

Conference Paper

Formulation a Strategy to Increase the Competitiveness of SMEs: a Case Study on the Industry of Batik Bojonegoro

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ORCID IDTaufiq Hidayat: <https://orcid.org/0000-0003-2367-8861>**Abstract.**

Batik has quite a stable market trend, both in national and international markets. Almost every region in Indonesia has a specific and unique batik product. On one side, this condition enriches national batik variation so that consumers have many choices. On the other side, it triggers competitiveness, particularly in the national batik market. Therefore, SMEs working with batik must have competitiveness in encountering competitors. This research aimed to formulate a strategy that improves the competitive advantage of the Batik Bojonegoro Industry. The researcher employed a qualitative approach. Managers and employees of Batik Bojonegoro Industry were the research subjects. The data were collected through interviews, documentation, and observation which were then analyzed by Internal Factor Evaluation (IFE) Matrix, External factor Evaluation (EFE) Matrix, Internal-External (I-E) Matrix, and Quantitative Strategic Planning Matrix (QSPM). The research result showed that the Product Development Strategy is the best strategy to improve the competitiveness of the Batik Bojonegoro Industry. This strategy has the highest Sum Total Attractiveness Scores (STAS) value on the QSPM matrix by 5.81. Product Development Strategy is the most appropriate strategy for Batik Bojonegoro SMEs to confront the power of competition and strengthen the competitiveness of businesses.

Keywords: Business strategy, competitiveness, SME, Batik Bojonegoro.

1. Introduction

SMEs (Small-Medium Enterprise) has strategic roles in promoting the development of the national economy. The role of SMEs can be noticed in its ability to improve economic growth. The contribution of the SME sector in determining Gross Domestic Product is undoubted. Ministry of Cooperation and Small-Medium Enterprises noted that the contribution of SMEs enhanced from 57.84% to 60.34% within five recent years. SME also has pivotal contribution in overcoming the unemployment problem (1). Ministry of Cooperation and Small-Medium Enterprises reported that in 2008-2013, SME had absorbed the workforce by 20,119,804 people (17.62%). Meanwhile, in 2012-2013, the total workforce absorption by SME improved to 6,488,518 (6.03%). Considering the

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SME contribution in national economy, keeping the growth and sustainability of SME becomes an obligation for both the business people and the government. However, some main problems encountered by SMEs in Indonesia nowadays are internal and external. Internal issues include the limitation of SME, capitalization, marketing, and technology and innovation constraints, while the main external problem is business competition.

It is undeniable that all companies (including SMEs) must encounter tight competition among their rivals in the market. Moreover, the digital and information era has eased new business people entering the market so that the new businesses increase significantly. Besides, international cooperation in trade has caused many foreign companies and various import products to enter the domestic market. This phenomenon has made the business competition more competitive and company profit decreasing, even in some cases, it has brought the collapse of local companies. Nowadays, low competitiveness has become the core of problems encountered by SMEs in Indonesia in coping with global competition. At least, there are two questions for SME doers in these global challenges, first, how to reach and preserve overseas export; second, how to maintain the domestic market from imported products.

SMEs of Batik Bojonegoro also undergo some obstacles and challenges, as previously mentioned. Therefore, one of the solutions to handling those problems is building competitiveness. Competitiveness will occur if a company implements an appropriate business strategy (according to internal and external conditions). The efforts of developing competitiveness are so crucial that SMEs can develop or survive in the middle of more competitive rivalry.

2. Literature Review

2.1. Business Strategy

A business strategy is a comprehensive plan formulation on how a company reaches its goals (2) by considering internal and external environments to maximize competitive advantage and minimize competition limits. A strategy means a big-scale plan orienting long-term to interact with a competitive environment to reach the company's goals (3).

The formulation of business strategy is a part of the strategy management process, including the development of vision and mission, the identification of opportunities and external threats to organization, the achievement of long term goal, the search of alternative strategies, and the selection of certain strategies to reach goals. A business

strategy is formulated to determine how an organization becomes more competitive than its previous position (4).

