

Marketing Strategy Determination by SWOT and ANP Approaches on Aceh Songket Small-Medium Enterprises

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Abstract— Aceh songket is a traditional Indonesian fabric which has not only cultural value but also economic value and one of the creative industries in Aceh. In the last fifteen years, however, the business of Aceh songket had no significant development and still classified as Small and Medium Enterprises (SMEs). Applying the right marketing strategy will be very useful in developing business, so that the income will be increased. This study aimed to find the problems, sub-criteria of influences as well as the best marketing strategy which can be applied based on the internal and external conditions of Aceh songket business, especially in Banda Aceh and Aceh Besar. Based on the SWOT analysis conducted, there were seven problems of internal and external factors of business to produce nine strategies which become the best marketing strategy alternative in this research. The sub-criteria for determining the best strategy in this study was seen in terms of marketing mix with sub-criteria of brand name, direct marketing and public relations as three sub-criteria with the highest importance than the other sub-criteria. The result of ANP processing showed the development of product diversification from the remaining of Aceh songket fabric as the best strategy with the highest priority weight.

Keywords- marketing strategy; aceh songket; sub-criteria; SWOT; ANP; multi-criteria

I. INTRODUCTION

Aceh songket has the value and characteristic which basically become the superior point in competing with other traditional Indonesian fabric. The characteristic of Aceh songket color and motive has a blend of Arabic, Hindu and Persian motives. The technique of making this fabric is done by bind weaving which is a number of tight bonds following the pattern, so that the tightly bonded threads are not exposed to the color when dyed. Thus, Aceh is the only region in the archipelago whose threads are made bonded [1]. The greatness of Aceh songket is not only because of its complexity and severity, but also the color used on the songket is a color made from vegetable material [2].

However, the business of Aceh songket is not experiencing a significant development currently. Based on field studies

conducted, there were several factors of obstacles for developing this business, one of them is the marketing. Overall, Aceh songket business in Banda Aceh and Aceh Besar still has not used the marketing enhancement facility which is growing nowadays optimally, such as promotion media (online media, exhibition, partnership), public relations, and also lack of management resources marketing that should regulate the process as well as the smooth steps of marketing. Data of Industry and Trade Office in 2015 also explained that the current number of Aceh songket weaver only amounted to 40 people, reduced about 33% of total weaver before the conflict which was amounted to 60 people. This is also one of the reasons for the decline of production so that it had never met the existing market demand and the marketing also come down. With the marketing decline of Aceh songket, the interest of the younger generation to learn the making techniques also decreased.

Building a competitive advantage by generating value for consumers has become a major highlight in marketing strategy. A company will achieve a competitive advantage when it offers a value different from its competitors [3]. Related to this, the world of the business is dynamic, there will be changes over time and the interrelationship between each other. Therefore, marketing strategy has an important role to the success of a business [4].

One way to formulate a marketing strategy is to consider the various things which affect the marketing itself. Strength-Weakness-Opportunity-Threat (SWOT) analysis is one of the tools of strategy formulation by identifying various factors systematically. With the SWOT matrix, the adjustment of opportunities and external threats facing a business with its own strengths and weaknesses can be clearly defined and yielding some strategic alternatives [5]. One way that can be done to do the selection of several alternatives is to use the method of Analytical Network Process (ANP). This method is used in the form of completion with the consideration of adjusting the complexity of a problem by elaborating the synthesis accompanied by the priority scale which produces the

greatest priority. ANP is also able to explain the model of the interconnection factors and its reciprocity systematically [6].

Based on the problems and descriptions which have been described, it is necessary to determine the marketing strategy by using SWOT and ANP to determine the pairwise comparison on Aceh songket Small and Medium Enterprises (SMEs).

II. RESEARCH METHODOLOGY

This research was conducted on Aceh songket SMEs location in Banda Aceh and Aceh Besar. This research began with a literature study on marketing strategies, SWOT analysis and ANP process. Field studies were also carried out by direct observation of Aceh songket products, weavers, and business processes. there are seven respondents in this study i.e. 3 weavers, 2 from Dekranasda, 1 from Industry and Trade and a marketing consultant.

