

## Sustainable Business Development System Increasing Omzet Through Technopreneurship In Small To Medium Industries (SMIs)

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### Keywords

Batik, improvement, strategy, omzet

**Abstract.** This research aims to determine the condition of the business and determine the priority of alternative strategies that are appropriate for SMIs. This research a quantitative methodology, the object of the research was carried out at Masaran batik SMIs with the stages of research through the analysis of internal and external factors SWOT analysis, strategic planning through strategic planning and prioritization of alternative strategies and criteria using the multi attribute model. Research will be conducted on business development strategies with strength, weakness, opportunities, threats (SWOT) analysis, Quantitative Strategic Planning Matrix (QSPM) and Multi Attribute Utility Theory (MAUT). The results of the research, the priority of the top alternative strategies for SMIs is to conduct online sales, increase online marketing strategies and cooperate with batik marketing souvenir centers. This study discusses the implementation of technopreneurship in marketing to build entrepreneurial success.

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### 1. INTRODUCTION

Development strategy is a management plan that has a function of formulating and considering internal and external factors encountered by SMEs or companies (Afridhal, 2017). The archipelago's batik treasures as a historical fact that proves the existence of Indonesian batik to present, making it worthy of being recognized as Indonesia's cultural heritage by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2009 (Pratiwi, 2020), (Kina, 2003).

The creative industry market, including batik, is currently experiencing a significant increase in competition, not only between local and national industries, but also competition from various multinational industries. Micro, Small and Medium Enterprises (MSMEs) are the largest part of the national economy which is an indicator of the level of community participation in various sectors of economic activity. MSMEs have proven to be reliable as a safety valve in times of crisis, through the mechanism of creating MSMEs, which means strengthening the community's economic business (Undari, 2021).

This research was conducted in the batik industry center, taking one of the Rafida SMEs, with consideration: it is one of the SMEs engaged in textiles with the production of batik cloth, it has a variety of batik fabric motifs, production activities have three stages, namely coloring, painting and drying, experiencing a decline in batik orders, not familiar with digital marketing-based marketing, not using digital marketing media, production of finished materials only when there are orders, due to the fact that SMEs do not have their own media to sell their products (Adcharina, 2017).

Therefore, this research is urgent to develop and complete, related to social media or the internet. The internet is a project that was created for the private use of a country, but nowadays it has become public. In line with the times, the progress of internet technology is also advancing. There are four functions of the internet, namely: communication media, data exchange media, media for searching information or data, community functions (Gani, 2018). The internet is based on education and technopreneurship with social media as a platform that focuses on the existence of users who facilitate activities and collaboration, can be carried out various two-way activities in various forms of exchange, collaboration, and mutual acquaintance in written, visual and audiovisual forms starting from three things, namely, sharing, collaborating, and connecting (Siregar, 2022).

Collaboration in the fields of engineering, economics and education for business progress, so technopreneurship is a unique part of entrepreneurship in the technology sector. Entrepreneurship is a creative and innovative business by seeing and creating opportunities, realizing them into something with added value (economic, social, technological, etc.). Entrepreneurship in the social sector is called sociopreneurship, in the educational sector it is called edupreneurship, in the internal company it is

called interpreneurship, in the technology business sector it is called technopreneurship (Ikhwan Alim, 2009). To solve the problems faced, internal and external preneurship factors for developing and increasing sales turnover can be carried out using various strategic analyzes with scientific concepts. To solve the problems encountered, the development and increase in sales turnover can be carried out with various strategy analyses with scientific concepts.

Data collection uses a 1-4 scale for filling in the Attractiveness Score value, where 1 = not attractive, 2 = somewhat attractive, 3 = quite attractive, and 4 = very attractive in the QSPM method to get alternative strategy priorities. The total attractiveness score (TAS) is obtained by multiplying the weights by the attractiveness scores (Setyorini, 2016). Hopefully, through the SWOT, QSPM and MAUT development approaches, a development plan is generated and implemented to gradually increase sales turnover. It is hoped that through the SWOT, QSPM and MAUT development approaches, the results of the development plan will be produced and implemented to increase sales turnover gradually. The technopreneurship concept for developing businesses and introducing entrepreneurship concepts with social media technology is equipped with various application examples through the educational process, using various business strategies, depending on the nature of the product and the market segment they have chosen to serve, very relevant to the conditions of the 4.0 era.

