

## PRODUCT QUALITY PLANNING AND CONTROL ANALYSIS ON CV. ANANDA WATER BANDAR BARU

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### ABSTRACT

This thesis was made with the aim of analyzing the planning and control of product quality in CV. Ananda Water Bandar Baru. The research method used is a SWOT analysis and descriptive analysis method using a qualitative research approach. Qualitative descriptive analysis is data analysis that is not in the form of numbers, but in the form of a series of information extracted from research results. Therefore, the author must first know how the company is and what internal and external factors affect the company's existing marketing strategy. Data collection techniques carried out by researchers are to conduct interviews and direct observations on marketing managers. In addition, there are additional supporting data from reading books and other sources related to the research title. The data obtained from the data collection is then analyzed using SWOT analysis to find out what are the strengths, weaknesses, opportunities, and threats of the marketing strategy carried out by the company. The results shown by the Cartesian diagram show that the company is in quadrant I, which is aggressive with the implementation of the Growth Oriented Strategy, which is a very profitable situation for the company. Where, the company has the power so that it can take advantage of existing opportunities.

**Keywords** : Product, Quality, Planning, Control

### INTRODUCTION

In producing a product, the company should not ignore the importance of planning and quality control of the products it produces. Planning and quality control are the most important supporting factors for the product to be accepted by the community.

Planning is an election that can connect facts, make and use assumptions that have a bearing on the future by describing and formulating a certain activity that is believed to be carried out to achieve a certain result. The purpose of planning is that planning can function as a vehicle for describing solutions in controlling, so that consumers are satisfied with the results of quality products.

One of the ways that companies do so that the products they produce are of high quality, namely by conducting quality control. Quality control is very important to do with the aim of producing products that are in accordance with consumer needs by taking into account the product standards that have been set. The aim of quality control is to strike a balance between quality and cost. With quality control, it is expected that consumers are satisfied with the products they buy. This will result in the company's production demand being stable or increasing. Such control is not carried out constantly, but must be carried out in accordance with the dynamic demands of consumers.

## LITERATURE REVIEW

### Definition of Planning

According to Listyangsih, (2014 ; 90 ) "planning is a continuous process that includes two aspects, namely the formulation of planning and its implementation. Planning can be used to control and evaluate the course of activities, because the nature of the plan is a guideline for implementing activities. "

Meanwhile, according to Tjokroamidjojo (in Syafalevi, 2011: 28) planning is a process of systematically preparing activities that will be carried out to achieve a certain goal.

### Definition of Product Planning

Product planning is a process of creating product ideas until the product can be introduced to the market. Product planning is also a process that is carried out periodically by considering the portfolio used in project development that will be carried out by the company. Product development will make periodic and continuous planning so that companies can produce products to meet consumer needs and gain profits for the company's progress (Purna Irawan, 2017). The product planning process considers product development opportunities. The opportunities were identified by many sources, including suggestions from marketing, research, customers, product development teams , and competitor advantage analysis. The product plan is regularly updated to reflect changes in the competitive environment, technology and existing product success information. The product plan is developed by predicting the company's goals, capabilities, constraints and competitive environment.

### Planning Dimension

According to Marwiyah (2018; 57-59) consideration of the dimensions allows the holding of comprehensive planning that is reasoning and efficient, namely:

1. Significance  
That is, the level of significance depends on the proposed educational objectives and the significance can be determined based on the criteria established during the planning process.
2. Feasibility  
Planning must be prepared based on realistic considerations both related to costs and implementation
3. Relevance  
This concept is related to ensuring that planning allows for more specific problem solving at the right time so that specific goals can be achieved optimally
4. Certainty  
The concept of minimum certainty is expected to reduce unexpected events.
5. Accuracy  
The main principle that is needed to be considered is that teaching planning is arranged in a simple form, and it is necessary to pay attention sensitively to the relationships that must occur between several components.
6. Adaptability  
The use of various processes allows flexible or adaptable planning to be designed to avoid the unexpected.
7. Time

Factors related to time are quite a lot in addition to the involvement of planning in predicting the future, as well as the validation and reliability of the analysis used, and when to assess the educational needs of the present in relation to the future.