A. Marketing Strategy Criteria

Determining the best strategy among alternatives which had been formulated in the SWOT matrix, sub-criteria that be the determinant influence variables were required. the marketing mix is actually a tool and has always been a means of demonstrating the core or basic principles of marketing [7]. Strategies with marketing mix can determine the best composition of four components or marketing elements to achieve the intended target market while achieving the company's goals and objectives [4]. Therefore, the design of sub-criteria in determining the best strategy was based on the marketing mix. The elements of Marketing Mix 4P is shown generally in Figure 1.



Figure 1. Mix Marketing 4P

B. Data Collection and Processing

This research observed the Aceh Songket business and conducted in-depth interviews for SWOT data collection. In addition, data collection for ANP processing was conducted by distributing three questionnaires: sub-criteria selection questionnaire, sub-criteria relationship questionnaire and pairwise comparison questionnaire. The scale that be used in pairwise comparison questionnaire is scale 1 to 9 that shown in Table 1. This scale was validated for effectiveness and could representing intensive judgement in many application [8].

The result of this questionnaire was a consensus score derived from a combination of individual answers from each respondent. The opinion combinations of the respondents were processed by the calculation of Geometric Mean, an average calculation showing a certain tendency or value which is shown in (1) (Ascarya, 2011) [6]:

$$GM = (R1 * R2 * R3 * \dots * Rn)^{1/n} \quad (1)$$

Where GM is the geometric mean, R is respondent value, and n is total responden. The value of the comparisons of pairwise comparisons was the value used as the input value in pairwise comparisons.

There were seven respondents in this study: three Aceh songket weavers, two representatives of Dekranasda Aceh, one representative of the Aceh Industry and Trade Office and a marketing consultant.

III. RESULT AND DISCUSSION

A. Aceh Songket Business SWOT Analysis

The internal strength factor of the Aceh songket business in Aceh is the characteristic of different motifs from other regions, high product quality, the price of products which compete with the price of similar products from other regions and also have begun to innovate products both from motifs, colors and functions.

TABLE I. FUNDAMENTAL SCALE

Intensity of Importance	Definition	Explanation
1	Equal Importance	Two activities contribute equally to objective
3	Moderate Importance	Experience and judgment slightly favor one activity over another
5	Strong Importance	Experience and judgment strongly favor one activity over another
7	Demonstrate Importance	Experience and judgment very strongly favor one activity over another; its dominance demonstrated in practice
9	Extreme Importance	The evidence favoring one activity over another is the highest possible order of affirmation
2,4,6,8	Values between two adjacent consideration	Values between two values of adjacent consideration

The opportunity factors of the Aceh songket business in Aceh include the increasing of creative and fashion industries

in Aceh and Indonesia, the wide market share, the market segmentation which has been formed and even possible to expand and also the promotion of the creative industry increased so that it can help the marketing.

As for the internal weakness factors of Aceh songket business were the amount of skilled weaver in making patterns, limited production support facilities, and less marketing resources. The threat factors of Aceh songket business in Aceh were the limited raw material compared to other regions, the competition of similar products with other regions of Indonesia, lack of training for weaver regeneration, and still not yet adapted to the current trading system.

Based on internal and external factors possessed by Aceh songket business, nine alternative strategies were produced such as expanding marketing access (A1), product branding (A2), product diversification (A3), following cultural activities actively (A4), adding labor and partners (A5), increasing the cooperation (A6), developing product promotion (A7), the expansion of raw materials (A8), training and regeneration of weaver (A9). These selected alternative strategy would be processed using ANP method to produce the best strategy in this research.

B. The Chosen Criteria and Sub-Criteria

Determining the best strategy among alternatives which had been formulated in the SWOT matrix, sub-criteria that be the determinant influence variables were required. Based on the distribution of sub-criteria selection questionnaires, there were 15 selected sub-criteria which were considered to be important in the marketing of Aceh songket. The selected sub-criteria is shown in Table 2.

After choosing sub-criteria, then the relationship determination of among sub-criteria was conducted. This was needed to be done because not all of sub-criteria give effects and needed to be compared.

