

# SWOT Analysis and QSPM Matrix in Chicken Egg Marketing in Banyuwangi

(A Case study of PT Supermama Farm Banyuwangi)

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**Abstract:** The laying hen farming business is one of the contributors of protein food to the community but faces stiff competition in business. This research examines the external and internal factors of the laying hen cultivation business at PT. Supermama Farm. The research method is descriptive. The analysis tools are SWOT analysis and QSPM. The research results show that the total IFAS value is 3,238 and the EFAS value is 3,029. This condition is in quadrant I. The main strategy taken by the company is trying to maintain chicken performance so that the quality of the eggs is high, maintaining relationships with the social environment and customers (TAS 7.140), and guaranteeing product quality (7.082).

**Keywords:** Laying Hens, SWOT, QSPM.

## Introduction

The need for food consumption has become a major problem or issue in recent years. This was triggered by wars between countries such as Russia and Ukraine. Conflict also has an impact on meeting world food needs. Meanwhile, the level of world food needs continues to increase along with the growth of the world human population in 2023, around 7.9 billion, which will increase to 8.6 billion people in 2032. ([OECD FAO, 2023](#)).

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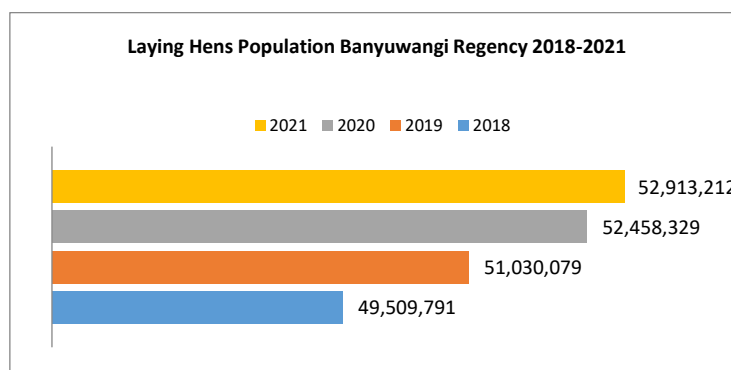
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The livestock sector is one of the contributors of protein food to society. Animal protein consumption will increase from 83.9g per day to 88.4g per day in 2032. (OECD FAO, 2023). Products from the livestock sector include meat, milk, and eggs. Chicken farming is able to contribute as much as 89% of the protein source for meat production and 92% of egg production. Chicken eggs are a product that is in great demand by the public (mass market). Eggs have a complete nutritional content and are relatively cheap. Demand for livestock products is always consistent with the increase in population and level of public knowledge. Demand for animal food from chickens is projected to grow by 70% by 2050, including meat by 121% and eggs by 65%. (Erdaw & Beyene, 2022; Maulidiya et al., 2023)

Banyuwangi is an area that has the potential to develop laying hens. This can be seen from the demand for chicken eggs in both East Java and Bali. According to the East Java Provincial Livestock Services, data shows that the population of laying hens in Banyuwangi has continued to increase in recent years.



**Figure 1. Population of Banyuwangi laying hens 2018-2021 (The East Java Livestock Services, 2023)**

The increase in the laying hen population is due to society responding to the high demand for egg consumption. One of the laying hen companies in Banyuwangi is PT Supermama Farm. This company implements a close house and semi-close house system with a total population of 57 thousand chickens. The company's sustainability cannot be separated from competition in producing and marketing egg products. Egg products are products that break easily and are easily damaged, so they require careful handling. Apart from that, in the egg business, there are many large companies and small and medium businesses competing for the same market, while the price of chicken eggs always fluctuates and even tends to be cheap. (Astrini et al., 2021; Herianto et al., 2022).

PT Supermama Farm wants to increase egg production, but the selling price of eggs is not controlled, the absorption of eggs on the market is decreasing, and the quality of eggs is also decreasing. This is also inseparable from internal and external factors. These factors have not been studied empirically, so determining the marketing strategy for chicken eggs is not

appropriate. This research aims to find out internal factors (strengths and weaknesses) and external factors (opportunities and threats), as well as determine priority marketing strategies for laying hens.