#### 8. Monitoring

It is the process of developing criteria to ensure that various components work effectively

#### 9. Contents of planning

Refers to what will be planned.

### Planning Indicator

Used to control and evaluate the course of activities, because the nature of the plan is as a guide for the implementation of activities (Listyangsih, 2014:90)

According to Robbins describes planning indicators include .

1. Operational Planning (*Operational Planning*) Is a short-term planning designed to translate long-term plans into a series of activities that are more detailed.
2. Strategic *planning* is the process of selecting organizational goals, determining strategies, *strategic* programs, and determining the methods needed to ensure that strategies and policies have been implemented.

### Control

#### Definition of Control

According to Sofyan Assauri (in Hayu Kartika, 2013) control and supervision are activities carried out to ensure that production and operating activities are carried out in accordance with what was planned and if deviations occur, these deviations can be corrected so that what is expected can be achieved.

According to Bakhtiar et al (2013) quality control can be interpreted as "activities carried out to monitor activities and ensure actual performance". According to Firmansyah M. Anang and Mahardika (2018) Control is a systematic effort by business management to compare the performance of predetermined standards, plans or goals to take healing actions obtained to see human resources being used as effectively as possible in achieving destination

#### Control Dimension

According to Mulyadi (2016 , 129 ) is covering the organization, methods, and measures that are coordinated to maintain organizational wealth, check the accuracy and reliability of data, encourage efficiency and encourage compliance with management policies.

Several dimensions that have an important role in influencing sustainability performance are positive and significant, namely the diagnostic control dimension, interactive control.

1. Diagnostic control is a formal feedback system that is used to monitor organizational results and correct deviations that occur from predetermined performance standards.
2. Interactive controls are controls that relate to how top-level managers use control systems to centralize information for strategic purposes.

#### Control Indicator

According to the *Community Of Sponsoring Organization Of The Threadway Commission* (COSO) internal control consists of the following indicators:

##### 1. Control Environment ( *control environment* )

The control environment is a corporate environment that includes the attitudes of management and employees to the importance of control in the organization.

2. ( *Risk Assessment* )

Company management must be able to identify the various risks faced by the company. A risk that has been identified can be analyzed and evaluated so that its intensity and intensity can be estimated

actions to minimize it.

## 3. Control Procedure

Control procedures are various processes of efforts made by company management to enforce supervision or control of company operations.

4. Monitoring ( *monitoring* )

Monitoring of the internal control system will determine deficiencies and improve control effectiveness. Internal control can be monitored properly by means of special assessments or in line with management efforts.

**Product quality****Understanding Product Quality**

Product quality is a basic business strategy that produces goods and services that meet the needs and satisfaction of internal and external consumers, explicitly and implicitly. This strategy uses all the capabilities of all management resources, core knowledge and competencies, capital, equipment technology, materials , systems and people of the company to produce value-added goods and services for the benefit of society and provide benefits to shareholders. Meanwhile , according to . Kotler and Armstrong (2014, 253) "quality is a characteristic of a product or service that depends on its ability to satisfy stated or implied customer needs".

According to Kotler and Keller translated by Bob Sabran (2012: 4) the definition of a product is anything that can be offered to the market to satisfy a want or need. Products marketed include physical goods, services, experiences, events, people, places, properties, organizations, information, and ideas. Meanwhile, according to Mowen (2012:61) Product quality is an overall evaluation process to customers for improving the performance of a product

**Product Quality Dimension**

Dimensions of Quality is an aspect of characteristic characteristics to see the quality of a product in a company which can be grouped into eight dimensions of quality

The dimensions of product quality according to Kotler and Keller which were transferred by Bob Sabran (2012:8) to determine the quality of goods , can be through dimensions such as:

- a. *Performance* , This relates to the functional aspects of an item and is the main characteristic to be considered
- b. *Features* , namely performance aspects that are useful for adding basic functions, related to product choices and development.
- c. *Reliability* is related to the probability or possibility of an item successfully carrying out a function every time it is used
- d. *Conformance* , which relates to the level of conformity of predetermined specifications based on customer wishes.
- e. *Serviceability* is a characteristic related to speed , competence , ease and accuracy in providing services for repairing goods .
- f. *Aesthetics* is a subjective characteristic regarding aesthetic values related to personal considerations and reflections of individual preferences .
- g. *Aesthetics* is a quality dimension related to the appearance, sound, taste and smell of a product .