There are three phases of company strategies formulation process, i.e., the phases of input, matching, and decision. The input phase contains basic input information required for strategy formulation. The matching phase focuses on creating a reasonable alternative strategy by considering the main internal and external factors. Decision phase functions for evaluating objectively the alternative strategies identified in the matching phase and giving objective basis for selecting alternative strategies (5).

2.2. The observation on Internal and External Environment

A business strategy can be formulated after having an observation on the internal and external environment of a company/SME. This observation aims to identify the number of company strengths and weaknesses as well as its opportunities and threats.

Internal environment consists of the existing factors under the company's control such as marketing and distribution, human resources, production (operation) management, financial and accounting, and research and development. Meanwhile, the external environment comprises factors out of control which influences the company in selecting direction and action that finally affect the organization's structure and internal process.

2.3. Method and Procedure for Business Strategy Formulation

2.3.1. Internal Factor Evaluation (IFE) Matrix

Internal Factor Evaluation (IFE) Matrix refers to a means of strategy formulation for summarizing and evaluating the major strengths and weaknesses in business functional areas. It can also be the basis for identifying and evaluating correlation among those areas.

2.3.2. External Factor Evaluation (EFE) Matrix

External Factor Evaluation Matrix is a means for summarizing and evaluating information of economy, social, culture, demography, environment, politic, government, law, technology, and competition.

2.3.3. Internal-External (I-E) Matrix

Internal-External Matrix positions organization division in nine cells of display, which can be broken down into three big parts with each strategy implication. First, cells I, II, III, and IV are displayed as growth and development. The best strategy for companies in this position is intensive or integrative strategy. Second, cells V, VI, and VII can be handled by keeping and preserving strategy. The third, cells VIII, IX, and X can be tackled by divestiture strategy.

2.3.4. Quantitative Strategy of Planning Matrix (QSPM)

Quantitative Strategy of Planning Matrix is a means by which strategy planner evaluates various alternative strategies objectively, based on the success factors in external & internal previously identified. This technique objectively shows the best strategy.

2.4. Competitiveness of SME

Competitiveness is the ability of company to create competitive advantage by optimizing the existing resources to win competition among competitors in the market. The competitiveness of a company depends on how that company has certain strengths compared to the other competitors. This statement is supported by Rahmana (6) who argues that competitive price can determine competitiveness of a company. Gradually, competitive price is influenced by two important factors i.e. the company ability to adapt consumer desire (flexibility) and product differentiation management. Meanwhile, National Resilience Institute of Republic of Indonesia (7) states that competitiveness is the ability to produce high quality goods and services which enables to compete with products from other countries.

SME with high competitiveness is characterized as follows: (a) the improvement of production volume, (b) the improvement of domestic market or export market, (c) the domestic market not only serves local market but also national market, and (d) the export market serves not only for one country but also for many ones (8).

The company in very strong competitiveness position can better develop strategy. The criteria of relatively strong position are characterized as follows: (a) no competition dominating market, (b) significant enough market share, (c) at least one top product in the market share, (d) market share improvement, (e) getting profit as the market leader, (f) very competitive market, (g) protected position such as by Anti-Monopoly Law.

2.5. Relevant Researches

The research results carried out by Li entitled “The Customer Value Strategy in the Competitiveness of Companies” showed that the strategy of consumer value is the one that can be applied by a company to gain competitive advantage (9). Campos, et.al. conducted the research under the title “Technology Strategy and New Technology Based Firms”. It was grounded theory. The results indicated that the technology strategy is the key factor in improving the competitive advantage of a company (10).

The research of Yan entitled “Competitive Strategy and Business Environment: The Case of Small Enterprises in China” aimed at investigating the correlation between competitive strategy (strategies of cost and differentiation) and competitive advantage of SMEs in China by using correlation analysis method (descriptive statistic). This research reported that competitive strategy is very crucial to reach competitive advantage among SMEs in China. In other words, competitive strategy has positive correlation with competitive advantage among SMEs in China (11).