## 2. METHOD

This research uses Strength, Weakness, Opportunity, Threat (SWOT), Quantitative Strategic Planning Matrix (QSPM), and Multi Attribute Utility Theory (MAUT) analysis methods. Data collection was carried out by interview, questionnaire, with purposive sampling technique. Purposive sampling is a non random sampling technique where the researcher determines the sampling by determining specific characteristics that are in accordance with the research objectives so that it is expected to answer the research problem (Soegiyono, 2019). The application of the key informant technique becomes a respondent in data collection based on in-depth knowledge of the field of study under study and is directly involved with the object to be studied (Salasi, 2017).

Internal factors can be analyzed to show the strengths and weaknesses of a company, while the internal environment includes: management, marketing, finance/accounting, production/operations, human resources, and management information systems. The external environment studied about the company's opportunities and threats consists of six segments, namely: demographic, economic, political / legal, socio-cultural, technology, and competition (Sari, 2018).

### Hypotheses development

Based on Effendi, (2017) in Kampung Coklat Blitar, one of the business development strategies was completed using SWOT, QSPM, and MAUT methods. Puspitasari's research, (2013) Kasongan Pottery Industry Center Bantul designed a business development strategy using SWOT, QSPM, and MAUT methods. Borobudur-Dieng tourism strategy development using SWOT, QSPM and MAUT methods (Susanty, 2017). Likewise, development strategies in the food manufacturing industry using SWOT, QSPM, and MAUT methods (Shojaei, 2010), selection of yarn suppliers using the MAUT method, (Susliansyah, 2021).

The QSPM method is needed as an input analysis from stage one and the matching results from stage two analysis to objectively determine the strategy to be carried out among alternative strategies. In the comprehensive strategy formulation framework, QSPM uses input from stage one analysis and matching results from stage three analysis to objectively determine.

Based on these problems, SMEs need an appropriate business development strategy for their business. Therefore, research was conducted using the Strength, Weakness, Opportunity, Threat (SWOT) analysis method, Quantitative Strategic Planning Matrix (QSPM), and Multi Attribute Utility Theory (MAUT) to find out what factors affect the business, the position of the business unit, and alternative strategies for the business to develop the business. The research results are directly implemented and become a novelty in the selection of alternative business development strategies.

H1: SWOT analysis capable as a business strategy planning tool (SMIs)

H2: The QSPM method objectively determines the strategy that will be carried out among the existing alternative strategies.

H3: The MAUT method has a positive influence in the strategy of gradually increasing sales.

### 3. RESULTS AND DISCUSSION

#### Respondent characteristics data

Furthermore, data was collected by interviewing and distributing questionnaires to employees and owners of SMEs with a scale of 1-4 on each component of the IFE Matrix and EFE Matrix. In the IFE Matrix, value 1 = major weakness, value 2 minor weakness, value 3 = minor strength, value 4 = major strength. While the EFE Matrix, value 4 = superior company response, 3 = above average company response, 2 = average company response, 1 = poor company response. The rank is based on the effectiveness of the company's strategy, while the weight is based on the industry. As well as filling in the significance level value to determine the weight value with the provisions of 4 = very important, 3 = important, 2 = quite important, 1 = less important (Ningsih, 2014).

After the IFE matrix and EFE matrix are obtained, they will be used to show the current position of the business. The X axis uses the total weighted value of the IFE matrix and the Y axis uses the total weighted value of the EFE matrix. Data collection uses a scale of 1-4 for filling in the Attractiveness Score value, where 1 = not attractive, 2 = somewhat attractive, 3 = quite attractive, and 4 = very attractive in the QSPM method to get alternative strategy priorities. The total attractiveness score (TAS) is obtained by multiplying the weights by the attractiveness scores (Setyorini, 2016).

MAUT analysis explicitly identifies the steps used to identify alternatives that perform well with special emphasis on steps that are considered relatively more important. In this research, the attributes used are: cost, time, infrastructure, and entrepreneurs' opinions (Effendi, 2017). Data filling in MAUT method uses a scale of 1 to 5 where the scale of each indicator has been adjusted to MSMEs. Therefore, MAUT attribute parameters are obtained as in Table-1 (Parjito, 2023).

