve the quality better than the competitors at an affordable price and the third is to plan the schedule in a timely way in case of increased demand volume.

The advice that can be given to the company is to apply alternative strategies well and conduct evaluations periodically, then for researchers can then be used as a reference to conduct research with the topic SWOT and QSPM can also add innovation to the research with the addition of statistical tests. Then for readers can be used as insight in the field of industrial management.

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References

- [1] A. S. Alam and M. Cawer, "Strategi Usaha Tani Pengembangan Kopi Arabika Kasus Desa (Studi di Sukanagara, Gunungsai, Kecamatan Kabupaten Cianjur)," J. Agrita, vol. 1, no. 1, pp. 23–32, 2019.
- [2] M. I. Walukow and S. A. Pangemanan, "Developing Competitive Strategic Model Using Quantitative Strategic Planning Matrix (QSPM) Approach for Handicrafts Ceramic Industry in Pulutan, Minahasa Regency," *Procedia -Soc. Behav. Sci.*, vol. 211, pp. 688–695, 2015.
- [3] C. Namugenyi, S. L. Nimmagadda, and T. Reiners, "Design of a SWOT Analysis Model and Its Evaluation in Diverse Digital Business Ecosystem Contexts," *Procedia Comput. Sci.*, vol. 159, pp. 1145–1154, 2019.
- [4] R. Madurai Elavarasan, S. Afridhis, R. R. Vijayaraghavan, U. Subramaniam, and M. Nurunnabi, "SWOT Analysis: A Framework for Comprehensive Evaluation of Drivers and Barriers for Renewable Energy Development in Significant Countries," *Energy Reports*, vol. 6, pp. 1838–1864, 2020.
- [5] S. K. Mallick, S. Rudra, and R. Samanta, "Sustainable Ecotourism

Development Using SWOT and QSPM Approach: A study on Rameswaram, Tamil Nadu," *Int. J. Geoheritage Park.*, pp. 1–21, 2020.

- [6] M. B. Bouraima, Y. Qiu, B. Yusupov, and C. M. Ndjegwes, "A Study on the Development Strategy of the Railway Transportation System in the West African Economic and Monetary Union (WAEMU) Based on the SWOT/AHP Technique," *Sci. African*, vol. 8, pp. 1– 11, 2020.
- S. Mathiyazhagan, "Participatory Youth-Led Community Development: A Child-Centered Visual SWOT Analysis in India," *Child. Youth Serv. Rev.*, vol. 113, p. 104963, 2020.
- [8] H. Setyorini and I. Santoso, "Analisis Strategi Pemasaran Menggunakan Matriks SWOT dan QSPM (Studi Kasus: Restoran WS Soekarno Hatta Malang) Marketing Strategy Analysis Using SWOT Matrix and QSPM (Case Study: WS Restaurant Soekarno Hatta Malang)," vol. 5, no. 1, pp. 46–53, 2016.
- [9] E. R. Pratiwi, "Analisis Strategi Bisnis dalam Menghadapi Persaingan (Studi pada Siantar Hotel, Pematang Siantar)," Universitas Sumatera Utara, 2017.
- [10] S. Fahmi, "Analisis Perencanaan Strategi Pemasaran Pada PT. Hapeel Pharmindo," J. Manaj. dan Bisnis Indones., vol. 2, no. 3, pp. 344–363, 2015.
- [11] F. Tjiptono and G. Chandra, *Pemasaran Strategik*. Yogyakarta: Andi Publisher, 2012.
- [12] Freddy Rangkuti, *Analisis SWOT Teknik Membedah Kasus Bisnis*. Jakarta : Gramedia Pustaka Utama, 2006.
- [13] D. Leigh, "SWOT Analysis," in Handbook of Improving Performance in the Workplace, 2010.
- [14] N. Pröllochs and S. Feuerriegel, "Business analytics for strategic management: Identifying and assessing corporate challenges via topic modeling," *Inf. Manag.*, vol. 57, no. 1, p. 103070, 2020.
- [15] D. B. Anna Beloborodkoa*, Francesco Romagnolia, Marika Rosaa, Carmen Disantob, Riccardo Salimbenib, Eva Næss Karlsenc, Marianne Reimec, Tobias Schwabd, Jonas Mortensene, Mikel Ibarraf, "SWOT analysis approach for advancement of waste-to-