The research of Chandamoyo and Dumbu entitled “Competitive Strategy and Business Environment Influencing Performance of Small and Medium Enterprises in the Manufacturing Sector: The Case Study of Manufacturing Firms in Mucheke Light Industry” was aimed at figuring out the competitive strategy and business environment which influenced the performance of SME of Mucheke lamp industry in Zimbabwe. This qualitative research was carried out by survey. The results showed that (a) competitive strategy (strategies of cost and differentiation) is the key strategy used by SME of Mucheke Lamp Industry to get competitive advantage, (b) business environment (factors of politic, economy, and social) has pivotal role for SMEs of Mucheke Lamp Industry to get competitive advantage (12).

He did a research entitled “How to Maintain Sustainable Competitive Advantages: Case Study on the Evolution of Organizational Strategic Management”. It aimed at analyzing why the sustainable competitive advantage could disappear in many companies and how to survive competitive advantage in industry/market. The results reported that competitive advantage of a company had life cycle beginning from plan formulation (strategic) and sources accumulation. A successful company requires competitive advantage including how to do, innovate, and improve continuously (13).

A study of Lourens & Jonker entitled “The Strategic Relevance of Technology-Related Variables to the Competitiveness of Small-to-Medium-Sized Furniture Manufacturers” was intended for analyzing the effects of business strategy toward competitiveness of SMEs in furniture industry by using ANOVA. The research results showed that there was

significant correlation among business strategy, technology use, technology purchase strategy, and information technology with SMEs competitiveness based on business performance and technology competitive advantage (14).

This research aimed at completing and supporting the previous researches. It focused on the efforts to formulate business strategy at SMEs of Batik Bojonegoro to develop competitive advantage. Figure 1 shows the road map of this research.

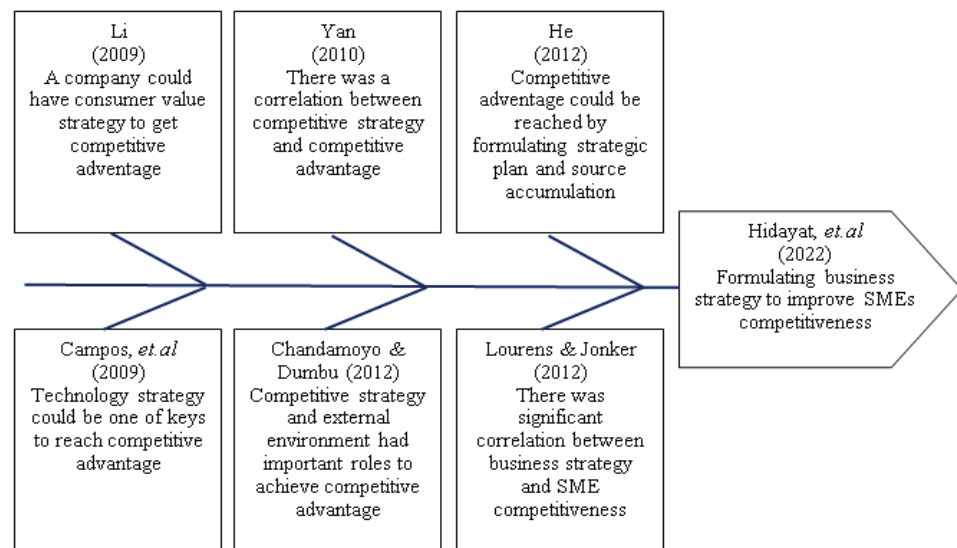


Figure 1: Road Map of the Research.

3. Method

This research was carried out at the location of Batik Bojonegoro Industry, Indonesia. It used qualitative approach with a case study type. It aimed at more in-depth understanding various events until the best business strategy for Batik Bojonegoro SMEs was formulated particularly in strengthening their competitiveness. The data were collected through interview, documentation, and observation and analyzed by Internal Factor Evaluation (IFE) Matrix, EFE (External Factor Evaluation) Matrix, Internal-External (I-E) Matrix, Quantitative Strategic Planning Matrix (QSPM). The test for data validity was conducted through triangulation of sources and methods.

