

Analysis of Consumer Satisfaction Levels with Bulog Rice in the Cheap Food Movement (GPM) Program in Binjai City

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The purpose of this research is to determine the level of consumer satisfaction with Bulog rice in the Cheap Food Movement (GPM) program in the city of Binjai. In this research, the method used is a case study approach, utilizing tools such as Importance-Performance Analysis (IPA) and Customer Satisfaction Index. (CSI). The sample size for this study is 30 respondents using the convenience sampling technique. The characteristics for sample collection are as follows: 1.) Bring an ID card with a Binjai address, 2.) and purchase a minimum of 1 package and a maximum of 3 packages of Bulog products in the Cheap Food Movement (GPM) program in Binjai City. The results of this study indicate that, based on the analysis of Importance-Performance (IPA), attributes found in quadrant I (maximum priority) such as the soft texture of the rice, the bright white color of the rice, and the affordable price offered at Rp.55,000/5kg are the main priorities for consumer satisfaction. Additionally, according to the calculation of the Customer Satisfaction Index (CSI), a value of 87.715 was obtained, which falls within the range of > 81%. This indicates that consumers are satisfied with the purchase of Bulog rice in the city of Binjai as part of the Affordable Food Movement program in Binjai.

Keywords: Cheap Food Movement, Bulog, Consumer Satisfaction, Binjai, Rice

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1. Introduction

One of the biggest issues facing the government today is poverty. Poverty is still a persistent issue, which makes it increasingly concerning even now. According to data released by the Indonesian Central Bureau of Statistics (2024), the proportion of the population living in poverty in North Sumatra province fell to 1,268.19 in 2022 from 1,343.86 in 2021. Additionally, the poverty line fell in 2022 as compared to the year before. Binjai City is one of the areas with a positive poverty line through 2022. The poverty line increased from Rp 433.746 per capita per month in 2020 to Rp 499.251 per capita per month in 2022. A low standard of life among the impoverished will lead to a number of long-term effects, like inadequate nutrition, which will ultimately compromise health (Antika, 2015).

Basically, the demand for rice in Indonesia is very high because of the large number of people who live there and because rice is their daily food (Malyda, 2010). With such a large population, the demand for food is also increasing. However, sometimes the supply of food is not enough to meet the demand (Kadir et al., 2023). The production of rice and rice in North Sumatra from 2020 to 2022 has increased, but for the city of Binjai itself it appears that the production of rice in the city of Binjai has decreased from 2020 to 2022 (BPS, 2022). Declining rice production causes the price of food commodities in Binjai City in the rice commodity to fluctuate.

Table 1. Development of Average Price of Plain Rice Commodity in Binjai City (Kg/Rp) 2018-2022

Year	Average Price per Year (Kg)
2018	11.375
2019	11.125
2020	11.125
2021	11.125
2022	11.416

The highest price of rice commodity occurred in 2022 at IDR 11,416 and the lowest price in 2019-2021 at IDR 11,125. According to the National Food Agency, the national average price of staple and strategic food at the consumer level in zone 2 (North Sumatra) was IDR 12,364 as of June 2023. One of the ways to overcome unemployment and the high price of rice, the Indonesian government created one of the food assistance programs such as the Cheap Food Movement (GPM) is an effort to help people who have difficulty getting food or staples, as well as providing subsidies on staples sold by organizations (Kadir et al., 2023).

2. Method

The research location is at Binjai City's Food Security and Agriculture Office. Purposively, this location was chosen because the corporation thinks it can satisfy customers by offering the community high-quality rice. The convenience sampling approach, a non-probability sampling technique, is the one employed in this study. It allows researchers to choose participants at the research site according to the convenience of the study (Nurmalina and Endang, 2012). Thirty respondents made up the study's sample, which was drawn from participants in five Binjai City villages' Cheap Food Movement initiative.

Primary data from interviews and conversations, as well as secondary data from income estimates and tourism financial reports, comprise the amount of data gathered for this study. Questionnaire-based interviews and observation were used to gather data. Direct field observation is used in the case study method of research, which makes use of tools like the Customer Satisfaction Index (CSI) and Important and Performance Analysis (IPA). Sugiyono (2016) asserts that the variables to be measured and taught to be variable indicators can be assessed using a Likert scale. This Likert scale can be used to respond to statements and inquiries.

