

# Business Development Strategy for Young Coffee Entrepreneurs in Batang Regency, Indonesia (SWOT Analysis Approach - Fuzzy Analytical Hierarchy Process)

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**Abstract:-** Batang is one of the coffee-producing areas in Central Java. Coffee is one of the leading commodities that are being intensively developed in Batang Regency. Opening a coffee business is important because it can create added value. This added value creation is carried out by youth in the Regency, it is hoped that it can contribute to the economy of Batang Regency. There are complex problems in business management, so that this coffee business has not been able to make an optimal contribution to the regional economy. The purpose of this research is to determine strategic priorities in developing a coffee business in Batang Regency. This study uses the SWOT analysis method to formulate alternative strategies and the Fuzzy Analysis Hierarchy Process (FAHP) to analyze priority strategies in business development. The group of respondents who were the samples in this study were key persons consisting of the Government, Business Actors, Communities, and Academics. The results showed that the strategic priorities for developing business in young coffee entrepreneurs in Batang Regency were institutional aspects with a weighting value of 0.4084, marketing aspects with a weighting of 0.2446, aspects of human resources with a weighting value of 0.1314, financial aspects with a weighting value of 0.1226, and production aspects with a value weight of 0.0929. The priority alternative strategy for developing business for young coffee entrepreneurs in Batang Regency is institutional strategy 3, namely building an effective partnership system with all stakeholders (raw material suppliers, associations / communities, government, etc.) with a final weight value of 0.22933. The second priority is marketing strategy 1, namely expanding market share by increasing the intensity of promotion with various media (internet / social media, exhibitions, banners / brochures, etc.), obtaining a final weight value of 0.18719. The third priority is institutional strategy 2, namely professional business management training with a final weight value of 0.14591. The fourth priority is financial strategy 2, namely training in professional recording / bookkeeping and business financial management, with a final weighting value of 0.07216. The fifth priority is production strategy 1, namely increasing operational efficiency, so that the

selling price is more competitive with a final weight value of 0.0677.

**Keywords:-** Strategy Priorities; Youth Entrepreneurial Coffee; SWOT-FAHP Analysis.

## I. INTRODUCTION

The relationship between entrepreneurship and the development of a country, both from the macro and micro aspects, is always interesting to discuss today. In recent decades, stagnant economic development in various developing countries has actually influenced the existence and number of entrepreneurs in the country because many economists believe that entrepreneurship can be a solution for unemployment (Anyadike, 2014).

High unemployment has a direct or indirect impact on poverty, crime and other social problems. The size of the workforce is quite large, accompanied by a continuous flow of migration, and the impact of the ongoing economic crisis to date, making the labor problem very large and complex. These problems are getting more complicated due to conflicts between employers and workers regarding wages, the inflation rate tends to rise, and other economic problems such as slowing economic growth and so on.

Given the huge impact of unemployment, each country strives to reduce the unemployment rate as low as possible. Unemployment alleviation programs can be carried out directly or indirectly. Overcoming unemployment directly, the government can directly create employment opportunities in both the government and economic sectors as well as create labor-intensive projects. The indirect way is by providing knowledge, skills and fostering entrepreneurial attitudes to job seekers through entrepreneurial development.

Batang Regency Government in overcoming unemployment, namely by developing entrepreneurship programs for youth. Batang Regency is an area that has a lot of agricultural potential, one of which is coffee. There are many areas in Batang Regency that have local coffee, namely Bandar, Reban, Blado, Bawang, Limpung, and Tersono

Districts. Coffee production in Batang Regency is as shown above.

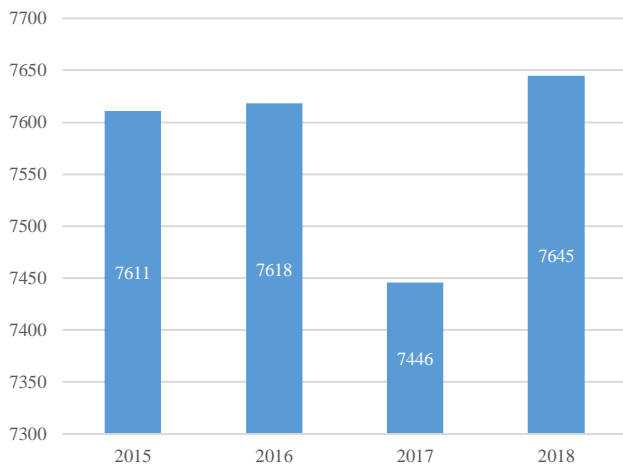


Fig. 1. Batang Regency Coffee Production (Quintal)

Through the Thousand Village Youth Entrepreneurship program, the Batang Regency government is trying to increase the number of entrepreneurs in Batang Regency. One form of the program is the Young Coffee Entrepreneurs. Through this program accompanied by the great potential of coffee in Batang Regency, there has been a very rapid increase in youth opening coffee businesses. However, based on observations made, these businesses still face several problems, making it quite difficult to carry out business development. These problems are divided into several aspects as follows:

Table I. Coffee Business Development Problems in Batang Regency

Aspect	Problems
Production	Expensive means of production The supporting production tools are still limited Prices for raw materials are unstable It is quite difficult to get quality raw materials
Financial	Limited working capital Access to capital is still difficult for small businesses Financial management (recording) is still very simple, and many have not even used financial records
Institutional	Business management is not yet professional Many do not have legality / business license The synergy between stakeholders is not yet intensive
Marketing	Marketing is not yet intensive Marketing channels have not been optimal Customer loyalty
Human resource	HR competence is still low The training program is still not massive

Source: Primary Data (2020)

In addition to the above problems, Lusmino (2016) reveals that there are at least 3 (three) factors that cause the failure of a business, especially in this case for Micro, Small and Medium Enterprises (MSMEs), namely: (1) understanding of basic marketing techniques still low; (2) management capability is still weak; and (3) limited sources of funds (capital).

Therefore, this study was conducted to formulate alternative business development strategies for young coffee entrepreneurs in Batang Regency, and determine appropriate strategic priorities. It is hoped that this research can produce alternatives that can solve the problems of developing coffee businesses in Batang Regency, so that the coffee business in Batang Regency can develop and contribute greatly to the regional economy of Batang Regency.

## II. LITERATURE REVIEW

### A. Regional Development Theory

Lincoln (2010) explains that regional economic development is a process of collaboration and synergy between local governments and communities in the management of resources owned by the region, accompanied by a process of forming a system of cooperation between the government and the private sector to stimulate economic growth and create new jobs in the area. The process of regional development can be interpreted as a process that includes the formation of new economic institutions, the development of alternative industrial sectors, the process of producing better products and services by improving human resource capacity, creating new markets, developing companies, and transfer of science and technology (IPTEK).

The main objective of the regional development process is to create more new jobs for local communities (Lincoln, 2010). This goal can be realized jointly between the government and the community to carry out development initiatives towards the potential of the regions. Therefore, local governments must be able to predict the potential of each resource they have to be used maximally to improve the regional economy. Each region has different development potentials, so each region must be able to determine which economic potential is the leading sector (Syafrizal, 2008).

### B. Entrepreneurship

According to Schumpeter, entrepreneurs as the person who destroys the existing economic order by introducing new products and services, by creating new forms of organizations, or by exploiting new raw material. Meanwhile, according to Hisrich-Peters entrepreneurship is the process of creating something different with value by devoting the necessary time and effort, assuming the accompanying financial, personal satisfaction and independence (Alma, 2011).

Sukirno (2006) argues that entrepreneurship is one of the factors that can encourage economic growth, this is based on Schumpeter's theory of growth. This theory emphasizes the innovation carried out by entrepreneurs and says that technological progress is largely determined by the entrepreneurial spirit in society who is able to see

opportunities and dare to take risks to open new businesses and expand existing businesses. The opening of new businesses and expansion of businesses will open up additional jobs to absorb the workforce that increases every year.

According to Schumpeter, the main factor that causes economic development is the process of innovation and the perpetrators are the innovators or entrepreneurs. The economic progress of a society can only be implemented through innovations by entrepreneurs. Economic progress can be interpreted as an increase in the total output of society. In discussing economic development.

**C. SWOT Analysis**

SWOT analysis is a method for strategic planning by identifying internal and external factors that support or hinder it as a basis for formulating strategies in achieving a goal (Rangkuti, 2004). These factors are then used to evaluate strengths, weaknesses, opportunities, and threats. This SWOT analysis is based on the logic that in determining strategy, an organization / company must achieve a balance between internal and external conditions, namely by maximizing strengths and opportunities, and minimizing weaknesses and threats (Asri Dwi Asmarini, 2010).

SWOT analysis in this study is used to reveal internal and external factors that are considered important in developing coffee businesses in Batang Regency, namely by identifying strengths, weaknesses, opportunities, and threats. These factors will be used as materials to formulate a local coffee development strategy for Batang Regency. The factors in a SWOT analysis can be explained as follows:

**1. Strength (S)**

Strength is a factor that comes from within the organization / company that has a positive effect in achieving goals.

**2. Weakness (W)**

Weakness is a factor that comes from within the organization / company that has a negative effect so that it hinders the achievement of goals.

**3. Opportunity (O)**

Opportunity is a factor that comes from outside the organization / company that supports the achievement of goals.

**4. Threats (T)**

Threat is a factor that comes from outside the organization or company that hinders the achievement of goals.

**D. Fuzzy Analytical Hierarchy Process (F-AHP)**

Analytical Hierarchy Process (AHP) is a tool to determine the most priority decisions among various decisions. This method is a decision-making tool that tries to cover the shortcomings of other decision-making tools. The main input in this model is human perception, with the main tool being a functional hierarchy. According to Brojonegoro

(1992), the hierarchy in the AHP model is used to break unstructured and complex problems into individual criteria and then these criteria are designed into a hierarchy.