This research consists of some phases (Figure 2) as follows; First, choosing one of Batik SMEs in Bojonegoro Regency, Indonesia as a research object based on the following determined criteria: total number of workforces, the width of market share, and the desire to continue its development in the future. Second, observing the conditions of internal and external environment which influence SMEs of Batik Bojonegoro to reach the goal. This activity was used for identifying strategic factors involving the aspects of

internal strengths and weaknesses, external opportunity and threat being encountered by companies.

Third, analyzing the number of strategic factors both internal and external Batik Bojonegoro SMEs which previously had been identified. Internal strategic factors were analyzed by Internal Factor Evaluation-IFE, while the external ones were analyzed by External Factor Evaluation-EFE.

Fourth, formulating and evaluating alternative strategies for finding rational alternative strategy by considering internal and external strategic factors of Batik Bojonegoro SMEs. Internal-External (IE) Matrix was employed in this research. Fifth, making decisions. Some alternative strategies found in the fourth phase were analyzed by Quantitative Strategic Planning Matrix (QSPM) for determining the most appropriate strategy for Batik Bojonegoro SMEs referring to the internal and external environment condition. The results of business strategy formulation are expected to improve competitiveness of Batik Bojonegoro SMEs in encountering competitors and winning rivalry.

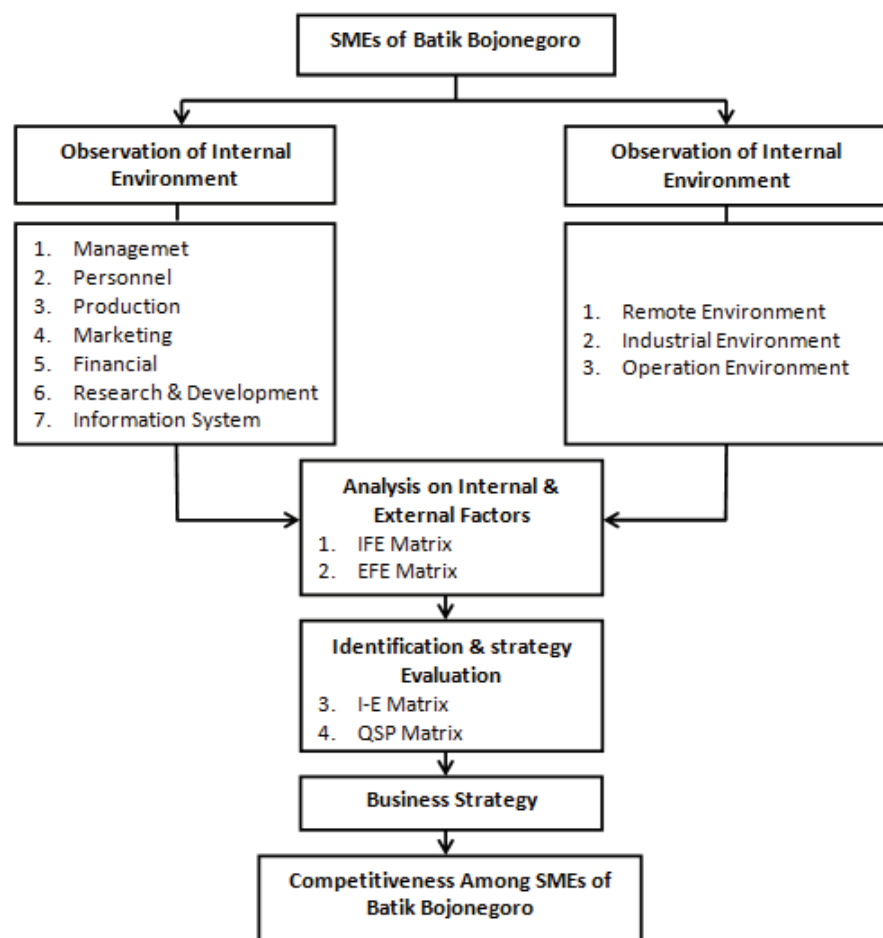


Figure 2: The Phases of The Research.