- h. *Fit and finish* , subjective nature , relates to the customer's feelings about the existence of the product as a quality product.

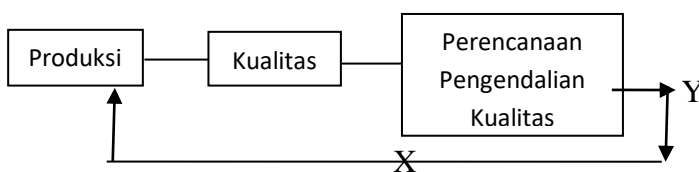
**Product Quality Indicator**

According to Garvin in Tjiptono and Chandra (2012) product quality can be measured through several indicators as follows:

- a. Performance (performance) The basic operating characteristics of a product. Performance here refers to the core product characteristics which include brands, measurable attributes and other aspects of individual performance. Performance can also be interpreted as the customer's perception of the basic benefits used, such as the ease and convenience obtained.
- b. Features (features) Special complementary characteristics that can enhance the product experience. Features are defined as additional functions that can add to the advantages of the product or the features of the product. In this case, the features are usually measured subjectively by each individual which indicates a difference in the quality of a product.
- c. Reliability (reliability) Product reliability which is expressed by the quality of the product. The reliability of a product can be seen at the time of use when there are no problems or technical problems.
- d. Conformance The degree to which the basic operations of a product meet certain specifications. This dimension looks at the quality of the product in terms of whether the shape, size, color, weight and others are as desired and whether the operation is in accordance with the specified standard.
- e. Durability Technically, durability is defined as the number of uses obtained before experiencing a decrease in quality. Economically, durability is defined as the economic life of a product seen from the number of uses obtained before damage occurs and the decision to replace the product.
- f. Serviceability Product quality is determined on the basis of the ability to repair, easy, fast, and competent as well as the product's ability to provide services. It is also often associated with spare parts and repair service centers.
- g. Aesthetics (aesthetics) Concerning the appearance of the product that can show the beauty of the product. This dimension concerns the style, color, attractiveness and others that are able to provide attractiveness to consumers
- h. Perceived quality Quality is assessed based on product reputation. This dimension is part of consumer perceptions of big names , company reputation and product quality. Of these dimensions, quality is the largest part of the customer's impression of the product.

**Framework of thinking**

This study aims to find out what are the discrepancies contained in the final product of the new CV Ananda Water Bandar and the number of final products that are not in accordance with the standards produced by the new CV Ananda Water Bandar is still within the control limits.



**Source: Data processed**

Y= Products that meet the specified quality specifications and can be sold to the market.

X = Products that do not meet the quality specifications set by the company.

### **Research Hypothesis**

This study aims to find out what are the discrepancies contained in the final product of CV Ananda Water and the number of final products that are not in accordance with the standards produced by CV Ananda Water are still within the control limits.

## **METHODOLOGY**

### **Research Location and Time**

This research was conducted at CV Ananda Water, Bandar Baru located on Jalan Bandar Baru no 52, Martelu, Sibolangit, Deli Serdang Regency, North Sumatra, Indonesia . This research was conducted from May 202 2 to completion.

### **Data Types and Sources**

#### **Data Type**

The data used in this study uses qualitative data, that is, the type of data that information data in the form of verbal sentences not in the form of numeric symbols or numbers.

#### **Data source**

The sources of this research data are:

1. Primary data, namely data sources that directly provide data to data collectors .
2. Secondary data, namely data sources obtained indirectly through intermediaries , which include a brief history of the company and organizational structure .

### **Population and Sample**

#### **Population**

According to Sunyoto (2013:13) "population is the whole object to be studied". The population of this research is the leader of CV Ananda Water .

#### **Sample**

The samples in this study were the leadership of CV Ananda Water, as a planner and product quality control with SWOT analysis , . In this study, the resource persons from CV Ananda Water, is a production manager .