TABLE II. THE CHOSEN SUB-CRITERIA

No	Sub-Criteria	Value	Code	Criteria
1	Product Quality	4.86	A	Product
2	Product Design/Pattern	5.00	B	
3	Product Variety	4.14	C	
4	Brand Name	4.57	D	
5	Product Packaging	4.14	E	
6	Product Size	4.29	F	
7	Advertising	4.57	G	Promotion
8	Direct Marketing	4.86	H	
9	Marketing Promotion	4.43	I	
10	Society Relationship	4.57	J	
11	Intermediary Option	4.57	K	Place
12	Inventory Capacity	4.86	L	
13	Transportation	4.29	M	
14	Price List	4.86	N	Price

Based on relationship determination questionnaires distribution, the result is shown in Table 3. Based on Table 3, it can be seen that among sub-criteria, there are 58 relations consisting of inner dependence (relationships within the same criteria), outer dependence (relationships in different criteria) and feedback (reciprocal or influencing and influenced each other).

C. Best Strategy Determination

In addition to the relationships among sub-criteria, the sub-criteria influence relationships against alternatives were also need to be determined. This was because not all of sub-criteria influenced the existed alternative strategy so the pairwise comparison was only done to sub-criteria and alternatives which had the relationship in order to be more effective and efficient. The result of sub-criteria relationships determination againts alternatives is shown in Table 4.

TABLE III. SUB-CRITERIA RELATIONSHIP

		Product					Promotion				Place			Price		Information	
		A	B	C	D	E	F	G	H	I	J	K	L	M	N		O
Product	A	■						■	■	■	■				■		■ Related Inner Dependence of Product Criteria
	B	■	■					■	■	■	■				■		
	C	■	■	■				■	■	■	■		■		■		
	D		■		■			■	■	■	■				■		
	E	■			■	■			■	■	■				■		
	F			■		■	■		■	■	■				■		
Promotion	G				■		■	■	■	■	■	■		■		■■■ Inner Dependence of Promotion Criteria	
	H				■		■	■	■	■	■	■		■			
	I				■		■	■	■	■	■	■		■			
	J				■		■	■	■	■	■	■		■			
Place	K										■	■	■			■■■ Inner Dependence of Place Criteria	
	L				■						■	■	■				
	M										■	■	■				
Price	N													■	■	■■■ Inner Dependence of Price Criteria	
	O													■	■		

Note: Product Quality (A), Product Design/Pattern (B), Product Variety (C), Brand Name (D), Product Packaging (E), Product Size (F), Advertising (G), Direct Marketing (H), Marketing Promotion (I), Society Relationship (J), Intermediary Option (K), Inventory Capacity (L), Transportation (M), Price List (N), Payment Time (O)

TABLE IV. SUB-CRITERIA RELATIONSHIPS AGAINST ALTERNATIVES

		Alternative									Information
		A1	A2	A3	A4	A5	A6	A7	A8	A9	
Subkriteria Produk	A										 Related
	B										
	C										
	D										
	E										
	F										
Subkriteria Promosi	G										
	H										
	I										
	J										
Subkriteria Penyaluran	K										
	L										
	M										
Subkriteria Harga	N										
	O										

Note: Product Quality (A), Product Design/Pattern (B), Product Variety (C), Brand Name (D), Product Packaging (E), Product Size (F), Advertising (G), Direct Marketing (H), Marketing Promotion (I), Society Relationship (J), Intermediary Option (K), Inventory Capacity (L), Transportasian (M), Price List (N), Payment Time (O)

Based on the relationship which had been formed, it was necessary to make an ANP model in order to facilitate the understanding of the relationship and the comparison which would be done. The ANP model can be known and shown in Figure 2.

The used ANP model was a common network type, i.e a network with no special structure. The general network consists of several clusters containing multiple nodes. There are 5 clusters in this model, the Product cluster representing product criteria with sub-criteria as nodes. As well as the Price, Distribution and Promotion clusters. For Marketing Strategy cluster, consists of strategic alternatives as nodes. The arrow direction illustrates the direction of influence whereas the meaning of the circular arrow symbols contained in the Product, Distribution and Promotion clusters is that the nodes affecting the nodes within the same cluster.