**Table-1.** MAUT attribute parameters

Attribute	Description	Score	Attribute	Description	Score
Cost	<1 million	1	Infrastructure	Incomplete	1
	1-5 million	2		Less complete	2
	5-10 million	3		Quite complete	3
	10-15 million	4		Complete	4
	>15 million	5		Very complete	5
Time	<1 week	1	Entrepreneur opinion	Not important	1
	1-2 week	2		Less important	2
	2-3 week	3		Quite important	3
	3-4 week	4		Important	4
	>4 week	5		Very important	5

The calculation of all evaluation values can be determined by several equations. The following equation 1 is presented to find the preference value of each alternative (Parjito, 2023):

$$V(x) = \sum_{i=1}^n W_i V_i(x) \dots\dots\dots (1)$$

Note

- $V(x)$  = Alternative total evaluation -  $x$
- $W_i$  = Criteria relative score -  $i$
- $V_i(x)$  = Attribute (criteria) evaluation result -  $i$ , alternative -  $x$
- $I$  = Index to indicate criteria
- $n$  = Number of criteria

The utility function for normalizing each attribute  $V_i(x)$  to a 0-1 scale is referred to as  $U(x)$ . The following equation 2 presents the normalized utility value:

$$U(x) = \frac{x-xi^-}{xi^+ - xi^-} \dots\dots\dots (2)$$

Note

- $U(x)$  = Utility value of each alternative criterion -  $x$
- $xi^-$  = Minimum value (worst weight) of alternative criteria -  $x$
- $xi^+$  = Maximum value (worst weight) of alternative criteria -  $x$
- $x$  = Criterion value of each alternative -  $x$ ,

In MAUT method, the total weight of  $W_i$  is 1. Here is equation 3 of the total weight.

$$\sum_{i=1}^n W_i = 1 \quad \dots\dots\dots (3)$$

Note:

- $W_i$  = Relative weight of criteria -  $x$
- $i$  = Index to indicate criteria
- $n$  = number of criteria

The significance degrees of the weights when using Schäfer's rule are: 1 = not important, 2 = less important, 3 = moderately important, 4 = important, 5 = very important. So, the weight normalization function is used to measure the relative weight of each criterion. The following equation 4 presents the relative weight value of each criterion:

$$W_i = \frac{w_i'}{\sum w_i'} \quad \dots\dots\dots (4)$$

Note

- $W_i$  = Relative weight of criteria -  $x$
- $W_i'$  = Level of importance of criteria weights -  $x$
- $\sum W_i'$  = The total importance of the weights of each criterion

The sampling technique used was purposive sampling technique because the samples used for this research were employees and owners of SMIs Batik Rafida. Based on data collection, respondents based on characteristics; (a) female gender is 14% and male gender is 86%. (b) age 18-30 years by 29%, age 31-40 years by 43%, age above 41 years by 29%, (c) characteristic data based on position in SMIs is known that respondents who have a position as an employee by 71%. Meanwhile, respondents who have a position as owners of MSMEs amounted to 29%.

**SWOT data**

The design of the company's strategy requires data on the internal and external environmental conditions of the SME to facilitate the process of designing the strategy to be implemented. The company's internal and external data were obtained through observations and interviews with the owner of SMIs Batik Rafida. The following is SWOT data on SMIs Batik Rafida. Strength Factors, the strength factors possessed by SMIs Batik Rafida are: (a) Affordable Product Prices, (b) Varied Types of Batik, (c) Already Have a Permanent Market. Weakness Factors, weakness factors owned by SMIs Batik Rafida, namely: (a) Lack of Human Resources Quality in Management, (b) Promotion Strategy is Less Optimal, (c) Information systems have not been implemented in business management, (d) Sales Location is Less Strategic. Opportunity Factors, the opportunity factors owned by SMIs Batik Rafida are: (a) The existence of broad batik market opportunities, (b) technological developments that can perform digital marketing. Threat Factors, the threat factors owned by SMIs Batik Rafida are: (a) The number of similar competitors, (b) COVID-19 pandemic, (c) Lack of loyalty from customers, (d) The increasing number of batik MSMEs with new concepts.

**IFE matrix and FEE matrix FEE**

SWOT aims to analyze the condition of a business, so that a strategy can be formulated for the company in dealing with its competition with business competitors. In SWOT analysis, there are two influencing factors, namely internal factors and external factors. In table-2 IFE Matrix Factors and Table-3 EFE Matrix Factors.