### **Method of collecting data**

1. Documentation technique is a way of collecting data obtained from existing documents or stored records , whether in the form of transcripts, books, newspapers, and so on.
2. interview technique is a one-sided question and answer process which is carried out systematically and based on the research objectives.

### **Data analysis method**

This research was conducted using a qualitative descriptive method. The steps taken in this research is by looking at the SWOT analysis. SWOT analysis is a form of analysis within the company's management or within the organization that can systematically assist in the preparation of a mature plan to achieve goals,



## **RESEARCH RESULTS AND DISCUSSION**

### **Research result**

#### **Production process**

The production process for packaged mineral water products marketed by CV Ananda Water, Bandar Baru includes the process of preparing raw materials. The basic raw material used is mineral water taken from Mount Ungaran springs. Packaged mineral water products will be distributed to various outlets according to consumer demand. The following are the main ingredients in the manufacturing process, namely: Water and Packaging (PET plastic and cardboard).

#### **Production process Bottled Mineral Water Along with the Sanitation Process in CV Ananda Water Bandar Baru”**

##### **Bottled Mineral Water Production Process.**

Sibayak spring located at Jalan Bandar Baru no 52, Martelu, Sibolangit, Deli Serdang Regency and then will be checked for quality and safety. first by the Quality Control team and then it will enter the filtering stage by going through a microfilter, then the water that has been filtered by the microfilter will be injected by high pressure ozone and then it will enter the filtering stage again intensively, namely by passing through the sand filter, then carbon filter and through the microfilter again to ensure that the impurity particles are no longer contained in the mineral water. After filtering, ozone is injected for the second time and after that it is put into the gravity tank and in the final sanitation step, it is passed through a pipe where UV light is installed and then it will be distributed to the filling cup, bottle and gallon room. The packaging material used by CV Ananda Water Bandar Baru for gallons is Polycarbonate (PC), bottle sizes of 14 330ml, 660ml and 1 L using Polyethylene terephthalate (PET) and cup packaging sizes 120ml and 250ml using Polypropylene (PP). After the filling process is complete, the cup will automatically be attached with a lid according to the packaging size of 120ml and 240ml then immediately packaged in the secondary packaging of the carton. While for gallons and bottles, additional brand labels will be attached after the filling process manually by employees by entering the brand label in the center of the bottle and gallons on the gallon cap seal which will then be passed to a kind of heater to quickly glue the brand label in about 1-2 seconds. to avoid damage to the packaging and also to control the quality so that the quality is maintained. For secondary packaging of bottle products, it will be put into cardboard boxes and for gallon products it will be placed on a wooden pallet which will then be stacked using an iron plate base up to 4 stacks. The production of bottled drinking water "BAG" follows the regulatory system that has been implemented by the government regarding the production process and the quality it produces based on SNI 01-3553 2015.

##### **Sanitation Process in Packaging and Filling Rooms**

The first thing that is done before the production process starts at the beginning of the shift is sterilization in each filling room by spraying sanitary reagents, and for gallon production in particular, before production, the capseal gallons are soaked using hot water first, then soaked with 15 sanitary solution and after that it is soaked in mineral water, the product has been provided in the filling room so that it can be prepared before gallon production begins. Furthermore, inspection of sanitary equipment (gallon washing machine) along with reagents will be used for packaging sanitation later. Gallon packaging only has a fairly complicated sanitation process compared to cup and bottle packaging products because the gallons of mineral water distributed to consumers are returned by consumers to clean the gallons which are then refilled and distributed again to