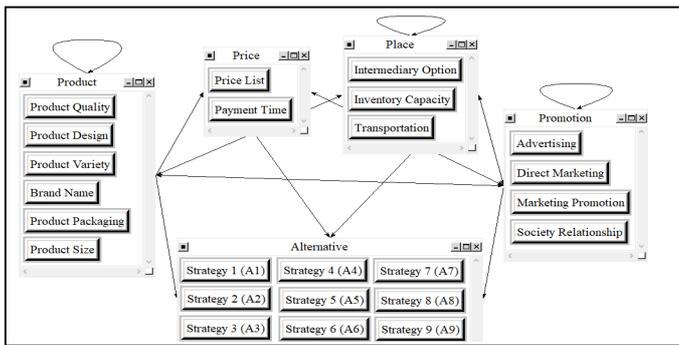


Figure 2. ANP model

After the ANP model had been established, then the pairwise comparison questionnaire was distributed to the predetermined relationship. Based on the processing which had been done, the obtained result is shown in Figure 3. Figure 3 shows the weight of each sub criteria on a global scale/all nodes contained in the Limiting column and the weight of each sub-criteria on the cluster scale found on the Normalized by Cluster column are known.

The weight value obtained by the sub-criteria were not the same even some had a high weight difference in the same cluster. This weight value represented the importance of a sub-criteria. The higher the weight value obtained by sub-criteria, the more important the sub-criteria was in decision-making. And for the global or whole scale, Brand Name sub-criteria was the most important sub-criteria.

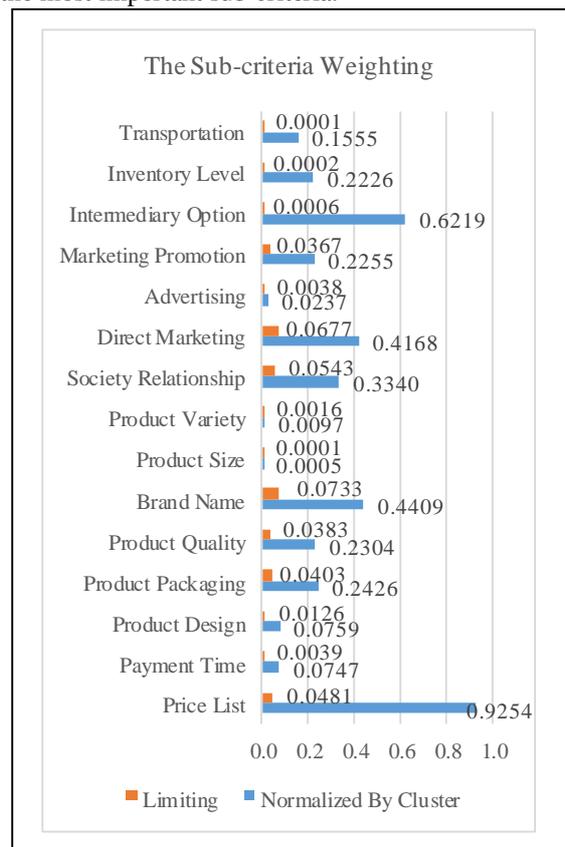


Figure 3. Sub-criteria Weighting

Brand Name sub-criteria was a sub-criteria which had the highest level of importance compared to other sub-criteria because Brand Name sub-criteria had the largest global weight of 0.0733.

Furthermore, for the alternative strategies, the results of pairwise comparison processing are called synthesized results. Alternative synthesis results have three related weights, namely Raw, Normals and Ideals weights. This Raw weight can be said to have the same meaning with the Limiting weight on the weighting sub-criteria. The Normals weight is an alternative weighting strategy from an alternative cluster scale only. Normals weight in this synthesis result can be said to have the same meaning as the Normalized by Cluster weight on the weighting sub-criteria. While the Ideals weight is the division result of the weight of Normals weight on each alternative against the highest Normals weight among the existed alternative strategies. Alternative with the highest priority position is an alternative which has the highest Normals weight or has the Ideals weight of 1. Based on the alternative strategies processing or synthesis with Super Decision software, the alternative weighting results of existing strategies can be known and shown in Figure 4.