Table 2. Likert Scale Level of Importance

Weight	Level of Importance
1	Very Unimportant
2	Not Important
3	Moderately Important
4	Parenting
5	Very Important

The formula for calculating the place value of parsing is as follows:

$$precise\ value = \frac{correct\ score}{maximum\ score} \times 100\%$$

The precise score is the total of the scores of all respondents' responses for each question item, whereas the maximum score is multiplied by the number of questions. The criteria distribution will be split into four quadrants in a scatter plot of the Importance-Performance Analysis that is presented using the IPA method. By taking into account the relative importance of the characteristics of the product or service being measured, the Customer Satisfaction Index (CSI), which is a customer satisfaction index analyzed in customer satisfaction surveys and presented in percentage form, can be used to calculate the overall level of customer satisfaction according to Syukri (2014).

3. Result and Discussion

3.1 Results

3.1.1 Validity and Reliability Test

The validity test to calculate the data to be calculated and the process is done using the SPSS 23.0 application. The results of validity testing using the test criteria for this test are if $r\ count > r\ table$, then it is valid and if $r\ count < r\ table$, then it is invalid.

Table 3. Validity Test of Importance and Performance

No	Attribute	R count		r table	Status
		interests	performance		
1	Blog rice has good grains	0.604	0.721	0.361	Valid
2	The texture of the rice is soft when consumed	0.511	0.765	0.361	Valid
3	Blog rice has a hard texture	0.620	0.669	0.361	Valid
4	Bulog rice has a sticky texture when served	0.553	0.668	0.361	Valid
5	Blog rice has a good aroma	0.729	0.680	0.361	Valid
6	The aroma of Blog rice is different from other rice	0.611	0.586	0.361	Valid
7	The aroma of Bulog rice does not change after several days of storage	0.780	0.702	0.361	Valid
8	Bulog rice does not have aromatic compounds	0.553	0.595	0.361	Valid
9	Blog rice is white and slightly yellow in color	0.729	0.627	0.361	Valid
10	Stability of Bulog rice when stored	0.603	0.800	0.361	Valid
11	Rice quality is suitable or clean for consumption	0.418	0.706	0.361	Valid
12	Rice packaging is clean and neat	0.710	0.723	0.361	Valid
13	Bulog rice grains have a high fracture rate	0.611	0.624	0.361	Valid
14	Bulog rice is free from grain or gravel contamination	0.478	0.539	0.361	Valid
15	Berry Blog purlin when consumed	0.369	0.419	0.361	Valid
16	There is no mixture in the rice grains	0.780	0.755	0.361	Valid
17	Bulog rice is resistant to damage when stored	0.591	0.649	0.361	Valid

18	Berry blog is free from culture when stored	0.658	0.475	0.361	Valid
19	Rice distribution location is easy to reach	0.444	0.463	0.361	Valid
20	Rice delivery invoices are on schedule	0.827	0.681	0.361	Valid
21	Program information is conveyed clearly	0.478	0.507	0.361	Valid
22	Distribution officers are friendly	0.396	0.624	0.361	Valid
23	The price of Bulog rice is in accordance with the quality	0.728	0.649	0.361	Valid
24	Bulog rice price is stable	0.566	0.723	0.361	Valid
25	Bulog rice price is competitive compared to other rice prices	0.714	0.624	0.361	Valid
26	Bulog rice price is affordable	0.610	0.539	0.361	Valid

By showing the quantity of statement items, you may verify the accuracy of the performance and important variables. The results show that the r count is higher than the r table (0.361). As a result, the performance and interest elements in the variable statement are deemed legitimate.

Table 4. Reliability Test of Importance and Performance Levels

Variable	coefficient Alpha Cronbach	coefficient r	Description
Interests	0.751	0.600-0.799	Highly reliable
Performance	0.754	0.600-0.799	Highly reliable

The largest Cronbach's alpha value is 0.751 for importance with a high level of reliability, and 0.754 for the performance variable with a high level of reliability.

3.1.2 Level of Consumer Satisfaction with Bulog Rice

To measure the level of consumer satisfaction with Bulog rice in the Cheap Food Movement program in Binjai City using 2 (two) data analysis tools, namely the Importance Performance Analysis (IPA) Method and the Customer Satisfaction Index (CSI).

1. Importance Performance Analysis (IPA) Method

The Cheap Food Movement's organizer uses the Importance Performance Analysis (IPA) technique to assess the scope of the company's accomplishments and identify the qualities that need to be preserved and enhanced. How well the importance score stacks up against the Bulog rice Cheap Food Movement program's performance score determines the parity assessment. where the significance of enhancing quantifiable performance characteristics is ranked according to the degree of parsimony.