## Literature Review

### Marketing Strategic

Marketing strategy is a measurable method used by companies to compete and win competition in the market. Marketing strategy is also said to be a target or objective, a policy carried out by a company over a certain period of time in response to business competition (Aisyah et al., 2023). According to Amin (2021), this condition is carried out to use limited resources to increase sales of the company's products. Things that need to be done in this marketing mix are analysing customers, competitors, business segmentation, target market, and company position. The purpose of the marketing mix is to find out, fulfil, and satisfy consumer needs or desires.

Fulfilling consumer needs or desires can be done by continuing to develop the products or services needed, determining prices, distributing them, and promoting them. This marketing mix consists of four elements (4P), namely product, price, place, and promotion (Amin, 2021). Furthermore, the marketing mix developed into seven elements (7P), including product, price, place, promotion, people, process, and physical evidence (Rahman et al., 2019). These seven elements of the marketing mix are related to each other to achieve company goals. Generally, companies will pay attention to all marketing mixes.

### SWOT Analysis and QSPM

SWOT analysis is a systematic way of identifying factors that influence the continuity of a business. This analysis is usually used to formulate business strategies. A business plan generally evaluates the internal and external aspects of the company. The analysis of these factors is abbreviated as SWOT. (Rangkuti, 2015; Benzaghta et al., 2021). The evaluation of internal factors includes the company's strengths and weaknesses. Internal factors are seen in the business functions within the company, such as labour, production, infrastructure, finance, and others that originate within the company. The strengths factor describes the superiority of resources and skills possessed by a company in facing market needs. Meanwhile, weaknesses are limited resources and skills that can hinder a company from competing.

Meanwhile, external factors include company opportunities and threats. All externally related information is obtained from various references, including government data,

suppliers, distributors, customers, and partner companies. Opportunities are conditions or trends from outside the company that can benefit the company. Changing trends can help companies develop, improving relationships with partner companies and consumers. On the other hand, threats are conditions that can harm the company. (Ton et al., 2021; Mardiyana, et al., 2022)

SWOT analysis can be categorised into two levels, including the Internal Factor Estimation Matrix (IFEM) and the External Factor Estimation Matrix (EFEM). Factors can be weighted and assessed by experts to formulate a company strategy using the QSPM approach. (Mallick et al., 2020). QSPM analysis is a way to determine the best alternative strategy based on an objective internal and external success formula. This analysis can be used by companies. This analysis method compares feasible alternatives and is widely used in making decisions and improving company quality. (Wardani & Dini, 2020; Mallick et al., 2020)

## Research Method

This research method uses qualitative and quantitative methods. The research results describe the subjects studied and provide an overview of the company's development strategy. Data was obtained by observation and conducting interviews with respondents. The research subjects are company managers, customers, employees, and related agencies in the SWOT analysis. SWOT analysis is carried out by evaluating the internal environment to see the company's strengths and weaknesses. Meanwhile, external analysis needs to be carried out to ascertain the opportunities and threats that the company must anticipate. The weighting and scoring of IFE and EFE are obtained from the results of internal and external factor analyses. Next, decision-making uses QSPM analysis. QSPM analysis is used to evaluate strategies objectively according to main internal factors and main external factors. Drawing conclusions is necessary by considering the results of the research and the theoretical basis. Research stages include data collection, data analysis, determining alternative strategies, and determining priority strategies.

- 1) 1) Collecting data in the form of internal factors (strengths and weaknesses) and external factors (opportunities and threats) of the company
- 2) Giving weights and ratings to each item based on internal and external factors.
- 3) Ranking of each internal factor and external factor to calculate the score by transferring the score and rating.
- 4) Making IFAS and EFAS matrices and making SWOT matrices.
- 5) Formulation of the QSPM matrix in the form of determining the Attractiveness Score (AS) value and determining the Total Attractiveness Score (TAS).

## Result and Discussion

PT. Supermama Farm is a laying hen farm located in Bolo Village, Bangorejo District. The maintenance of laying hens uses a close-house system with a capacity of 57,000 chickens (Wang et al., 2019; Liu et al., 2022). Egg production at PT Supermama Farm reaches 2.5 tonnes per day, with an average hen day of 73%. The eggs produced are distributed to several collectors in the southern Banyuwangi area, such as Genteng, Jajag, Cluring, and Srono.