Based on Figure 4, it can be seen that the alternative which has the highest Normals weight and at the same time become the chosen marketing strategy in this research, i.e alternative strategy 3, which was the diversification of the product from the remaining fabric of Aceh songket. Explanation of the results of the weighting of alternative strategies in Figure 4 can be seen in Table 5.

TABLE V. SUB-CRITERIA RELATIONSHIPS AGAINST ALTERNATIVES FINAL RESULT

Rating	Strategy	Information	Weight
1	A3	Development of product diversification from the remaining Aceh songket fabric.	0.1582
2	A2	The enhancement of product branding on middle to the upper market target.	0.1521
3	A9	Technical training on making Aceh songket in order to improve the regeneration of weaver.	0.1388
4	A4	Actively utilize the national cultural/exhibition activities to raise the value of Aceh songket	0.1376
5	A1	Expand the marketing access by adding promotional partners and product outside area distribution	0.1090
6	A6	Cooperation enhancement with the government in business coaching and product marketing.	0.1082
7	A7	Relationships enhancement with existing promotional partners to improve online media promotion.	0.1031
8	A5	The addition of labor or marketing partners to improve business management and marketing.	0.0927
9	A8	Expansion of raw material access to ensure availability of raw materials & products.	0.0004

This strategy was considered highly relevant when viewed from the real situation and had a great opportunity in improving the marketing if it could be applied to the Aceh songket business today. Applying this strategy can decrease production waste which is usually no longer in use and only becoming an example pattern. By using the remaining Aceh songket fabric as combination of product diversification, this strategy can also increase the value of product diversification significantly. This strategy also can make the businessmen to be more creative in innovating and developing product variety. After obtaining the chosen strategy, the businessmen themselves also need to outline the operational supportive steps to be able to implement this strategy.

IV. CONCLUSION

Based on the processing and discussion of research results, here are some conclusions that can be taken. The marketing problems experienced by the Aceh songket business currently is caused by several weaknesses of internal factors such as less expert weaver, limited production support facilities and lack of marketing resources; and threatening external factors such as limited raw materials, competition of similar products (other traditional Indonesian cloth), lack of training to regenerate weaver and not yet adapted to the current growing online trading system.

The sub-criteria chosen to be the determining factor of marketing strategy in this study were amounted to be 15 sub-criteria with Brand Name, Direct Marketing and Society Relationship as the three most important sub-criteria of all sub-criteria. The chosen strategy based on ANP processing using

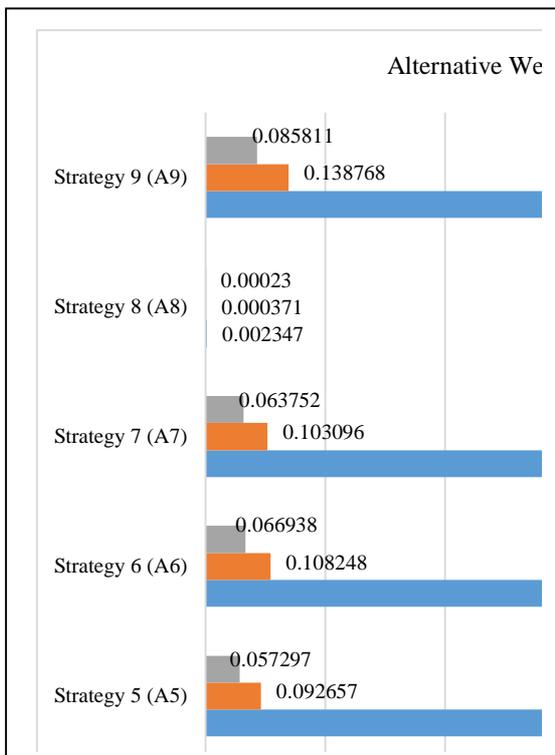


Figure 4. Alternative strategies weight

Super Decision software was the development of product diversification from the remaining fabric of Aceh songket with a priority value of 0,1582.

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