According to Saaty (1993), in an unstructured and complex situation, the AHP model is able to provide the possibility for decision makers to represent the continuous interaction of factors. This analysis tool makes it easy for decision makers to identify problems, as well as formulate decisions / policies to be taken based on a priority order based on the objectives to be achieved, their experience and knowledge of the problems at hand.

The basic principles of making decisions using the AHP method according to Saaty (1993) are as follows:

**1. Decomposition**

Decomposition is the principle of sorting the problem into an element, if you want to get optimal and accurate results, then sorting the elements until they can no longer be selected into smaller elements so that several levels are obtained.

**2. Comparative Judgement**

It is the principle of making judgments regarding the relative importance of two elements at a certain level above it, this is the core judgment of the AHP method because of its influence on the priority of the elements. Then the results are presented in the form of a matrix called a pairwise comparison matrix which is a pairwise comparison matrix that includes the level of stakeholder preference in making decisions on alternatives based on available criteria.

**3. Synthesis of Priority**

After the pairwise comparison matrix has been obtained, the next step is to look for local priority. Because a pairwise comparison matrix exists at each level, it is necessary to get global priority or by synthesizing the existing local priority.

**4. Logical Consistency**

Consistency in this case has two meanings, namely, the same objects are grouped according to uniformity and suitability. Then consistency can also be interpreted as a relationship between objects based on certain criteria. Consistency in a comparison matrix is measured by:

$$A.W = \lambda_{max}. W$$

The consistency index (CI) is obtained from:

$$\frac{\lambda_{max} - n}{n - 1}$$

The consistency ratio (CR) is obtained from:

$$CR = CI / RI, \text{ where } RI = \text{Random index}$$

N	1	2	3	4	5	6	7	8	9	10
RI	0	0	0,58	0,9	1,12	1,24	1,32	1,41	1,45	1,49

The weakness of the AHP method is the problem with the criteria that have a more subjective attitude. Therefore, by using the Fuzzy approach, the problems with the criteria can be viewed objectively and accurately. The uncertainty of numbers is represented by an order of scale. To determine the degree of membership in the FAHP method, a function rule in the form of a triangular fuzzy number (TFN) is used which is arranged based on a linguistic set (Anshori, 2012).

Fuzzy Analytic Hierarchy Process (FAHP) can be seen as an analytical method developed from the AHP method. FAHP is a combination of the AHP method with Fuzzy mathematical logic. The difference with AHP is the implementation of pairwise comparison weights in the comparison matrix, which is represented by three variables (a, b, c) or (l, m, u) called Triangular Fuzzy Numbers (TFN). This means that the weight found is not one but three, according to the triangle membership function which includes three consecutive weights (Bire, 2012).

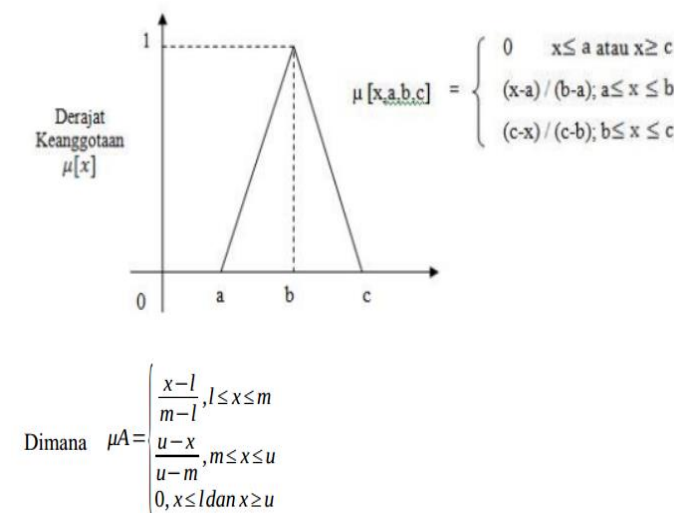


Fig. 2. Triangular Fuzzy Number (TFN)

Triangular Fuzzy Number (TFN) is a fuzzy set theory that helps in measuring the subjective assessment of humans using language or linguistics. The essence of fuzzy AHP lies in the pairwise comparison which is described by the ratio scale associated with the fuzzy scale. TFN numbers are symbolized by (Shega, 2012).

TFN is represented by = (l, m, u), where l ≤ m ≤ u and l is the lowest value, is the middle value and is the top. The TFN approach in the AHP method is an approach used to minimize uncertainty on the AHP scale in the form of crisp values. The approach used is to do fuzzification on the AHP scale in order to obtain a new scale called the AHP fuzzy scale. The rating scale used in comparing between criteria and between measurement sub criteria is the linguistic variable which can be seen in Table II.