## Internal Factors Analysis

**Table 1. Internal Factors Analysis Summary**

<b>Strengths</b>	<b>Weight</b>	<b>Rating</b>	<b>Score</b>
Superior reared hens (S1)	0.109	3.00	0.327
The quality of the eggs has been well sorted (S2)	0.149	3.67	0.547
Packaging uses safe and sturdy packaging (S3)	0.129	3.17	0.409
Adequate facilities and infrastructure (S4)	0.129	3.50	0.452
Overall Strengths	0.516		1.734
<b>Weakness</b>	<b>Weight</b>	<b>Rating</b>	<b>Score</b>
The shelf life of eggs is short and they break easily (W1)	0.129	2.83	0.365
Fluctuating egg prices (W2)	0.158	3.83	0.607
Less skilled experts in livestock and marketing (W3)	0.089	2.50	0.223
Less product promotion (W4)	0.109	2.83	0.309
Overall Weakness	0.485		1.504
Total Internal Factors	1.00		3.238

Based on Table 1, it shows that the main strength factor is the quality of eggs, which are sorted well according to quality categories (score 0,547). Sorting eggs can keep consumers confident that the products offered are quality. Eggs marketed are categorised as whole eggs, white shell eggs, small cracked eggs, and eggs without shells. Sorting eggs according to this category can reduce the occurrence of damage during the distribution process. Whole eggs generally have a shelf life of only two weeks and are suitable for consumption. Cracked or broken eggs can speed up the spoilage of other eggs, thereby reducing their quality. Actions like this can also increase consumer confidence so that they make repeat orders.

The results of the IFAS matrix analysis (table 1) show that the company's weak factor is unpredictable egg price fluctuations, with a score of 0.607. The price of eggs that is not stated can cause the company to suffer losses. Meanwhile, these eggs have a short shelf life and are easily broken. This is the second weakness factor, with a score of 0.365. Generally, eggs stored at room temperature (250°C) last only 18 days and 28 days at refrigerated temperatures (Altunatmaz et al., 2020). The relatively short shelf life of eggs and unstable price fluctuations mean that egg turnover must occur quickly so that the product does not suffer damage.

## External Factors Analysis

**Table 2. External Factors Analysis Summary**

<b>Opportunity</b>	<b>Weight</b>	<b>Rating</b>	<b>Score</b>
Culinary tourism and bread factories are growing rapidly in Banyuwangi (O1)	0.183	3.33	0.609
The price of Day Old Chicken is relatively affordable (O2)	0.154	3.00	0.462
The company maintains good relations with stakeholders (O3)	0.173	3.17	0.548
Overall Opportunity	0.510		1.619
<b>Treats</b>	<b>Weight</b>	<b>Rating</b>	<b>Score</b>
Laying hens business competition is very tight (T1)	0.115	3.17	0.365
Feed prices are likely to rise (T2)	0.135	3.00	0.404
Egg prices tend to fall (T3)	0.115	2.67	0.308
Chickens are susceptible to disease (T4)	0.125	2.67	0.333
Overall Treats	0.490		1.410
Total External Factors	1.000		3.029

Based on table 2, it shows that PT Supermama Farm's total EFAS score is 3.029. The highest opportunity factor is the development of culinary tourism and bread factories in Banyuwangi (score 0.609). Businesses that use egg raw materials are confectionery and bread factories. If these two businesses develop rapidly, then the demand for eggs will also increase. With the increase in culinary tourism and bakery factories, the demand for eggs will increase. The threat factor is that the price of feed continues to increase (score 0.404), but the price of eggs actually decreases (0.308). Meanwhile, competitors in the laying chicken business are also very tight (0.365). An increase in production costs due to an increase in feed costs, which is not balanced by an increase in egg prices, could threaten the failure of the laying hen farming business. This is because the turnover generated by the company cannot cover the company's production costs.