**Table-2. IFE Matrix Factors**

Factor	Significance level	Weight	Rating	Score
Affordable product prices	4,0	0,16	4,0	0,63
Has a variety of batik types	3,7	0,15	3,7	0,55
Already has a fixed market	3,7	0,15	3,4	0,50
Lack of quality human resources in management	3,1	0,12	3,0	0,37
Less than optimal promotion strategy	4,0	0,16	3,9	0,61
No information system has been implemented in business management	2,9	0,11	2,1	0,24
Less strategic sales location	3,9	0,15	4,0	0,61
<b>TOTAL</b>	<b>25,29</b>	<b>1,00</b>	<b>24,14</b>	<b>3,52</b>

Source: processed data (2023)

Based on the IFE Matrix, it is known that the factor of affordable product prices gets a score of 0.62; the factor of having various types of batik gets a score of 0.55; the factor of already having a fixed market has a score of 0.50; the factor of lack of quality of human resources in management has a score of 0.37; the factor of less than optimal promotion strategy has a score of 0.61; the factor of not yet implementing an information system in management has a score of 0.24; and the factor of less strategic sales location has a score of 0.61. Meanwhile, the total score of the internal factors has a value of 3.54 which will then be used for the IE Matrix analysis.

**Table-3. IFE Matrix Factors**

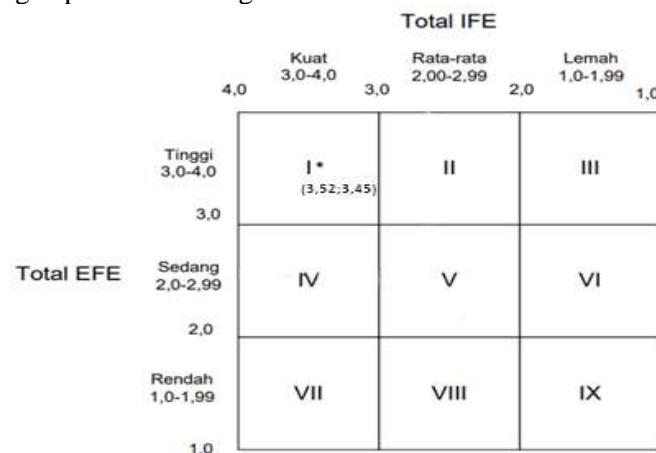
Factor	Significance level	Weight	Rating	Score
The existence of a wide batik market opportunity	4,0	0,18	3,7	0,66
Technological developments that can do marketing through digital	4,0	0,18	4,0	0,71
The number of similar competitors	4,0	0,18	2,9	0,51
Covid-19 pandemic	3,1	0,14	3,0	0,42
Lack of loyalty from customers	3,6	0,16	3,3	0,52
More and more batik MSMEs with new concepts	3,9	0,17	3,7	0,63
<b>TOTAL</b>	<b>22,57</b>	<b>1,00</b>	<b>20,57</b>	<b>3,45</b>

Source: processed data (2023)

Based on the IFE Matrix, it can be seen that the factor of batik market opportunities has a score of 0.66; the factor of technological developments that can do marketing through digital has a score of 0.51; the COVID-19 pandemic factor has a score of 0.42; the factor of lack of loyalty from customers has a score of 0.52; the factor of the increasing number of batik SMIs with new concepts has a score of 0.63. Meanwhile, the total score of external factors is 3.45 which will then be used in the IE Matrix.

### IE matrix

Based on the results of the IFE Matrix and EFE Matrix analysis, the analysis continues using the IE Matrix by entering the total value of the IFE Matrix and EFE Matrix according to the IE Matrix diagram. The following is presented in Figure-1. IE Matrix.



**Figure -1. IE Matrix**

Based on the IE Matrix, it is known that the total value of the IFE Matrix is 3.52 and the EFE Matrix is 3.45 so that the position of the business unit is in area I. In this area, the right strategy for business units is the grow and build strategy. Where the strategy focuses on product development, market penetration, and market development (Effendi, 2017).

### SWOT matrix

The SWOT matrix is used to obtain a strategy for the company that will be compiled by comparing internal factors and external factors including Strength and Weakness with external factors Opportunity and Threat. The strategy chosen is a strategy that benefits the company, with the minimum level of risk and threat presented in Table-4.