Table II. Comparison of Interest Fuzzification  
Table II. Fuzzifikasi Perbandingan Kepentingan

Arti Skala	Skala AHP	Skala Fuzzy	Reciprocal Fuzzy
Sama Penting	1	(1,1,3)	(1/3,1/1,1/1)
Lanjutan			
Sedikit Lebih Penting	3	(1,3,5)	(1/5,1/3,1/1)
Lebih Penting	5	(3,5,7)	(1/7,1/5,1/3)
Sangat Lebih Penting	7	(5,7,9)	(1/9,1/7,1/5)
Mutlak Lebih Penting	9	(7,9,9)	(1/9,1/9,1/7)
Pertengahan	2, 4, 6, 8	(x-2, x, x+2)	(1/(x+2),1/x,1/(x-2))

Source : Kaganski, Majak, & Karjust (2018) in Wang, Xu, & Solangi (2019)

### III. RESEARCH METHOD

Research is included in a mix-method research, because it uses qualitative and quantitative approaches. A qualitative approach is used in capturing perceptions and opinions of experts (key persons) regarding the factors that influence business development in young coffee entrepreneurs in Batang Regency, which is then used as a basis for developing alternative strategies. A quantitative approach is used to measure the extent to which key persons assess these factors which are then analyzed to determine priorities for business development strategies.

#### A. Data Collecting Technique

The data collection techniques in this study consisted of the following:

##### 1. In-depth Interview

According to Anto Dajan (1986), interviewing is a method of collecting data by asking respondents directly.

##### 2. Questionnaires

According to Sugiyono (2011), a questionnaire is a method of collecting data that is done by giving a set of questions or written statements to respondents to answer. Respondents answered questions consciously without assistance from researchers. The questionnaire used in this study is a questionnaire with a closed question model, so that researchers can get data that is in accordance with the research design.

##### 3. Literature study

Literature study is a data collection method by studying the literature and other literature sources relevant to the topics and problems in research. This literature can be obtained from journals, books, printed media, and internet media, whose sources are reliable.

**B. Teknik Penentuan Sampel**

The sampling technique used in this study was purposive sampling technique, in which the sampling technique was based on certain considerations, which included non-probability sampling (Sugiyono, 2011). The sample in this study is the key person / stakeholder who has been previously determined through pre-research. Key Person are people who have knowledge and are involved in the development of coffee businesses in Batang Regency. After the previous pre-research was carried out, the key person sample in this study were 7 stakeholders, including:

Table III. Research Samples

Name	Stakeholders	Information
Sunarni, SH	Department of Industry, Trade, Cooperatives, and SMEs	Government
Dr. Chalimah, MM.	Lecturer at the Faculty of Economics, Pekalongan University	Akademic
Cucun Fery T A. SE.	the Batang Brewing Community Director of Business Madrasah	Community
Nurochman, M.Pd.	Abdurrahman Bin 'Auf Owner Tombo Coffee	Community
Tarmujo		Business

**C. Data Analysis Technique**

**1. SWOT Analysis**

The SWOT analysis steps in this study are as follows:

**a. Analysis of Internal and External Factors**

The first step that must be carried out in a SWOT analysis is to identify internal and external factors that are considered to have a positive or negative influence on the development of a coffee business in Batang Regency.

**b. Formulation of Questionnaires and Filling of Questionnaires by Research Respondents**

The next step after analyzing internal and external factors is compiling a questionnaire. This questionnaire contains a list of questions regarding the respondent's assessment of the factors identified in the previous stage. Assessment of the condition of the factors in the SWOT uses an assessment with 9 scales, accompanied by an assessment of the weight of importance (rating) a to d. d.

**c. Data analysis**

After filling out the questionnaire the next stage is to compile a table of indicators of internal and external factors based on expert perceptions of internal and external factors. The results of the assessment of these internal and external factors will be the basis for determining what internal factors can be categorized as strengths and weaknesses, as well as what external factors can be categorized as opportunities and

threats in the development of a coffee business in Batang Regency.

The method for classifying internal factors into strengths and weaknesses, as well as external factors into opportunities and threats, is to compare the respondents' assessment weight with the benchmark value (weight average value). If the respondent's weight value is above the benchmark value then these factors are included in the strengths and opportunities, if it is below the benchmark value then it is included in the weakness and threat factors. The next step after the factors are grouped is to weight the IFAS - IFAS factors in the SWOT model.

**d. Strategy Formulation**

The next stage after obtaining the strengths, weaknesses, opportunities and threats is to formulate a strategy. The strategy formulation process in this SWOT analysis is carried out by interacting a combination of internal and external factors, as in the following table.

Table IV. SWOT Matrix

	<b>Strenght (S)</b>	<b>Weakness (W)</b>
Opportunity (O)	<u>Strategy SO</u> - Strategy by maximizing strength to take advantage of existing opportunities; - Aggressive strategy; - Comparative advantage	<u>Strategy WO</u> - Strategies to minimize weaknesses to take advantage of opportunities - Reverse orientation strategy; - Investment / divestment
	<u>Strategy ST</u> - Strategy by maximizing strength to overcome threats; - Diversification strategy; - Mobilization.	<u>Strategy WT</u> - Strategies to minimize weaknesses to overcome threats; - Defensive strategy; - Damage control

Source : Soesilo (2002)

**2. Fuzzy Analytical Hierarchy Process**

*Fuzzy Analytical Hierarchy Process* (FAHP) analysis steps in this study are as follows :

**a. Hierarchy Arrangement**

The hierarchy in the AHP model of this study is divided into goals, criteria / aspects, and alternative strategies, as shown in the picture above. The goal in this hierarchy is the development of a coffee business in Batang Regency, where to achieve this goal several appropriate strategies are needed. Several alternative strategies that will be used to achieve these goals are formulated through the previous SWOT analysis. While the criteria / aspects in this hierarchy are the expert's perception (key person) of the problems that occur in the development of the coffee business in Batang Regency.