4. Result and Discussion

4.1. The Analyses on Internal and External Conditions of Batik Bojonegoro SMEs

4.1.1. Based on the observation results on internal and external environment of Batik Bojonegoro SMEs, some strengths, weaknesses, opportunities, and threats encountered by SMEs could be identified (Table 1). The strengths and weaknesses derived from factors of financial and accounting, human resources, production, and marketing. The strengths of Batik Bojonegoro SMEs are: (1) strong capital business, (2) skillful and loyal employees, (3) high income growth, (4) big production capacity, (5) quality-oriented production. Meanwhile, the weaknesses are: (1) weak marketing, (2) high production cost, (3) unavailability of health and old days insurance, (4) traditional accounting system, (5) no employees with IT (Information of Technology) skill.

TABLE 1: Lists of Strengths, Weaknesses, Opportunities, and Threats of Batik Bojonegoro SMEs.

Strengths	Weaknesses
Strong business capital Skillful and loyal employees High income growth Big production capacity Quality-oriented production	Marketing High production cost Unavailability of health and old days insurance Traditional accounting system Unskillful employees on IT
Opportunities	Threats
Strategic location between industry home and shop Batik clothes trend Local, national, and international market expansion. Available batik materials E-Commerce trend	Tight competition among batik industries Strong bargaining power among consumers People purchasing power due to inflation Unfamiliar Batik Bojonegoro among non-Bojonegoro people Various batik types

Batik Bojonegoro SMEs also encountered some opportunities and threats which were out of control but they may influence the existence of SME in the short and middle terms. Opportunities which can be used by SMEs are: (1) strategic location between home industry and shop, (2) trend of Batik clothes in society, (3) local, national, and international market expansion, (4) available Batik materials, (5) E-Commerce trend. Besides, some threats must also be anticipated such as (1) tight competition among batik industries, (2) strong bargaining power among consumers, (3) purchasing power influenced by inflation, (4) unfamiliarity on Batik Bojonegoro among non-Bojonegoro people, (5) various batik types.

4.2. Analysis of Business Strategy Formulation

4.2.1. Internal Factor Evaluation (IFE) Matrix

Based on the identification of internal factors at Batik Bojonegoro SMEs, some internal strengths and weaknesses were obtained. These factors were then given weight and rating by SME owners who were in the manager position (Table 2). Total IFE scores by 2.69 showed that Batik Bojonegoro SMEs was in the moderate (strong enough) position internally. The biggest strength of this business was on business capital by the score 0.51, while the biggest weakness was on the Traditional Accounting System by the score 0.05.

TABLE 2: Internal Factor Evaluation (IFE) Matrix of Batik Bojonegoro SMEs.

Internal Strategic Factor	Weight	Relative	Rating	Weight Score
Strengths				
Strong business capital	5	0.13	4	0.51
Skillful and loyal employee	4	0.10	4	0.41
High income growth	4	0.10	3	0.31
Quiet big production capacity	4	0.10	4	0.41
Quality-oriented production	5	0.13	3	0.38
Weaknesses				
Marketing	5	0.13	2	0.26
High production cost	4	0.10	2	0.21
Unavailability of health and old days insurance	3	0.08	1	0.08
Traditional accounting system	2	0.05	1	0.05
Unskillful employees in IT	3	0.08	1	0.08
Total		1.00		2.69

4.2.2. External Factor Evaluation (EFE) Matrix

Based on the external factors of Batik Bojonegoro SMEs, some external opportunities and threats were gained. The owners in the manager position of Batik Bojonegoro SMEs then gave weight and rating to these factors. Table 3 showed the total EFE scores by 2.75 indicating that SMEs of Batik Bojonegoro could respond quite well to the opportunities and threats in their industries. In other words, this business strategy was effective enough to get benefit from external opportunities and avoid the existing threats.