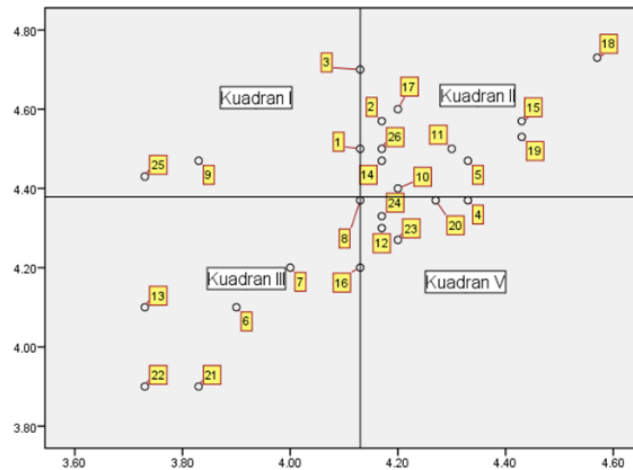
The Cartesian diagram's measurement findings help the Cheap Food Movement's management maintain or develop the product—Bulog rice—based on qualities that are thought to be crucial for customer happiness. The position of each attribute in the four quadrants determines how well these attributes improve.

The Cheap Food Movement program is distributed in quadrant I (Top Priority) with a total of 4 attributes, in quadrant II (Maintain Achievement) with a total of 10 attributes, while in quadrant III (Low Priority) there are 7 attributes, and in quadrant IV (Tend to Exaggerate) as many as 5 attributes.

a. Quadrant I

Quadrant I is the Top Priority where the attributes that are plotted in this quadrant must get more attention or must be improved. The items that are included in this quadrant are (1) Bulog rice has good grains, (3) Berry blog has a good texture, (9) Blog rice is white and slightly yellow, (25) Bulog rice prices are more competitive compared to other rice.

Figure 1. Cartesius Diagram



b. Quadrant II

Quadrant II investigates the qualities that Bulog rice buyers value and believe to be significant, leading to a high level of discontent. The second quadrant's contents are as follows: (2) the rice's texture is easily pliable when eaten, (5) Blog rice, (10) it smells well, (11) it is stable in storage, (14) The rice is of a respectable or clean enough quality to eat; (15) Berry Blog is not contaminated by grains or gravel; (17) Berry Blog purlin when eaten; (18) Bulog rice is not easily damaged during storage; (19) Blog rice is not contaminated by culture during storage; and (26) The distribution location is easily accessible.

c. Quadrant III

Since the components in this quadrant are regarded as having low importance or poor performance levels, the organizers of the Cheap Food Movement do not need to give them significant priority; however, players should still take these attributes into account. (6) Bulog rice has a distinct aroma from other rice; (7) its aroma remains constant after a few days of storage; (8) Bulog rice lacks fragrant compounds; (13) Bulog rice grains exhibit a high degree of fracture; and (16) the rice grains do not include any mixture. (21) The distribution officer is amiable, and (22) Program information is communicated clearly.

d. Quadrant IV

Since this feature of Bulog rice is not widely expected by consumers yet produces very high results, the organizers of the Cheap Food Movement might gain more by focusing the quality standards of this rice on other, more crucial areas. (4) Bulog rice has a softer texture when it is served; (12) the rice is neat and clean; (20) the rice delivery invoice is sent on time; (23) the price of the rice is reasonable given its quality; and (24) the pricing of the rice is consistent.

2. Customer Satisfaction Index (CSI)

To emphasize the importance of the factors used to reduce customer losses, the CSI moderator is used.

$$\begin{aligned} \text{Consumer Satisfaction Index: } & (\text{Total WS: Minimum Scale}) \times 100\% \\ & : (438.56 : 5) \times 100\% \\ & : 87,71 \% \end{aligned}$$

The CSI calculation table shows that the Bulog rice in the Cheap Food Movement program has a customer satisfaction index of 87.71% on a scale > 81% indicating "Very satisfied". The high CSI value indicates that a significant proportion of consumers feel that

Bulog rice has met or even exceeded their expectations in terms of quality, price, and service. This high level of satisfaction reflects the success of the program in providing tangible benefits to the community. It also indicates that the efforts made by the organizers, including in terms of supply, distribution, and promotion, have been well received by consumers. The success of this program not only helps to ensure food security at affordable prices, but also increases public confidence in Bulog products and similar programs in the future.