**IV. RESULT AND DISCUSSIONS**

*A. SWOT Analysis Results*

A SWOT analysis in the framework of formulating alternative strategies for developing a coffee business in Batang Regency is carried out in the following stages:

*1. Formulation of Internal and External Factors*

Based on documents, literature reviews, news published in local media, preliminary surveys of coffee businesses in Batang Regency, it is obtained elements of internal and external factors such as which are then based on respondents' assessment of the condition and level of importance, factors These factors are grouped into strengths (S), weaknesses (W), opportunities (P), and threats (T). The results of the analysis are presented in Table VI. under.

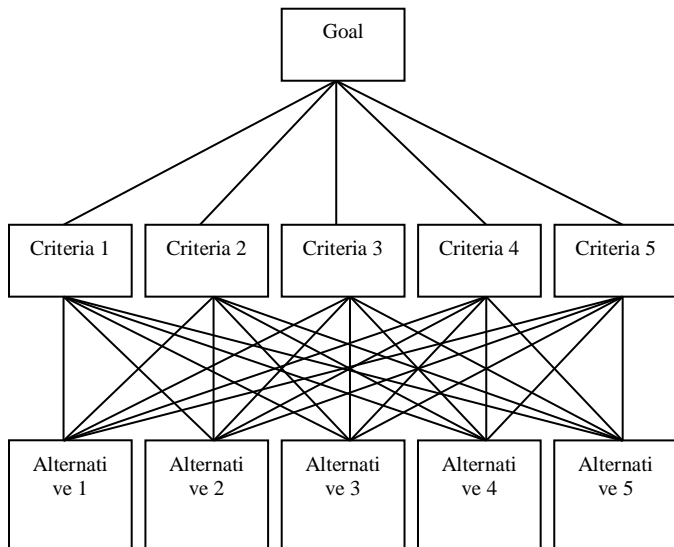


Fig. 3. Hierarchy Arrangement

*b. Preparation of the Questionnaire*

The AHP questionnaire is used as a research instrument that functions to determine the respondent's perception of the problem being studied. The use of a questionnaire in this study was chosen because it was very difficult to collect respondents simultaneously at the same time and place.

*c. Filling the Questionnaire by Respondents*

Filling out this questionnaire is done by providing an assessment with an assessment scale using the pairwise comparison scale from Saaty (1993) as in Table V below.

Table V. Saaty Comparison Scale

Scale	The meaning
1	The two elements being compared are equally important
3	One element is slightly more important than the other elements
5	One element is more important than the other elements
7	One element is more important than the other elements
9	One element is absolutely more important than the other elements
2,4,6,8	Is a compromise number among the ratings above

Source: Saaty (1993)

*d. Data Processing*

The results of filling in pairwise comparisons based on the expert's perception are then compiled in a pairwise comparison matrix and the eigenvector and eigen value calculations are carried out to calculate the consistency index, as well as weighting the criteria and alternatives using the fuzzy synthetic extent.

Table VI. Results of Internal and External Analysis

No	Internal Factor	Weight	Criteria
1	Coffee Shop Concept	6.6	S
2	Coffee shop atmosphere comfort	7.2	S
3	Product price affordability	6	W
4	Availability of wifi and other supporting facilities, such as parking, prayer rooms	7.8	S
5	Coffee drink consistency	6	W
6	Availability of products offered	6.8	S
7	Marketing Intensity (social media, stickers, brochures, etc.)	6.4	W
8	Alertness and friendliness of service	7	S
9	Difersification / variation of coffee drinks	8.4	S
10	Raw materials are guaranteed freshness and quality	5	W
11	Financial management	5.4	W
12	Availability of business capital	5.4	W
13	HR competency level	6.3	W
14	Availability of production support equipment	6	W
15	Business legality and licensing	5.8	W
	Average Weights	6.5	
No	External Factors	Weight	Criteria
1	Support from the government for UMKM	6.6	O
2	Access to finance or capital for business actors	5.2	T
3	Ease of processing business permits	6.8	O
4	There is an association / community of coffee entrepreneurs in Batang Regency	7.4	O
5	Market demand for coffee	8	O
6	Changes in consumer behavior	6.8	O
7	Development of information and communication technology	7.2	O
8	The level of customer loyalty	5.8	T
9	Changes in people's lifestyles	6	T
10	Community economic conditions	6.6	O
11	Social and cultural conditions of the community	6.8	O
12		5.8	T
13		5.8	T
14		6	O