## Internal External (IE) Matrix

The internal external matrix is a combination of the IFAS (Internal Factor Analysis Summary) and EFAS (External Factor Analysis Summary) matrices by combining the final scores from the weights determined by the researchers so that the strategic location of the laying hen cultivation business being carried out is known. The method used to determine the internal-external (IE) matrix is to create an x-axis from the total weight of the IFAS (Internal Factor Analysis Summary) matrix and a y-axis from the total weight of the EFAS (External Factor Analysis Summary). The parameters used in the internal-external (IE) matrix include the internal strength and external influence of the laying chicken company

business at PT. Supermama Farm. The SWOT diagram of PT Supermama Farm is presented in Figure 2.

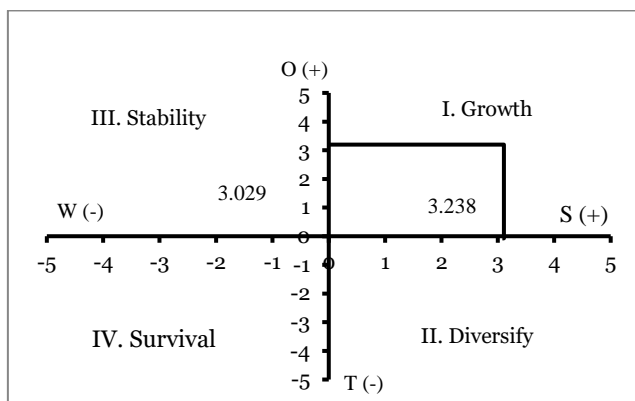


Figure 2. Business IE Matrix PT Supermama Farm

The results of the IE matrix mapping of the laying hen business at PT Supermama Farm obtained an average IFAS value of 3.228 and an average EFAS value of 3.029. These values are obtained from the sum of several factors to obtain a score, weight, and rating. The company is in quadrant I (growth) position, so the company can be said to be stable for development.

### Quantitative Strategy Planning Matrix (QSPM)

Company development strategies can be carried out through several priority strategies. Determining priority strategies is carried out through the QSPM method. PT Supermama Farm's business development strategy based on QSPM analysis is presented in Table 3.

Table 3 QSPM Test Results

Strategy Alternatives	Total TAS	Value	Rank
Maintaining the performance of the hen, so as to produce quality eggs	7.290		1
The company maintains good relations with the social environment and customers	7.140		2
Provide guarantees according to the quality of eggs offered to customers	7.082		3
Strict application of biosecurity so that it is not susceptible to disease	7.052		4
Utilize social media for promotion	7.009		5
Improving workforce skills with training and mentoring, livestock and marketing programs	6.998		6
Establish branding and improve service to consumers	6.767		7
Building a strong market network	6.691		8
Making alternative feed from relatively inexpensive raw materials	6.609		9
Making packaging innovations (packaging using mica) so that the marketing reach is wider	6.566		10

The results of the QSPM analysis show that the main alternative is maintaining the performance of chickens so that they always produce quality eggs (TAS 7.290). This action aims to reduce stress levels in chickens, which results in reduced production and performance of laying hens. Stress regulation can be done by controlling feeding and production management ([Edwards & Hemsworth, 2020](#); [Abbas et al., 2021](#); Paim et al., 2021). Furthermore, another alternative strategy is that the company tries to maintain good relations with the social environment and customers (TAS 7.140). The company's actions include always following and supporting the social and cultural actions of the community around the company, supporting internship programmes for students, and other social actions (Agudelo et al., 2019; Huang, 2021). Apart from that, another alternative strategy is providing service and guarantees to consumers regarding product quality (TAS 7.082). According to Ali et al. (2021), companies always pay attention to each customer for satisfaction and loyalty.

## Conclusions

There are four internal company factors and four weaknesses. Meanwhile, external factors contain three opportunities and four threats. The highest value of the strength factor is that the quality of the eggs has been sorted well, with a score of 0.545. Meanwhile, the weakness factor has the highest value, namely erratic egg price fluctuations (score value 0.607). Total internal factor score: 3.238. The highest opportunity factor is the development of culinary tourism and bread factories in Banyuwangi, with a score of 0.609. The threat factor with the highest value is feed prices, which tend to increase by 0.404. The marketing strategy for laying hens at PT. Supermama Farm has 10 alternative strategies based on SWOT analysis. The best total TAS value was 7,290 based on the QSPM method, namely the factor of maintaining the quality of the brood stock, thereby producing quality eggs.

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