**Tabel-4.** Matriks SWOT.

Internal factors	STRENGTH	WEAKNESS
	1. Affordable product price 2. Has a variety of batik types 3. Already have a regular market	1. Lack of high-quality human resources in management 2. Less optimal promotion strategy 3. Not yet implemented information systems in business management 4. Less strategic sales location
External factors		
<b>OPPORTUNITY</b>	<b>S-O Strategy</b>	<b>W-O Strategy</b>
1. There is a wide market opportunity for batik 2. Technological developments that can carry out digital marketing	1. Cooperate with souvenir centers for batik marketing 2. Conduct sales using digital marketing such as social media and e-commerce 3.	1. Conduct coaching and training to employees and improve the management system. 2. Improve online marketing strategies or collaboration
<b>THREATS</b>	<b>SS-T Strategy</b>	<b>W-T Strategy</b>
1. Number of similar competitors 2. Covid-19 pandemic 3. Lack of loyalty from customers 4. More and more batik MSMEs with new concepts	1. Do batik promotion through bazaars, social media or EO. 2. Create modern batik product innovations 3. Provide ready-to-use batik products and accept custom orders 4. Conduct online sales	1. Do market research on current community trends 2. Provide discounts on large-scale purchases 3. Provide promos on product sales

Source: data processed (2023)

Based on the SWOT Matrix, 11 alternative strategies for SMIs are obtained according to the SWOT Matrix analysis that has been carried out, namely: (1) S-O strategies include working with souvenir centers for batik marketing and making sales using digital marketing such as social media and e-commerce; (2) S-T strategies include conducting promotions either through bazaars, social media or EOs, creating modern batik product innovations, providing finished batik products and accepting custom orders, making online sales; (3) W-O strategies include providing guidance and training to employees and improving management systems and improving marketing strategies online or collaboratively; (4) W-T strategies include conducting market research on current community trends, providing discounts on large-scale purchases, providing promos on product sales. Furthermore, from the strategies that have been obtained, calculations will be carried out using the Quantitative Strategic Planning Matrix (QSPM) and Multi Attribute Utility Theory (MAUT) methods to obtain alternative strategy priorities for SMIs Batik Rafida.

### Quantitative strategic planning matrix

Quantitative Strategic Planning Matrix is used to objectively evaluate strategies based on internal and external factors that have been identified. The 11 strategies that have been obtained from the SWOT Matrix will then be calculated and analyzed using the QSPM method to obtain alternative strategy priorities (Prastiti, 2019). The following is presented in Table-5.

**Table-5.** The result of QSPM analysis

Faktor	Bobot	Strategi 1		Strategi 2		Strategi 3		Strategi 4		Strategi 5		Strategi 6		Strategi 7		Strategi 8		Strategi 9		Strategi 10		Strategi 11	
		AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS	AS	TAS
<b>STRENGTH</b>																							
Harga produk terjangkau	0,16	3,9	0,61	3,6	0,56	3,9	0,61	3,9	0,61	3,7	0,59	3,9	0,61	1,4	0,23	4,0	0,63	2,0	0,32	3,3	0,52	3,7	0,59
Memiliki jenis batik bervariasi	0,15	3,4	0,50	3,1	0,46	3,9	0,57	3,7	0,55	3,3	0,48	3,9	0,57	2,1	0,31	3,7	0,55	3,7	0,55	2,4	0,36	2,4	0,36
Sudah memiliki pasar tetap	0,15	3,3	0,48	2,1	0,31	3,1	0,46	3,9	0,57	3,4	0,50	4,0	0,59	1,9	0,27	2,3	0,34	3,9	0,57	3,9	0,57	3,7	0,55
<b>WEAKNESS</b>																							
Kurangnya kualitas SDM dalam manajemen	0,12	1,6	0,20	2,1	0,27	1,1	0,14	1,4	0,18	1,3	0,16	2,1	0,27	3,4	0,43	2,9	0,36	3,6	0,44	1,1	0,14	1,4	0,18
Strategi promosi kurang optimal	0,16	3,9	0,61	3,7	0,59	3,7	0,59	2,7	0,43	2,1	0,34	3,7	0,59	2,1	0,34	3,7	0,59	3,1	0,50	3,4	0,54	3,4	0,54
Belum diterapkannya sistem informasi dalam manajemen bisnis	0,11	2,4	0,27	1,7	0,19	2,9	0,32	1,6	0,18	1,4	0,16	2,0	0,23	3,6	0,40	1,3	0,15	1,9	0,21	2,1	0,24	1,6	0,18
Lokasi penjualan kurang strategis	0,15	3,1	0,48	3,6	0,54	3,7	0,57	1,1	0,17	2,3	0,35	3,7	0,57	1,4	0,22	3,9	0,59	2,4	0,37	1,4	0,22	3,4	0,52
<b>OPPORTUNITY</b>																							
Adanya peluang pasar batik yang luas	0,18	3,7	0,66	4	0,71	3,7	0,66	3,7	0,66	3,7	0,66	3,9	0,68	2,4	0,43	3,9	0,68	3,7	0,66	4,0	0,71	3,9	0,68
Perkembangan teknologi yang dapat melakukan pemasaran melalui digital	0,18	3,9	0,68	4	0,71	3,9	0,68	2,9	0,51	3,6	0,63	4,0	0,71	2,7	0,48	4,0	0,71	3,9	0,68	3,9	0,68	3,7	0,66
<b>THREAT</b>																							
Banyaknya pesaing sejenis	0,18	4	0,71	3,7	0,66	3,6	0,63	3,6	0,63	3,7	0,66	3,9	0,68	2,7	0,48	3,7	0,66	3,9	0,68	3,6	0,63	3,6	0,63
Pandemi Covid-19	0,14	2,4	0,34	3,7	0,52	2,4	0,34	2,0	0,28	2,1	0,30	3,6	0,50	1,6	0,22	3,6	0,50	1,7	0,24	2,1	0,30	2,0	0,28
Kurangnya loyalitas dari para pelanggan	0,16	3,1	0,50	2,9	0,45	2,7	0,43	3,7	0,59	3,6	0,57	3,6	0,57	2,3	0,36	3,4	0,54	3,7	0,59	3,6	0,57	3,3	0,52
Semakin banyak UMKM batik dengan konsep baru	0,17	3,7	0,63	2,1	0,37	3,4	0,59	3,6	0,61	3,7	0,63	3,9	0,66	2,4	0,42	3,6	0,61	3,7	0,63	3,9	0,66	3,7	0,63
<b>TOTAL TAS</b>			6,68		6,35		6,59		5,96		6,03		7,21		4,59		6,89		6,44		6,14		6,32
<b>PRIORITAS</b>			3		7		4		10		9		1		11		2		5		8		6