15	The stability of the business climate Coffee raw material prices Weather and climatic factors The existence of instant coffee drinks	5.6	T
Average Weights		6.4	

Source : Primary Data (2020)

2. Strategy Formulation

After the internal and external factors are categorized as Strengths (S), Weaknesses (W), Opportunities (O), and Threats (T), the next step is to formulate alternative strategies. The strategy formulation process in this SWOT analysis is carried out by interacting a combination of internal and external factors. This interaction and combination of internal and external factors consists of the following.

a. Strategy S-O

The interaction of strength and opportunity factors will result in an SO strategy, which is a strategy using factors of strength to take advantage of opportunities. The alternative strategies consist of the following:

- Improve operational efficiency, so that the selling price is more competitive (Pro1)
- Ensuring the availability of quality raw materials (Pro2)
- Optimizing the use of production support tools and technology (Pro 3)
- Build an effective partnership system with all stakeholders (raw material suppliers, association / community, government, etc.) (Kel 2)
- Expanding market share by increasing the intensity of promotions with various media (internet / social media, exhibitions, banners / brochures, etc.) (Pem 1)

b. Strategy W-O

The interaction of weakness and opportunity factors will result in a WO strategy, which is a strategy that minimizes

weaknesses to take advantage of opportunities. The alternative strategies consist of the following:

- Professional recording / bookkeeping and financial management training (Keu 2)
- Determine the portion of finance for each expenditure item, and ensure that expenditure is in accordance with a predetermined portion (Keu 3)
- Building effective communication between fellow business actors in the community as a means of increasing human resource capacity (Kel 1).

c. Strategy S-T

The interaction of strength and threat factors will produce ST strategy, which is a strategy that uses strength factors to overcome threats. The alternative strategies consist of the following:

- Improve HR competencies, so as to be able to create quality products with consistent taste (Sdm 1)
- Increase the speed and quality / quality of service (Sdm 2)
- Creating a harmonious and effective work atmosphere and environment (Sdm 3)
- Professional business management training (Kel 2)

d. Strategy W-T

The interaction of the weaknesses and threats will produce a WT strategy, which is a strategy that minimizes weaknesses to overcome threats. The alternative strategies consist of the following:

- Increase customer retention by rewarding loyal customers, as well as procuring merchandise for customers (Pem 2)
- Increase capital capacity, by establishing relationships with financial institutions and / or investors (Keu 1)
- Strengthening business associations to obtain bargaining prices from suppliers (Pem 3)

The complete alternative strategy formulation results in the SWOT analysis of this study are as follows:

Table VII. SWOT Analysis

Internal	Strength (S)	Weakness (W)
	<ul style="list-style-type: none"> <li>• Interesting coffee shop concept</li> <li>• Coffee shop atmosphere comfort</li> <li>• Availability of wifi and other supporting facilities, such as parking, prayer rooms                             <ul style="list-style-type: none"> <li>• Availability of products offered</li> </ul> </li> <li>• Alertness and friendliness of service</li> <li>• Diversification / variation of coffee drinks</li> </ul>	<ul style="list-style-type: none"> <li>• The product price is not affordable enough                             <ul style="list-style-type: none"> <li>• Coffee drink consistency</li> </ul> </li> <li>• Marketing intensity through social media, exhibitions, brochures, etc.                             <ul style="list-style-type: none"> <li>• Financial management is not professional</li> </ul> </li> <li>• Limited availability of working capital                             <ul style="list-style-type: none"> <li>• Low HR competence</li> </ul> </li> <li>• The availability of production support tools is low</li> <li>• Many do not have business legality and licenses</li> </ul>
Eksternal	Strategy S – O	Strategy W – O
Opportunity (O)	<ul style="list-style-type: none"> <li>• Improve operational efficiency, so that the selling price is more competitive (Pro1)</li> </ul>	<ul style="list-style-type: none"> <li>• Professional recording / bookkeeping and business financial management training (Keu2)</li> </ul>
<ul style="list-style-type: none"> <li>• Support from the government for UMKM</li> <li>• Ease of processing business permits</li> </ul>		