consumers and customers. First of all, the gallons returned by consumers will be returned to the CV Ananda Water Bandar Baru company and then several employees called “selectors” will select gallon packaging which is considered clean enough and still suitable for reuse, which will be directly placed on the marked train. “Pass QC” to directly put into the washing machine and sanitize gallons of mineral water. However, gallons that are considered less clean or do not meet the standard hygiene criteria will be placed on a cart that has been marked for further treatment. Gallons that are judged not to be included in the standard criteria for cleanliness are gallons that have an unpleasant odor such as a sour, earthy smell, and are not generally accepted. Not only smells, if there are impurities in the gallon attached to the sides or bottom of the gallon such as rust, moss, leaves, residual water with a cloudy color or other garbage, it will go straight to the carriage with a sign of further treatment. Treatment on the gallon packaging will be continued by pouring laundry detergent into each gallon and will be scraped using a squeezing machine manually by the employee, after that it will be rinsed using a special rinse in the gallon and then seen again whether the gallon is clean and if it is clean and there is no lingering aroma, the gallon will be directly given to the employee in charge of entering the gallon into the gallon prewash machine. Then the gallon that has rust and moss will be separated again by the selector for further treatment because it is difficult to remove if only scraping and rinsing and reagents are also needed to remove moss and rust which are usually found at the bottom of the gallon. For mineral water products in " BAG " gallons, the gallons are considered clean and can be cleaned directly with the first gallon prewash machine and then will be machine washed automatically on an ongoing basis. The gallon washing process is carried out by high pressure spraying until it enters the inside of the gallon, then there is a brush that brushes the outside of the gallon that rotates around the gallon, after that the inside of the gallon will be sprayed with two sanitary reagents and the conveyor will run the gallon on the second part gallon washing machine where The reagent will be rinsed clean with water that is sprayed both inside the gallon and outside using high pressure many times before reaching the gallon filling chamber. Cup and bottle products have the same sanitation principle, namely the fogging process by spraying sanitary reagents in each filling room and the lid on bottle products is sanitized with ozone injection which is carried out every day to prepare for bottle packaging production.

## SWOT analysis

### SWOT Matrix

#### Internal Factors and External Factors

From the results of research that has been carried out starting to see and find out the latest condition of CV Ananda Water Bandar Baru , the strategies that have been taken and the performance that has been achieved can be seen several internal and external factors at CV Ananda Water Bandar Baru . Several important internal and external factors ( *IFAS & EFAS* ) can be identified as follows:

#### a. Internal factors

Based on the research activities carried out, information related to the internal factors of the glagah broom craft business was obtained. These factors include *Strength* (strength) and *Weakness* (weakness) of the company.

Strengths are situations and conditions that are the strength of a company to achieve the desired business goals. These include:

1. Prioritizing the quality of raw materials.
2. Raw materials can be obtained easily because they come from natural resources around.



3. The large number of workers assisting in production activities so as to increase production capacity
4. Competitive prices with other bottled water products
5. Well-established partnership with local government

Weaknesses are deficiencies that become a barrier to the sustainability of a business, both in terms of resources and skills.

1. Lack of management in both production and financial activities so that the recording of inputs and outputs has not been maximized
2. CV Ananda Water Bandar Baru 's lack of experience in producing bottled drinking water
3. The function of research and development that is not paid attention to
4. Material handling for direct consumption is still lacking
5. Unattractive packaging so that it has not penetrated the modern market

#### **b. External factors**

Based on the research activities carried out, information related to the external factors of the glagah broom craft business was obtained. These factors include *Opportunity* (opportunity) and *Threat* (threat) of the company.

Opportunity is there an external condition that supports an organization or company to achieve its objectives, which consist of:

1. Very large population
2. The changing lifestyle of people who want everything instant
3. Increased consumption of bottled mineral water in big cities
4. The price is quite affordable so that it can compete in the market
5. The existence of market expansion that affects sales capacity

Threats are external conditions that prevent an organization or company from achieving its objectives, which consist of:

1. There is the same company that produces mineral water
2. Lack of consumer satisfaction with the results of CV Ananda Water Bandar Baru mineral products
3. The geographical location of the business location is less strategic and is in an area prone to natural disasters
4. High bargaining power of workers.

#### **Internal Factor Evaluation Matrix (IFE)**

The IFE matrix is used to find out how big the role of the internal factors contained in CV Ananda Water Bandar Baru is . The IFE matrix describes an internal condition of CV Ananda Water Bandar Baru which consists of strengths and weaknesses calculated through weights and ratings. The weighting of internal factors is based on interview questions conducted on the manager of CV Ananda Water Bandar Baru and the rating is based on the manager of CV Ananda Water Matrix Bandar Baru with the following results:

**Internal Matrix**

Description of Internal factors	Weight	Rating	Score
1. Strength			
• Easily obtainable raw materials	0.14	3	0.42
• Experience in managing mineral water	0.10	4	0.40
• Guaranteed Product Quality	0.14	3	0.42
• The price compete	0.13	3	0.39
2. Weakness			
• Lack of experience in making bottled water	0.13	3	0.39
• Unattractive packaging	0.12	2	0.24
• R&D functions and facilities that limited	0.12	3	0.26
• Handling of unfinished materials optimal	0.12	3	0.26
Total score of strength-weakness factor	1		2.78

Based on the results of the IFE analysis in the table above , it shows that the factors that become the main strength of CV Ananda Water Bandar Baru are the ease of obtaining raw materials and experience as a supplier of mineral water to the city of Medan so that it can increase public interest in using CV Ananda Water Bandar Baru products , with a value of The highest weighted value is 0.40 while the weakness of CV Ananda Water Bandar Baru is the lack of experience in making bottled mineral water with the highest value of 0.39. Then the total weight score obtained is 2.78. This shows that CV Ananda Water Bandar Baru has a strong internal position, using existing strengths and overcoming weaknesses well.

**External Factor Evaluation (EFE) Matrix**

The EFE matrix is used to find out how big the role of external factors in CV Ananda Water Bandar Baru is . The EFE matrix describes an external condition of CV Ananda Water Bandar Baru which consists of opportunities and threats calculated through weights and ratings. The weighting of external factors is based on interview questions that have been conducted on the manager of CV Ananda Water Bandar Baru and the rating is based on the manager of CV Ananda Water Bandar Baru with the following results:

**External Matrix**

Description of External factors	Weight	Rating	Score
Opportunity			
• Number of residents who big	0.10	3	0.30
• Changing people's lifestyle	0.12	4	0.48
• Increased consumption of bottled mineral water	0.14	4	0.56
• An affordable price	0.13	3	0.39
Threat			
• There are competitors	0.15	3	0.45
• Lack of customer satisfaction	0.13	2	0.26
• Bargaining power of workers increase	0.13	2	0.26
• The company's presence in areas prone to natural disasters	0.10	2	0.20
Total score of opportunity-threat factor	1		2.9

Source: Data processed

Based on the results of the EFE matrix analysis in the table above , it shows that the main opportunity for CV Ananda Water Baru is the increasing consumption of mineral water in big cities with the highest being 0.56, while the main threat to CV Ananda Water Bandar Baru is the presence of competitor with the lowest score of 0.20. Based on Table 4.2, it can be obtained a total weight score of 2.9. This shows that CV Ananda Water Bandar Baru is able to respond to external factors by taking advantage of existing opportunities and overcoming threats.

From the IFE (Internal Factor Evaluation) and EFE (External Factor Evaluation) matrices, it can be seen that the company's internal and external positions are in quadrant I (2.78; 2.9). The position of diagram I shows that the company is currently able to run its business more freely, which means that the most appropriate strategy to use is the SO strategy, namely the company can improve the quality of the products produced, for example, maintain freshness and provide guarantees for the safety of bottled water, especially residue content, expand distribution networks, especially for Sumatra Island and tourist cities and conduct promotions for the upper middle class through existing retailers. Companies by using their greatest strengths in the form of partnerships and workers to seize the greatest opportunities, namely increasing the level of education and increasing healthy lifestyles, the company can carry out a strategy that is oriented to product quality according to consumer desires (maintaining freshness and providing security guarantees).

**Internal-External Matrix**

The Internal-External Matrix positions the various divisions of the organization in a nine-quadrant view. The parameters used include the parameters of the company's internal strength and external influences faced. In the IE matrix, the strategy prepared by the company for various possible opportunities and threats will be known. The purpose of using this matrix is to obtain a more detailed business strategy. Strategic issues that will be monitored must be determined, because it is estimated that these issues will affect the company in the future. The next stage is based on the total score obtained by the company in the internal and external matrix table, it can be seen the company's position to implement a strategy that is in accordance with the company's current condition by entering the total score into the internal and external matrix as follows:

In the internal factor matrix, the total weight is 2.78 and in the external factor matrix, the total weight is 1.9. So we can see that the internal-external matrix owned by CV Ananda Water Bandar Baru is located in the second quadrant (II) which means it is in a state of stabilization. The right strategy to be used by CV Ananda Water Bandar Baru is an intensive strategy by way of market penetration, market development, and product development. Market penetration can be done by continuously increasing promotions by providing more frequent price promotions. Meanwhile, market development can be done by expanding market segments to get new customers, then product development can be done by means of product quality through production planning and control.

