

Importance-Performance Analysis (IPA) of sustainable broiler agribusiness initiatives: The plasma farmers perspective

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Abstract. Plasma farmer satisfaction is pivotal in the broiler partnership cooperation system, serving as a key indicator of the extent to which partnership principles are effectively upheld. This study assessed plasma farmers' satisfaction level regarding broiler partnership services' performance in Malang. The research sample comprised 87 plasma farmers selected through purposive sampling. The data analysis employed the Importance Performance Analysis (IPA) method to discern the positioning of service attributes in quadrant analysis. The Customer Satisfaction Index (CSI) method was also employed to gauge user satisfaction. The study revealed a noteworthy CSI value of 0.87%, signifying a high degree of contentment among farmers with the core company's performance and services. Delving further into the analysis of 24 partnership attributes using the IPA assessment, several vital observations emerged. Firstly, two attributes were identified as possessing substantial importance yet exhibiting subpar performance. Secondly, seven attributes demonstrated partnership performance that necessitates ongoing maintenance. Thirdly, six attributes exhibited partnership performance that warranted maintenance but with relatively lower priority. Lastly, nine attributes showed an excessive level of performance.

1 Introduction

Broilers are nonruminant livestock that is raised to produce meat. Broiler livestock businesses contribute to the fulfillment of people's animal protein needs, especially chicken meat. The problems experienced by broiler farms are the increasing costs of production facilities (feed, DOC, vaccines, and medicines), which are not matched by an increase in the selling price of chicken and price stability. limited funding, availability of inputs, and fluctuations in the selling price of chicken. This condition makes farmers increasingly helpless, so one solution to minimize this problem is running a broiler farming business with a partnership pattern. The partnership business pattern is a livestock business involving a relationship between companies producing inputs and local farmers bound by mutually beneficial cooperation.

The core company engaged in broiler partnerships provides facilities and infrastructure provided by the partnership as production support such as DOC, feed,

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medicine, vaccines, vitamins, Field Extension Officers, and marketing back at harvest with a contract price agreement. So that farmers only provide cages, equipment, and labor in raising chickens. The implementation of the partnership is related to the performance services provided to the plasma that provide satisfaction to plasma farmers [1]. [2] added that plasma farmer satisfaction is an essential factor to consider in the partnership business development process. The level of satisfaction of plasma farmers with the core company will positively impact the continuity of the partnership business. Plasma farmers who are satisfied with the core company tend to maintain their cooperation with the company. This study aims to analyze farmers' satisfaction levels with the core company's contract farming model.

2 Materials and Methods

The research was conducted in Malang Regency. The research location was determined considering that Malang Regency is one of the districts with the largest broiler population in East Java Province in 2021, with a population of 25,591,600 birds [3]. The data collected is primary data and secondary data. Primary data was obtained by interviews with respondents using questionnaire, documentation, and observation. Secondary data was taken from the statistical data collection agency and the local animal husbandry office. The assessment of the level of satisfaction with the company's performance attributes is divided into several variables and indicators, as follows:

Table 1. Assessment variables and indicators

No	Variable	Indicator
1	Partner Acceptance Procedure	Partner Services Partner acceptance procedure Marketing assurance
2.	Contract price of production facilities	DOC Contract Price Feed Contract Price Vaccine Contract Price
3.	Quality of production facilities	Quality of DOC Quality of feed Quality of vaccine
4.	Delivery schedule of production facility item	DOC delivery schedule Feed delivery schedule Vaccine delivery schedule
5.	The role of Technical Service (TS)	Maintenance management technical guidance Frequency of guidance time by TS Supporting facilities used by TS Response to complaints Courtesy TS
6.	Broiler chicken harvesting	Implementation of production standards Timeliness of harvest Appropriateness of chicken selling price
7.	Post-harvest handling	Payment Incentive/bonus DOC bonus amount Mortality bonus

Source: Primary data, 2023

Determination of the score or value of the level of satisfaction on each attribute using a Likert scale calculation of 1 - 5 with the lowest score information farmers consider the attribute is not important or not satisfied and the highest score is considered very important and very satisfied. Data analysis used to determine the level of satisfaction of plasma farmers is the Importance Performance Analysis (IPA) method and the Customer Satisfaction Index (CSI) [4].