<ul style="list-style-type: none"> <li>• There is an association / community of coffee entrepreneurs in Batang Regency             <ul style="list-style-type: none"> <li>• Market demand for coffee</li> <li>• Changes in consumer behavior</li> <li>• Development of information and communication technology</li> </ul> </li> <li>• Social and cultural conditions of the community</li> </ul>	<ul style="list-style-type: none"> <li>• Ensuring the availability of quality raw materials (Pro2)</li> <li>• Build an effective partnership system with all stakeholders (raw material suppliers, associations / communities, government, etc.) (Kel 3)</li> <li>• Expanding market share by increasing the intensity of promotions with various media (internet / social media, exhibitions, banners / brochures, etc.) (Pem1)</li> </ul>	<ul style="list-style-type: none"> <li>• Determine the portion of finance for each expenditure item, and ensure that expenditure is in accordance with the predetermined portion (Keu3)</li> <li>• Building effective communication between fellow business actors in the community as a means of increasing human resource capacity (Kel 1)</li> <li>• Optimizing the use of production support tools and technology (Pro3)</li> </ul>
<p>Threat (T)</p> <ul style="list-style-type: none"> <li>• Access to finance or capital for business actors             <ul style="list-style-type: none"> <li>• The level of customer loyalty</li> <li>• Changes in people's lifestyles</li> </ul> </li> <li>• The stability of the business climate             <ul style="list-style-type: none"> <li>• Coffee raw material prices are unstable</li> </ul> </li> <li>• The existence of instant coffee drinks             <ul style="list-style-type: none"> <li>• Weather and climatic factors</li> <li>• Community economic conditions</li> </ul> </li> </ul>	<p>Strategy S – T</p> <ul style="list-style-type: none"> <li>• Improve HR competencies, so as to be able to create quality products with consistent taste (Sdm1)</li> <li>• Increase the speed and quality / quality of service (Sdm2)</li> <li>• Creating a harmonious and effective working atmosphere and environment (Sdm3)</li> <li>• Professional business management training (Kel2)</li> </ul>	<p>Strategy W – T</p> <ul style="list-style-type: none"> <li>• Increase customer retention by rewarding loyal customers, as well as procuring merchandise for customers (Pem2)</li> <li>• Increase capital capacity, by establishing relationships with financial institutions and / or investors (Keu1)</li> <li>• strengthening business associations to obtain bargaining prices at suppliers (Pem3)</li> </ul>

Source: Primary Data (2020)

The alternative strategies generated through the SWOT analysis will then be analyzed through the Fuzzy Analytical Hierarchy Process to obtain priority strategy alternatives according to the stakeholder / key person. The results of the Fuzzy Analytical Hierarchy Process analysis are as follows.

**B. Results of Fuzzy Analytical Hierarchy Process Analysis**

**1. Hierarchy Arrangement**

The hierarchy in the AHP model of this study is divided into goals, criteria / aspects, and alternative strategies, as shown in the figure below. The goal in this hierarchy is the development of coffee businesses in Batang Regency, especially those owned by youth. Several alternative strategies that will be used to achieve these goals are formulated through the previous SWOT analysis. Meanwhile, the criteria / aspects of this hierarchy are expert perceptions of the problems that occur in the development of coffee businesses owned by youth in Batang Regency.

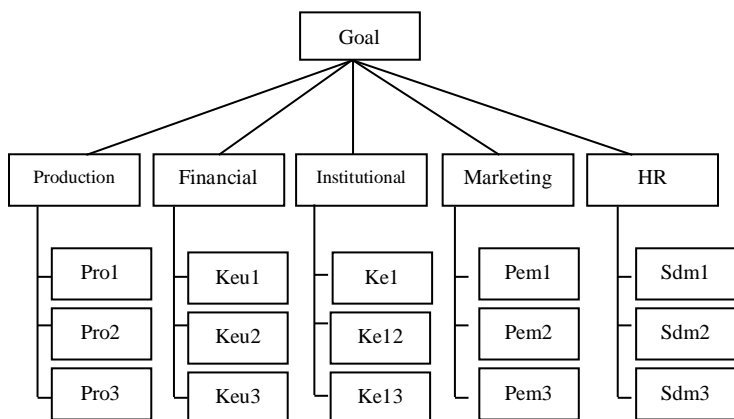


Fig. 4. Hierarchy of Business Development

**2. Matrix Consistency Calculation**

After the strategic alternative is determined, the stakeholder or key informant chooses strategic priorities, the value obtained from each stakeholder must be tested for consistency on the Criteria and Subcriteria. Matrix consistency measurement is done before converting it to Triangular Fuzzy Number. In calculating the consistency of the value matrix that must be known is the Consistency Ratio (CR). To calculate the CR value, the eigen value ( $\lambda$ ) and consistency index (CI) are needed. The results of the consistency calculation are shown in the following table.

Table VIII. Result of Calculation of Matrix Consistency at Criteria Level

Key Person	Eigen Vector	Consistency Index	Consistency Ratio
Government	5.287168	0.071792	0.080407
Academic	5.205555	0.051389	0.057555
Community	5.174053	0.043513	0.048735
Business	5.300684	0.075171	0.084191

Source : Primary Data Processed (2020)

Based on the results of the calculation of the consistency of the matrix, it can be seen that the results of respondents' assessment of the Fuzzy Analytical Hierarchy Process (FAHP) questionnaire are stated to be consistent. This is evidenced by the value of the Consistency Ratio (CR) for all respondents with a value below 0.1.

Likewise with the calculation of the consistency matrix for each sub-criteria level. Both for the production sub-criteria, financial sub-criteria, institutional sub-criteria,



marketing sub-criteria, and human resources sub-criteria, the calculation results show that the Consistency Ratio (CR) value is less than 0.1, so it can be concluded that the results of the respondent's assessment of the Fuzzy Analytical Hierarchy Process questionnaire ( FAHP) for the sub-criteria level is stated to be consistent.