### Internal-External Matrix

Information:

1. Quadrant I, II, IV: can be described as a strategy to grow and develop ( *Grow and Build* ). Intensive strategies through market penetration, market development, and product development can be the most appropriate for this quadrant.
2. Quadrant III, V, VIII: can be handled with a strategy to maintain and maintain ( *Hold and Maintain* ), market penetration and product development are appropriate strategies used in this quadrant.
3. Quadrant VI, VII, IX: can be handled with divestment and innovation strategies.

It can be seen in the IE matrix in the picture above, with a SWOT analysis the position of CV Ananda Water Bandar Baru according to the IE matrix is in cell V, namely hold and maintain or stabilization, with a total score of internal strategy factors (2.78) and a total score of external strategy (2.9). In this position, according to Fred R. David, the strategies applied for cell V are Market Penetration and Product Development. 4-Quadrant SWOT Matrix Analysis. Analysis using a 4-K SWOT matrix using a diagram divided into 4 quadrants

### SWOT Chart

The researcher holds a strategy in seeing the opportunities and threats of the company compared to the strengths and weaknesses in seeing the position of the company's ability in competition, it can be shown by using a SWOT diagram that identifies the business position in four quadrants. The results of the comparison of internal analysis with external analysis on CV Ananda Water are as follows:

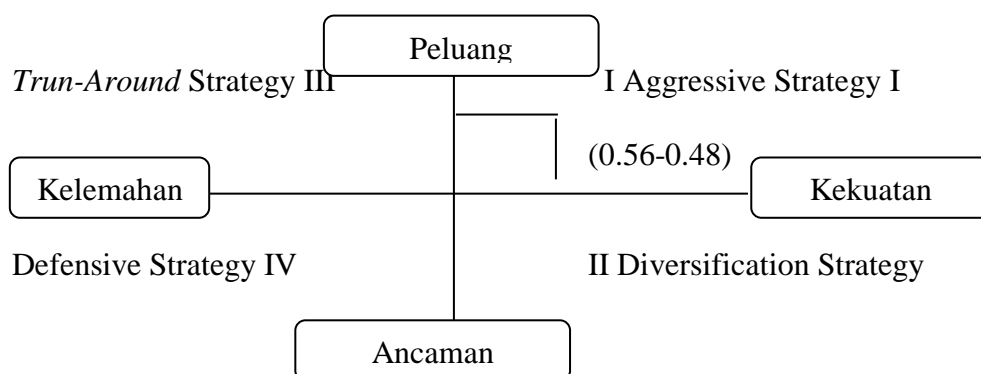
$x = \text{Total Strength Score (S)} - \text{Total Weakness Score (W)}$

$y = \text{Total Opportunity Score (O)} - \text{Total Threat Score (T)}$

Where  $x = 1.63 - 1.15$   $y = 1.73 - 1.17$

$x = 0.56$

$y = 0.48$



**Ananda Water's CV SWOT diagram**

Source: Processed Research Data

1. In diagram I **Progressive** (SO Strategy) the general strategy that can be done by the company is to use the company's strengths to take every advantage at the opportunity.
2. In diagram II , the company's **Diversification Strategy** (WO Strategy ) can make advantages on opportunities as a reference to focus activities by avoiding weaknesses.
3. In diagram III **Change Strategy** (WT Strategy) Minimize all weaknesses to face each threat.
4. In diagram IV **Defensive Strategy** (ST Strategy) Make every strength to face every threat by creating diversification to create opportunities.