3 Result and Discussion

3.1 Calculation of Customer Satisfaction Index (CSI)

Measurement of overall breeder satisfaction is obtained by calculating the Customer Satisfaction Index (CSI) to obtain the CSI value, the average value of the importance level (Mean Importance Satisfaction / MIS), and the average value of the performance level (Mean Satisfaction Score / MSS) are required. The assessment was carried out on 24 indicators that became the company's service attributes. The calculation (CSI) is in the Table 2.

Table 2. Results of the calculation of the Costumber Satisfaction Index (CSI)

No	Attributes	Average Importance (MIS)	Average Satisfaction (MSS)	Weighted Factor (WF)	Weighted Score (WS)
1.	Partner Services	4.28	4.03	0.041	0.18
2.	Partner acceptance procedure	4.70	4.02	0.045	0.21
3.	Marketing assurance	4.28	4.08	0.041	0.18
4.	DOC Contract Price	4.23	4.10	0.041	0.17
5.	Feed Contract Price	4.67	4.13	0.045	0.21
6.	Vaccine Contract Price	4.28	4.10	0.041	0.18
7.	Quality of DOC	4.15	3.98	0.040	0.16
8.	Quality of feed	4.28	4.08	0.041	0.18
9.	Quality of vaccine	4.15	4.07	0.040	0.16
10.	DOC delivery schedule	4.40	4.13	0.042	0.19
11.	Feed delivery schedule	4.50	4.07	0.043	0.19
12.	Vaccine delivery schedule	4.47	4.07	0.043	0.19
13.	Maintenance management technical guidance	4.20	4.07	0.040	0.17
14.	Frequency of guidance time by TS	4.38	4.07	0.042	0.18
15.	Supporting facilities used by TS	4.40	4.02	0.042	0.19
16.	Response to complaints	4.28	4.00	0.041	0.18
17.	Courtesy TS	4.70	4.08	0.045	0.21
18.	Implementation of production standards	4.28	4.07	0.041	0.18
19.	Timeliness of harvest	4.23	4.13	0.041	0.17
20.	Appropriateness of chicken selling price	4.67	4.08	0.045	0.21
21.	Payment	4.28	4.08	0.041	0.18
22.	Incentive/Bonus	4.15	4.03	0.040	0.16
23.	DOC bonus amount	4.28	4.05	0.041	0.18
24.	Mortality bonus	4.15	4.02	0.040	0.16
Total		104.6	97.6	1.000	4.4
Total Weight Value (WT)					4.4
CSI value = (WT : 5) x 100%					0.87

Source: Primary data, 2023

Based on the assessment conducted by plasma farmers on the performance of the core company, the CSI score is 0.87 percent. This value is in the range of 0.81 - 1.00, which indicates that overall, farmers are delighted with the performance. Although the satisfaction value is on a satisfied scale, farmers still have unmet expectations, amounting to 0.13%. Farmer satisfaction scores obtained from several attributes of company performance that have the highest scores are on the contract price of DOC and drugs and vaccines, DOC delivery schedule, and timeliness of harvest. In addition to the satisfaction value, a factor in the high CSI score, is the average of the breeder's interest value in the company's performance attributes. The company attributes that have a high importance value are the partner acceptance procedure, feed contract price, feed delivery schedule, TS (Technical Service) courtesy, and the suitability of the chicken selling price. [5] added that the customer satisfaction index value of 81.20% or 0.812 means that farmers are satisfied with the company's performance.

3.2 Importance Performance Analysis (IPA)

Importance Performance Analysis (IPA) is used to assess plasma farmers' performance on partnership companies' performance. Through this analysis, it will be known what things need to be improved to improve their performance and achieve plasma farmer satisfaction. Based on the study's results, the average value of the importance score was 4.35. This value means that plasma farmers consider overall partnership attributes in the core company very important. Based on the performance level assessment, the results show that the average performance score of the overall partnership attribute is 4.07. This score means that overall, plasma farmers are satisfied with the performance provided by the core company. Customer satisfaction reflects how far the company has responded to the wishes and market expectations [6].