3. *Weighted Matrix Results*

The results of the weighting of the FAHP analysis in this study both at the criteria and sub-criteria levels are as follows.

Table IX. FAHP Weighting Results

Criteria	Weight Value	Sub Criteria	Weight Value	Final Weight
Production	0.09291216	Pro1	0.728661	0.067701
		Pro2	0.152308	0.014151
		Pro3	0.119032	0.011059
Financial	0.1226378	Keu1	0.149914	0.018385
		Keu2	0.588359	0.072155
		Keu3	0.261727	0.032098
Institutional	0.40843997	Kel1	0.081302	0.033207
		Kel2	0.357232	0.145908
		Kel3	0.561467	0.229325
Marketing	0.24460096	Pem1	0.765278	0.187188
		Pem2	0.118881	0.029078
		Pem3	0.115841	0.028335
Human Resource	0.13140912	Sdm1	0.343321	0.045116
		Sdm2	0.446453	0.058668
		Sdm3	0.210226	0.027626

Source : Primary Data Processed (2020)

Based on the results of the FAHP analysis above, it can be seen that the criteria / institutional aspect is the most priority aspect for improvement, namely getting a value weight of 0.4084, followed by the marketing aspect with a value weight of 0.2446, the human resource aspect with a value weight of 0.1314, the financial aspect with The weight value is 0.1226, and the last priority is the production aspect with a value weight of 0.0929.

On the other hand, the weighting results at the sub-criteria level show that the main priority of alternative business development strategies for young coffee entrepreneurs in Batang Regency is marketing strategy 1, namely expanding market share by increasing the intensity of promotion with various media (internet / social media, exhibitions, banners / brochures, etc.), get a weight value of 0.7652. the second priority is production strategy 1, namely increasing operational efficiency, so that the selling price is more competitive with a weight value of 0.7286, and the third priority is institutional strategy 3, namely building an effective partnership system with all stakeholders (raw material suppliers, associations / communities, government , etc.) with a weight value of 0.5614.

C. *Discussion*

To find out which alternative priority strategies are right for developing a coffee business, the researcher must look at the results of the global calculation, namely by multiplying the results of the weighted values at the criteria level with the weight values at the sub-criteria level. Thus, the priority of alternative coffee business development strategies will be obtained such as in the table below.

Table X. Final Weighting Results

Ranking	Sub Criteria	Weight Value
1	Kel3	0.22933
2	Pem1	0.18719
3	Kel2	0.14591
4	Keu2	0.07216
5	Pro1	0.0677
6	Sdm2	0.05867
7	Sdm1	0.04512
8	Kel1	0.03321
9	Keu3	0.0321
10	Pem2	0.02908
11	Pem3	0.02833
12	Sdm3	0.02763
13	Keu1	0.01839
14	Pro2	0.01415
15	Pro3	0.01106

Source: Primary Data Processed (2020)

Based on the results of the above calculations, it can be seen that the priority alternative strategy for developing business for young coffee entrepreneurs in Batang Regency is Institutional strategy 3, namely building an effective partnership system with all stakeholders (raw material suppliers, associations / communities, government, etc.) with a final weight value of 0.22933. The second priority business development strategy alternative is Marketing Strategy 1, which is to expand market share by increasing the intensity of promotion with various media (internet / social media, exhibitions, banners / brochures, etc.), obtaining a final weight value of 0.18719.

The third priority alternative strategy is institutional strategy 2, namely professional business management training with a final weight value of 0.14591. the fourth priority alternative is financial strategy 2, namely training in recording /bookkeeping and professional business financial management, with a final weight value of 0.07216 and the fifth priority alternative is production strategy 1, namely increasing operational efficiency, so that the selling price is more competitive with the final weight value. amounting to 0.0677.

## V. CONCLUSION

Based on the results of the analysis and discussion, this study can conclude that institutional aspects / criteria are criteria that must be prioritized in business development for young coffee entrepreneurs in Batang District, namely getting a weight value of 0.4084, followed by the marketing aspect with a weighting value of 0.2446, the resource aspect. humans with a weight of 0.1314, financial aspects with a weight of 0.1226, and the last priority is the production aspect with a weight of 0.0929. Based on the weighted value globally, it can be concluded that the priority alternative strategy for developing business in young coffee entrepreneurs in Batang Regency is institutional strategy 3, namely building an effective partnership system with all stakeholders (suppliers of raw materials, associations / communities, government, etc.) the final weight value is 0.22933. The second priority is marketing strategy 1, namely expanding market share by increasing the intensity of promotion with various media (internet / social media, exhibitions, banners / brochures, etc.), obtaining a final weight value of 0.18719. The third priority is institutional strategy 2, namely professional business management training with a final weight value of 0.14591. The fourth priority is financial strategy 2, namely training in professional recording / bookkeeping and business financial management, with a final weighting value of 0.07216. The fifth priority is production strategy 1, namely increasing operational efficiency, so that the selling price is more competitive with a final weight value of 0.0677.

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