Based on Table-5, the priority of alternative strategies is obtained from the final value of the Total Attractiveness Score of each strategy. The TAS value is obtained from the product of the Attractiveness Score (AS) value and the weight of each internal or external factor. The table above shows that the highest TAS value is strategy 6, namely making online sales with a total TAS value of 7.21. The strategy with the second largest TAS value is strategy 8, namely increasing marketing strategies online or collaboration with a total TAS value of 6.89. The strategy with the third largest TAS value is strategy 1, namely working with souvenir centers for batik marketing with a total TAS value of 6.68.

### Multi attribute utility theory

The Multi Attribute Utility Theory (MAUT) method is used to prioritize alternative strategies with several attributes including cost, time, infrastructure, and entrepreneurs' opinions (Effendi, 2017). In this method, each strategy is adjusted to the existing attributes. Thus, the selection of alternative strategy priorities has a reference for each strategy that is adjusted to the SMI. The first step is to calculate the weight of each attribute criteria, with the total weight value of the attribute is 1 using the formula in equation 4. The following is presented in Table-6 Calculation of Attribute Criteria Weight.

**Table -6.** Calculation of Attribute Criteria Weights

Criteria	Weight	Criteria weight
Cost	5	0,29
Time	4	0,24
Infrastructure	3,5	0,21
Entrepreneur opinion	4,5	0,26
<b>TOTAL</b>	<b>17</b>	<b>1</b>

Source: data processed (2023)

Based on Table-6, it is known the weight value of the criteria for each attribute. The weight value of the cost attribute criteria is 0.29; time is 0.24; infrastructure is 0.21; entrepreneur's opinion is 0.26. Next is the calculation of the utility value using the MAUT data that has been obtained. The following is presented in Table -7 on MAUT Data Recapitulation.