From the analysis of the data obtained, it can be seen that the position of CV Ananda Water Bandar Baru is located on diagram I ( *Progressive* ). This position indicates an organization and an opportunity, meaning that the organization is in a strong condition so that it is very possible to continue to expand, increase growth and achieve maximum progress. Where has a good value weight in the internal environment in the strength position , *in the quadrant* in its external environment, so it can be concluded that the position in CV Ananda Water Bandar Baru competition based on the SWOT quadrant is in diagram I or the first diagram ( *Progressive* ), which means it shows that CV Ananda Water Bandar Baru has good strengths that can be used as opportunities to encourage the company's progress, namely by improving the quality of the products produced, for example maintaining freshness and providing guarantees for the safety of bottled water, especially residue content, expanding distribution networks, especially for the island of Sumatra and cities tourism and conduct promotions for the upper middle class through existing retailers. Companies by using their greatest strengths in the form of partnerships and workers to seize the greatest opportunities, namely increasing the level of education and increasing healthy lifestyles, the company can carry out a strategy that is oriented to product quality according to consumer desires (maintaining freshness and providing security guarantees). The strategy formulation using SWOT analysis can be seen in the following table :

**SWOT analysis**

<b>Internal</b>          <b>External</b>	<b>POWER(S)</b> 1. Easily obtainable raw materials 2. Experience in managing mineral water 3. Guaranteed Quality 4. The price compete	<b>WEAKNESSES (W)</b> 1. Lack of experience in making bottled water 2. Unattractive packaging 3. Functions and facilities of R & yang limited 4. Handling of unfinished materials optimal
	<b>OPPORTUNITY (O)</b> 1. Number of residents who big 2. Changing people's lifestyle 3. Increased consumption of bottled mineral water 4. An affordable price	<b>SO</b> 1. Maintain and improve product quality , freshness and safety assurance 2. Expand distribution network 3. Doing promotions for upper middle class
<b>THREAT (T)</b> 1. There are competitors 2. Lack of customer satisfaction 3. Bargaining power of workers increase 4. The company's presence in areas prone to natural disasters	<b>ST</b> 1. Maintain 2. Increase cooperation with <i>retailers</i> .	<b>WT</b> 1. Improving the quality of human resources through coaching and training. 2. Better coaching for partners Implementing work TQM

Steps for implementing strategies for companies regarding efforts to maintain and improve product quality, namely through improvements to the way raw materials are handled, must be carried out carefully. Namely, by controlling the supply of raw materials, the Company needs to ensure in advance that the products produced do not exceed consumer demand. In addition to reducing financial waste, controlling inventory will help companies take advantage of limited storage space. On the other hand, the company also needs to ensure that suppliers can always send the required raw materials ( *cups* and bottles of mineral water) in a timely manner and according to standards so that the quality of drinking water can be maintained freshness. This activity is very important so that the company does not experience a shortage of raw materials for the production process. Therefore, it is highly recommended for companies to have an inventory management system which is very important for production planning. Inventory management systems can help companies for forecasting inventory by providing notifications when inventory is running low. In fact, several inventory management systems exist that can be used to automatically order supplies to suppliers and select raw materials *Packaging*

In the packaging and storage process, the main factor that must be considered is the temperature used in the room so that more intensive control is needed, for example every 4 hours, worker discipline must be improved and equipment maintenance must be carried out regularly. Another strategy that is important for the company is the importance of providing security guarantees, especially the residue content in bottled mineral water through Halal certification from MUI and certification and BPOM.

Another strategy that can be used by CV. Ananda Water Bandar Baru , namely conducting IT-based promotions, expanding the market by selling products to small outlets and stalls,



increasing the transportation fleet, maintaining prices and product quality, conducting regular promotions, establishing binding cooperation with other actors. hotel restaurant and café business, conduct binding cooperation with suppliers, and making new innovations such as varying packaging sizes.

## CONCLUSIONS

1. CV. Ananda Water Bandar Baru has 4 strengths, 4 weaknesses, 4 opportunities and 4 threats. The strength with the highest weight is the raw material that is easily obtained ( 0.4 2 ) , while the main weakness is the lack of experience in making bottled mineral water with a score of (0.3 9 ). The main opportunity it has is the increasing consumption of bottled mineral water with a score of ( 0 , 56 ), while the main threat is the number of competitors with a score of (0.4 5 ).
2. The position of CV Ananda Water Bandar Baru is in quadrant I, which means that the most appropriate strategy to use is the S – O strategy, namely doing improvement of product quality, especially efforts to maintain freshness and guarantee safety by controlling the supply of raw materials.

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