The biggest opportunity for Batik Bojonegoro SMEs was the trend of Batik clothes among people by the score 0.50, while the biggest threat was on the unfamiliarity of Batik Bojonegoro among people outside Bojonegoro by the score 0.20.

TABLE 3: External Factor Evaluation (EFE) Matrix of Batik Bojonegoro SMEs.

External Strategic Factors	Weight	Relative	Rating	Weight Score
Opportunities				
Strategic location between industry home and shop	3	0.08	4	0.30
Trend for Batik clothes in society	5	0.13	4	0.50
The expansion of local, national, and international market	4	0.10	3	0.30
The availability of Batik raw materials	4	0.10	4	0.40
E-Commerce trend	4	0.10	1	0.10
Threats				
Tight competition among Batik industries	5	0.13	2	0.25
Tight bargaining power among consumers	5	0.13	2	0.25
Inflation influencing people purchasing power	3	0.08	3	0.23
Unfamiliarity on Batik Bojonegoro among people	4	0.10	2	0.20
Various Batik types	3	0.08	3	0.23
Total		1.00		2.75

1. Internal-External (IE) Matrix

The analysis by Internal and External Matrix (I-E Matrix) used the information obtained from the calculation results of IFE and EFE Matrixes. It aimed at figuring out the company position and getting the alternative strategies. The total scores of IFE was 2.69 meaning that Batik Bojonegoro SMEs had average ability in using strengths and minimizing the internal weaknesses. Meanwhile, the total scores of EFE was 2.75 indicating that Batik business had strong enough position in using opportunities and avoiding the obstacles.

The analysis by IE Matrix reported that Batik Bojonegoro SMEs was in cell V or in the phase of preserving and maintaining. In this position, the appropriate alternative strategy is intensive strategy (such as market and product development) or integrative strategy (such as horizontal integration). The position of Batik Bojonegoro SMEs in IE Matrix is shown in Figure 3.

4.2.3. Quantitative Strategic Planning Matrix (QSPM)

QSPM analysis was used to get the best strategy among all alternative strategies resulted from Internal-External (I-E) Matrix based on the relative attractiveness between

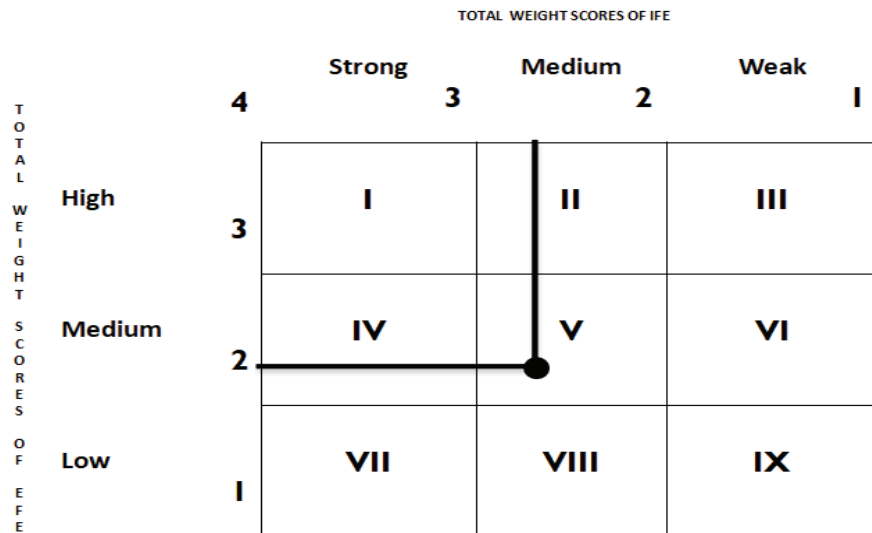


Figure 3: Internal-External Matrix of Batik Bojonegoro SMEs Position.

internal and external factors. Some strategies suggested are: market development (S1), product development (S2), and horizontal integration (S3).