energy cluster in Latvia," *Riga Tech. Univ. Inst. Energy Syst. Environ. Azenes iela 12-1, Riga, LV-1048, Latv. b Euroimpresa Legnano S.c.r.l. Via Pisacane, 46, 20025 Legnano, Italy c OREEC, Gunnar Randersvei 24, 2007 Kjeller, Norw. d ECO WORLD STYRIA Um, vol. Energy Pro, pp. 163–169,* 2015.

- [16] T. Baroto and C. Purbohadiningrat, "Analisis Strategi Pengembangan Bisnis PPOB Kipo Menggunakan Analisis SWOT dan QSPM," J. Tek. Ind., vol. 15, no. 01, pp. 1–15, 2014.
- [17] N. N. Lintong, "Strategi Bersaing Biro Perjalanan Wisata Alindo Dewata Tours Bali," J. Master Pariwisata, vol. 2, pp. 117–131, 2015.
- [18] Aspiany, S. Anggoro, F. Purwanti, and B. I. Gunawan, "Strategies for Sustainable Ecotourism Development in the Marine Waters of Bontang City, Indonesia," *AACL Bioflux*, vol. 12, no. 5, pp. 1779–1787, 2019.
- [19] Prayudi D. and R. Yulistria, "Penggunaan SWOT Matriks dan Metode QSPM pada Strategi Pemasaran Jasa Wedding Organizer: Studi Kasus pada UMKM Gosimplywedding Sukabumi." J. *Maksipreneur* Manajemen, Koperasi, dan Entrep., vol. 9, no. 2, p. 225, 2020.
- [20] P. M. Falcone, A. Tani, V. E. Tartiu, and C. Imbriani, "Towards a Sustainable Forest-Based Bioeconomy in Italy: Findings from a SWOT Analysis," *For. Policy Econ.*, vol. 110, no. May 2019, p. 101910, 2020.
- [21] H. P. Putra, "Penentuan Bobot Dan Rating Faktor Strategis Internal Dan Faktor Strategis Eksternal," Institut Pertanian Bogor, 2010.
- [22] Lingkarlm, "Perhitungan Bobot, Nilai dan Rating pada Analisa SWOT, SAP, ETOP," *lingkarlm.com*, 2018. [Online]. Available: http://lingkarlsm.com/caraperhitungan-bobot-dan-rating-dalamtows-matrix/. [Accessed: 15-Sep-2019].
- [23] A. Sobotka and K. Pacewicz, "Building Site Organization with 3D Technology in Use," *Procedia Eng.*, vol. 161, pp. 407–413, 2016.
- [24] S. Wahyuningsih, "Analisis SWOT untuk Penentuan Strategi Optimalisasi Infrastruktur," *Puslitbang Sumber Daya* dan Perangkat POs dan Inform., vol. 10, no. 38, pp. 289–304, 2012.