**Table-7.** The recapitulation of MAUT data

Alternative strategy	Attribute			
	Cost (0,29)	Time (0,24)	Infrastru cture (0,21)	Enterpre ur opinion (0,26)
Cooperate with souvenir centers for batik marketing	1	1,5	4,5	4
Do promotions using digital marketing such as social media and e-commerce	1,5	5	3	5
Do batik promotions through bazaars, social media or EOs	1	1,5	4	4
Create modern batik product innovations	1	1	4,5	4,5
Provide ready-to-use batik products and accept custom orders	2	2	5	3
Conduct online sales	1	3	5	5
Conduct coaching and training and improve the management system	1	1	2,5	4
Improve marketing strategies online or collaboratively	1	5	3	4,5
Conduct market research on current community trends	1	1	4	4
Provide discounts on large-scale purchases	1	1	5	4
Provide promos on product sales	1	1	5	3
<b>max</b>	2	5	5	5
<b>min</b>	1	1	2,5	3

Source: data processed (2023)

Based on Table-7, it is obtained the value of each attribute for each alternative strategy. Table-7 shows the maximum and minimum values for each attribute. The cost attribute has a maximum value of 2 and a minimum value of 1. The Time attribute has a maximum value of 5 and a minimum value of 1. The Infrastructure attribute has a maximum value of 5 and a minimum value of 2.5. From these data, the calculation of utility values using the formula as in equation 2 for each attribute for each strategy is then carried out to calculate the preference value to determine the priority of alternative strategies using the formula in equation 1, presented in Table-8 on MAUT Data Processing.

**Table-8.** MAUT Data processing

Alternative strategy	Utility value				Preferen ce score	Ran k
	Cost (0,29)	Time (0,24)	Infra- structu re (0,21)	Enterpren eur opinion (0,26)		
Cooperate with souvenir centers for batik marketing	0,000	0,125	0,800	0,500	0,33	7
Do promotions using digital marketing such as social media and e-commerce	0,500	1,000	0,200	1,000	0,69	1
Do batik promotions through bazaars, social media or EOs	0,000	0,125	0,600	0,500	0,29	8
Create modern batik product innovations	0,000	0,000	0,800	0,750	0,36	5
Provide ready-to-use batik products and accept custom orders	1,000	0,250	1,000	0,000	0,56	3
Conduct online sales	0,000	0,500	1,000	1,000	0,59	2
Conduct coaching and training and improve the management system	0,000	0,000	0,000	0,500	0,13	11
Improve marketing strategies online or collaboratively	0,000	1,000	0,200	0,750	0,48	4
Conduct market research on current community trends	0,000	0,000	0,600	0,500	0,26	9
Provide discounts on large-scale purchases	0,000	0,000	1,000	0,500	0,34	6
Provide promos on product sales	0,000	0,000	1,000	0,000	0,21	10

Source: data processed (20239)

Based on Table-8, the utility value, preference value, and ranking of each strategy can be seen. The three alternative strategies that have the greatest preference value are: The first alternative strategy priority is to promote using digital marketing such as social media and e-commerce with a preference value of 0.69. The second alternative strategy priority is to conduct online sales with a preference value of 0.59. The third alternative strategy priority is to provide finished batik products and accept custom orders with a preference value of 0.56. The results of developing the implementation of technopreneurship through social media have been obtained and implemented by the management of SMIs Batik Rafida, before the IKM research, they did not have social media to support marketing and did not dare to produce finished batik products with a large stock because they did not have their own media for selling.

The first stage, the implementation of technopreneurship through determining strategic alternative priorities has been analyzed using the Quantitative Strategic Planning Matrix (QSPM) method to produce three highest strategic alternative priorities for SMEs: (a) selling online, (b) improving online marketing strategies or collaborating with resellers, (c) collaborating with the souvenir center for batik marketing. The second stage, determining strategic alternative priorities using the Multi Attribute Utility Theory (MAUT) method with indicators: cost, time, infrastructure, and entrepreneurs' opinions produce a sequence of the three highest strategic alternative priorities based on preference values: (a) carrying out promotions using digital marketing such as social media and e-commerce; (b) selling online, (c) providing finished batik products and accepting custom orders.

Based on the results of the SWOT analysis, based on the matrix it can be concluded that SMIs Rafida batik is ready to: (a) penetrate the market while still considering product development strategies. This strategy is used to expand the market share of SMIs Batik Rafida which can increase business profits. (b) implementing sales increase strategies as a means for decision making in SMEs. After assistance, counseling and mentoring, the research results of SMIs Batik Rafida have used social media by displaying product catalogs and increasing promotions through digital. The use of Social Media is used as promotion and improving the sales system by improving product catalog photos and starting to do research for the production of finished products with the latest models. The results of the implementation of social media were quite significant in increasing sales and increasing turnover and Rafida Batik becoming better known to the wider community.

#### 4. CONCLUSION

This research resulted in a business development strategy in order to increase turnover through the implementation of social media was quite effective in increasing sales volume.

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