3.2 Discussion

Based on the results of testing the level of respondent satisfaction using the Customer Satisfaction Index (CSI) method, which is used to understand the level of respondent satisfaction by looking at the importance of the existing dimensions. After calculating the influence of performance and the importance of dimensions on respondent satisfaction with the CSI calculation obtained in this study, which is 87.71%. This shows that the respondents' satisfaction is in the range of 81%-100%, which means "Very satisfied" with the Murrah food movement program because it meets their expectations. This could also mean that 12.29% of customers are still not satisfied, though. Additionally, the government uses this as a guide or standard for putting the Affordable Food Movement program into action in order to boost performance and improve the qualities of still-inadequate goods and services. The findings of this investigation align with the findings of Rizal's (2022) study, "Analysis of Satisfaction Levels with BULOG Premium Rice in Lhokseumawe City, Banda Sakti District." Where individuals are content with the rice BULOG minimum food program According to the notion of satisfaction, consumers' expectations prior to purchase and the product's actual performance determine their level of satisfaction or discontent. Customers have preconceived notions about how a thing will work when they buy it.

According to the analysis's findings, most respondents gave Bulog rice high ratings for flavor, cleanliness, and aroma, indicating that customers think the rice is of extremely high quality. A sizable percentage of customers thought the rice met or exceeded their quality expectations. One of the key elements affecting customer happiness is product quality. Customers can benefit from high-quality Bulog rice. Since rice is a staple item that is eaten every day, its flavor and cleanliness are crucial. In addition to making additional purchases, customers who are pleased with the rice's quality may also suggest the product to their friends and family, which would enhance Bulog's reputation in the long run.

Meanwhile, the price of Bulog rice is competitive and more affordable than the price of rice in other markets. Many respondents consider that the price offered is very much in line with the quality provided. Positive perceptions of the price of Bulog rice play an important role in increasing consumer satisfaction. In a surplus economic situation, affordable prices are a major consideration for consumers, especially for those from low-income backgrounds. Offering fair and transparent prices by Bulog can increase consumer loyalty and encourage them to continue to choose Bulog rice as their first choice. This suggests that the right pricing strategy can be effective in attracting and retaining consumers. The results of this study are in accordance with research conducted by Puspitasari (2018) with the title "The Effect of Product Quality and Price Description on Increasing Sales of Premium Rice at Perum Bulog Regional Division of North Sulawesi and Gorontalo". Where prices greatly influence consumers in purchasing rice.

In the cheap food movement program, not only bulog rice, but also other staples are provided at affordable prices. Where this Cheap Food movement the Binjai City Government sells various staples including SPHP rice sold at a price of IDR 55,000 per kilogram, our oil is IDR 14,500 per liter, family oil is IDR 16,500 per liter, granulated sugar is IDR 17,000 per kilogram, wheat flour is IDR 12,500 per kilogram and chicken eggs. In addition, the availability of Bulog rice in the locations designated in the Cheap Food Movement program is stated to be quite good, although there are some villages related to stock instability at some sales points. Product availability is a key factor in maintaining consumer satisfaction. When consumers cannot find the products they want, this can lead to discouragement and even loss of customers. Therefore, it is important for the government to ensure that rice stocks are always available and well-distributed at all sales

locations. Improving supply chain and distribution management can help ensure the availability of rice and increase consumer confidence in the Cheap Movement program.

4. Conclusion and Recommendations

The results of the Importance-Performance Analysis (IPA) show that the attributes found in Quadrant I (highest priority), such as texture, color, and rice price attributes, are the main priorities for consumer perception. Meanwhile, the customer satisfaction index, calculated using the Customer Satisfaction Index (CSI), received the highest score of 87.715, which falls within the range of > 81%. This indicates that consumers are satisfied with Bulog rice in the Cheap Food Movement program in the city of Binjai.

Based on the results of the research that has been carried out, there are suggestions that can be used as input for the organizers of the Cheap Food Movement in Binjai City, namely it is recommended that the organizers focus on improving product quality, especially in terms of texture and cleanliness of rice, as well as improving the storage process to maintain aroma and quality. In addition, it is important to improve the packaging to make it more attractive and informative, as well as to promote the advantages of Bulog rice to consumers.

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