- [25] J. D. H. Van Wijngaarden, G. R. M. Scholten, and K. P. Van Wijk, "Strategic analysis for health care organizations: The suitability of the SWOT-analysis," *Int. J. Health Plann. Manage.*, 2012.
- [26] Y. Naelana and S. B. Istiyanto, "Analisis SWOT Strategi Pengelolaan Reputasi PT. Cowboy Nusantara Jaya Yuva," *Communicatiion*, vol. 1, no. 2, pp. 53– 76, 2019.
- [27] J. M. D'Addezio *et al.*, "Quantifying Wavelengths Constrained by Simulated SWOT Observations in a Submesoscale Resolving Ocean Analysis/Forecasting System," *Ocean Model.*, vol. 135, pp. 40–55, 2019.
- [28] E. B. Agyekum, "Energy Poverty in Energy Rich Ghana: A SWOT Analytical Approach for The Development of Ghana's Renewable Energy," *Sustain. Energy Technol. Assessments*, vol. 40, p. 100760, 2020.
- [29] R. C. Sanito, S.-J. You, T.-J. Chang, and Y.-F. Wang, "Economic and Environmental Evaluation of Flux Agents in The Vitrification of Resin Waste: A SWOT Analysis," J. Environ. Manage., vol. 270, p. 110910, 2020.
- [30] S. F. Tafti, E. Jalili, and L. Yahyaeian, "Assessment and Analysis Strategies according to Space Matrix-case Study: Petrochemical and Banking Industries in Tehran Stock Exchange (TSE)," *Procedia - Soc. Behav. Sci.*, vol. 99, pp. 893–901, 2013.
- [31] M. A. Masa, "Strategi Pengembangan Implementasi Telemedicine Di Sulawesi Selatan," J. Telekomun. dan Komput., 2017.
- [32] R. Rosmeli, N. Nurhayani, and S. Novita, "Model and Tourism Development Strategy Based On Local Potency in Merangin Regency," *Asian J. Soc. Sci. Res.*, vol. 2, no. 2, 2019.
- [33] D. Rasriantina, "Strategi Pemasaran Pembiayaan Kepemilikan Rumah Pada BRI Syariah KCP Metro Lampung Dalam Meningkatkan Pendapatan Bank," *FE-UMM*, vol. 6, no. 2, pp. 270– 279, 2018.
- [34] A. Octavian, Marsetio, B. A. Yulianto, and R. Rahman, "Strategi Maritim Penangkalan Penyelundupan Narkoba Via Jalur Laut di Sulawesi Selatan," Universitas Pertahanan, 2018.
- [35] C. T. Judianto and A. Maulana, "Development Strategy of National

Microsatellite Industry: Case Study of Indonesia Chusnul," *J. STI Policy Manag. Publ.*, vol. 3, no. 2, pp. 1–20, 2018.

- [36] Y. Sulistyadi, F. Eddyono, and B. Hasibuan, "Model of Sustainable Tourism Development Strategy of the Thousand Islands Tourism Area – Jakarta," J. Econ. Manag. Trade, vol. 19, no. 1, pp. 1–17, 2017.
- [37] J. Sandelin and J. Fiechtner, "Selection Process of Sport Tourism Development Strategy in Banja Vrućica SPA Resort: A Quantitative Analysis," vol. 1, no. 1, pp. 11–18, 2020.
- [38] H. Abya, M. M. Nasiri Khalili, M. Ebrahimi, and A. Movahed, "Strategic planning for tourism industry using SWOT and QSPM," *Manag. Sci. Lett.*, 2015.
- [39] A. A. Rumanti and K. J. Syauta, "Determining Strategies Based on Strategic Position Analysis in Small and Medium Enterprises," *Int. J. Inf. Educ. Technol.*, vol. 3, no. 4, pp. 442–447, 2013.
- [40] H. Hosseini Nasab and A. S. Milani, "An Improvement of Quantitative

Strategic Planning Matrix Using Multiple Criteria Decision Making and Fuzzy Numbers," *Appl. Soft Comput.*, vol. 12, no. 8, pp. 2246–2253, Aug. 2012.

- [41] D. Wijayanto, "Fisheries Development Strategies of Biak Numfor Regency, Indonesia," *Aquat. Procedia*, vol. 7, pp. 28–38, 2016.
- [42] A. Heryana, "Kerangka Teori, Kerangka Konsep, Variabel Penelitian, Dan Hipotesis Penelitian (Dalam Penelitian Kuantitatif)," *Metodol. Penelit.*, 2015.
- [43] U. S. M, "ANALISIS QUANTITATIVE STRATEGIC PLANNING MATRIX (QSPM) UNTUK MENENTUKAN STRATEGI BISNIS DI UD. KONTOMULYO BADAS-KEDIRI," *Manaj. BISNIS Univ. Islam KADIRI*, vol. Kongres Na, 2016.
- [44] N. Fajariah and T. Widuri, "Analisis QSPM Peternakan Burung Walet di Kabupaten Situbondo (Studi Kasus pada UD Sakinah)," *JMK (Jurnal Manaj. dan Kewirausahaan)*, vol. 4, no. 3, pp. 1–12, 2019.