The partnership attributes are then divided into four quadrants that reflect each attribute's importance and performance conditions. The IPA matrix consists of four quadrants, namely quadrant I (Top priority), quadrant II (Maintain achievement), quadrant III (Low priority), and quadrant IV (Excessive). A cut point separates the quadrants, which comes from the average importance and performance value. The partnership attributes contained in each quadrant can be seen in Figure 1.

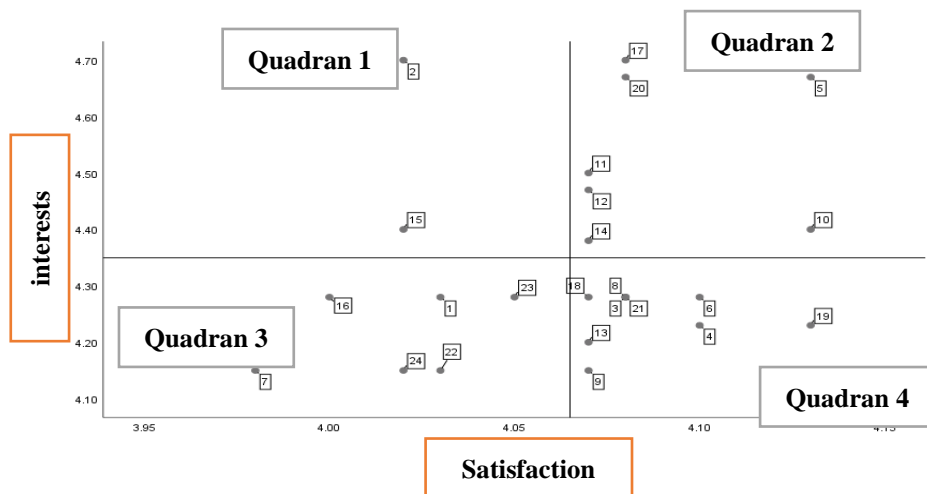


Figure 1. Importance Performance Analysis Quadrant

3.2.1 Quadrant I (Top Priority)

Quadrant I contain company attributes with a high importance value but still low performance, which is interpreted as a company's weakness. The variables in this quadrant must be improved again; the company continuously improves to meet breeders' expectations. The attributes in this quadrant consist of the acceptance procedure to become a partner and the supporting facilities used by TS (Technical Service). Attributes that are the weaknesses of the company in quadrant I must be evaluated for the performance of the services provided, directly reviewing the partner breeders so that the company can improve its services.

3.2.2 Quadrant II (Maintain Achievement)

Breeders consider Attributes in quadrant II important, and the company's performance can provide satisfactory service. These attributes show the company's superiority from the breeder's point of view and must maintain its performance. The Attributes in quadrant II are the company's strengths, especially in service to breeders. Companies need to maintain the performance of the attributes in this quadrant. Variables in quadrant II include feed contract price, DOC delivery schedule, feed, medicine and vitamins, frequency of guidance time by TS (Technical Service), and courtesy of TS (Technical Service).

3.2.3 Quadrant III (Low Priority)

Company attributes in quadrant III breeders consider that the level of importance is low, and the company's performance is still considered unfavourable by breeders. This is consistent with the opinion of [7] states that the company must improve performance so that the attributes in quadrant III do not move to quadrant I, which is a weakness. The partnership attributes in this quadrant are partner service, doc quality, response to complaints, provision of additional bonuses/intensive, doc bonus amount, and mortality bonus.

3.2.4 Quadrant IV (Excessive)

Attributes in this quadrant have low importance for breeders, but the company's performance is so good that it is considered excessive. The performance that the partnership attributes in quadrant IV have achieved must be maintained and does not need to be improved anymore because it will only cause a waste of resources. The attributes included in this quadrant are marketing assurance, doc contract price, drug and vitamin contract price, feed quality, drug and vitamin quality, maintenance management technical guidance, application of production standards, timeliness of harvest, and speed of payment of results.

4 Conclusion

The conclusion of this research showed that plasma farmers are delighted with the performance of partnership companies in the Malang district based on the calculation of the Customer Satisfaction Index (CSI) value of 0.87 and the calculation of Importance Performance Analysis (IPA), which provides advantages from the core company related to services to farmers.

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