Notes: AS (Attractiveness Score)

TAS (Total Attractiveness Score)

The analysis by QSPM used information from IFE and EFE Matrixes for determining some internal and external strategic factors including the recent strengths, weaknesses, opportunities, and threats encountered by the company as well as their weight scores. The other information used in this QSPM analysis was the result of relative attractiveness score (AS) determined by the owners of Batik Bojonegoro SMEs. The data were then processed through QSPM as shown in Table 4.

The results of QSPM analysis demonstrated the alternative strategies from the highest to the lowest. The first was strategy for product development by 5.81 STAS (Sum Total Attractiveness Scores). The second was strategy of market development by 5.20 STAS, while the third was strategy of horizontal integration by 4.38 STAS. These indicated that the strategy of product development is the best one for Batik Bojonegoro SMEs, based on the recent internal and external conditions.

The strategy of product development is a strategy to increase the sale by improving or modifying the existing products and goods. Product development usually needs high cost for research and development (David, 2008). Through product development strategy, Batik Bojonegoro SMEs can introduce their new products to the recent market segment.

TABLE 4: Quantitative Strategy Planning Matrix (QSPM) of Batik Bojonegoro SMEs.

STRATEGIC FACTORS	WEIGHT	ALTERNATIVE BUSINESS STRATEGIES					
		S1		S2		S3	
		AS	TAS	AS	TAS	AS	TAS
Strengths							
Strong business capital	0.13	4	0.52	4	0.52	4	0.52
Skillful and loyal employees	0.10	2	0.2	4	0.4	3	0.3
High income growth	0.10	3	0.3	3	0.3	3	0.3
Quite big production capacity	0.10	4	0.4	4	0.4	3	0.3
Quality-oriented production	0.13	3	0.39	4	0.52	2	0.26
Weaknesses							
Marketing	0.13	3	0.39	2	0.26	1	0.13
High production cost	0.10	2	0.2	3	0.3	2	0.2
Unavailability of health and old days insurance	0.08	1	0.08	1	0.08	1	0.08
Traditional accounting system	0.05	2	0.1	2	0.1	2	0.1
Unskillful employees in IT	0.08	4	0.32	2	0.16	1	0.08
Opportunities							
Strategic location between industry home and shop (Provincial highway of Surabaya-Bojonegoro)	0.08	1	0.08	1	0.08	1	0.08
Trend of Batik clothes in society	0.13	4	0.52	3	0.39	2	0.26
The expansion of local, national, and international market	0.10	4	0.4	3	0.3	3	0.3
The availability of Batik raw materials	0.10	3	0.3	4	0.4	1	0.1
E-Commerce trend	0.10	4	0.4	2	0.2	2	0.2
Threats							
Tight competition among Batik industries	0.13	1	0.13	4	0.52	4	0.52
Strong bargaining power among consumers	0.13	1	0.13	2	0.26	3	0.39
Inflation influencing people purchasing power	0.08	1	0.08	1	0.08	1	0.08
Unfamiliarity of Batik Bojonegoro among people	0.10	1	0.1	3	0.3	1	0.1
Various Batik types	0.08	2	0.16	3	0.24	1	0.08
TOTAL			5.20		5.81		4.38

5. Conclusion

The internal and external conditions of Batik Bojonegoro SMEs showed good performances. IFE Matrix score by 2.69 indicated that SMEs of Batik Bojonegoro had fair ability in using strengths and minimizing internal weaknesses. Meanwhile, the EFE Matrix score by 2.75 implied that Batik industry had a moderate ability to use

opportunities and avoid recent obstacles. The analysis of business strategy formulation through phases of input, matching, and decision obtained some alternative strategies such as market development, product development, and horizontal integration. The product development strategy is the best alternative strategy to implement by Batik Bojonegoro SMEs as it got the highest STAS by 5.81 on QSPM Matrix. This strategy is the most appropriate strategy for Batik Bojonegoro SMEs to encounter the power of competition and strengthen the competitiveness of business to the targeted goals.

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