Analysis Of Consumer Satisfaction Level with Bulog Rice In The Mobile Market Activities Program In Medan City

Alfi Syahfitri[a++*], Mitra Musika Lubis[b#]

[a,b]*Faculty of Agriculture, University of Medan Area, Indonesia.*

Authors' contributions

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

Original Research Article

ABSTRACT

Bulog (Logistics Agency) is one of the state-owned public companies engaged in food logistics. The general task of Bulog is to carry out development in the field of logistics management through the management of inventory, distribution, and price control of rice, as well as logistics service efforts in accordance with applicable laws and regulations. This research aims to analyze the factors that influence consumer satisfaction levels and to analyze how consumer satisfaction levels with Bulog rice in the mobile market program in the city of Medan. This research was conducted in the Medan Area and Medan Denai sub-districts. The research method used in this study is of the quantitative type, with the sample determination using the Convenience Sampling technique. In this study, the sample size used is 50 respondents. The data analysis used in this study includes multiple linear regression and the Customer Satisfaction Index (CSI). The results of this study indicate that the Price variable (X1) and the Product variable (X2) significantly affect customer satisfaction with Bulog rice in the mobile market program in Medan City, while the Promotion variable (X3) and the Place variable (X4) do not significantly affect customer satisfaction with Bulog rice in the mobile

[++]*Medan;*
[#]*Lecturer, Medan;*
Corresponding author: Email: mitra@staff.uma.ac.id

market program in Medan City. Based on the calculation of the Customer Satisfaction Index (CSI), the satisfaction level obtained is already within the "very satisfied" criteria, which is 86.4%.

Keywords: Bulog, CSI, logistics agency, rice, satisfaction, mobile market, stability, food prices

1.Introduction

Food is a basic human need that must be fully met one of the basic needs that is often consumed by the Indonesian people is rice. In everyday understanding, rice is the grain whose husk has been removed by peeling and grinding using peeling and grinding tools (Mulyadi, 2020). Rice is also one of the staple foods for the largest population in Indonesia, especially in the Medan region. Year after year, rice consumption among the residents of Medan continues to increase along with the population growth in the Medan area. Food security has become an issue that is often discussed year after year.

Based on the Food Security Law No. 18 of 2012, food security is the condition of food fulfillment for the country down to individuals, which is reflected in the availability of sufficient food, both in quantity and quality, safe, diverse, nutritious, equitable, and affordable, and not contrary to religion, beliefs, and culture, for the community to live a healthy, active, and productive life sustainably. (Dinas Ketahanan Pangan Kabupaten Probollinggo, 2022).

Perum BULOG, short for Badan Urusan Logistik, is a State-Owned Enterprise in Indonesia that operates in the field of food logistics. Established on 21 January 2003, Bulog is objectives are to monitor the availability and stability of food prices, particularly for food commodities such as rice, corn, and soybeans. Additionally, Bulog aims to monitor the availability and stability of food prices, provide basic purchase prices for rice, ensure the stability of food prices in the market, and manage food stocks for social assistance needs, distribution, and control of rice and other food commodity prices.

The high level of rice consumption and prices has prompted the government to implement various programs aimed at supporting food stability and prices, one of which is the Mobile Market program. This program is one of the government initiatives under the supervision of the Regional Public Company (PUD) Market of Medan City. The mobile market activities collaborate with Bulog, which is the supplier of the program. Bulog manages various types of food products such as rice, sugar, cooking oil, wheat flour, and others. The rice released by Bulog varies, ranging from medium rice, premium rice, to special rice. With the many types of rice released by Bulog, there are differences in quality for each type of rice. Each type of rice is distributed according to the Bulog program (Rizal, R. H. P, dkk, 2022). The characteristics of rice quality that can influence the level of importance and consumer satisfaction with rice are the fluffy texture of the cooked rice, the bright white color of the rice, and the cleanliness of the rice. (Widadie, 2015). According to (Septiarini et al, 2020), consumers will consider several attributes attached to rice before making a purchase that aligns with their interests, allowing them to achieve satisfaction. Therefore, it is very important for the company to know whether the quality of the rice received by consumers meets their desires and expectations.

The success of a business or program is inseparable from consumer satisfaction with the products or services offered. Therefore, consumer satisfaction is defined as a feeling of pleasure experienced after receiving good and satisfying service, as well as the company's performance that meets expectations (Anggraini, N & Alhempi, R, R, 2021). Essentially, consumer satisfaction is the response or feeling of pleasure consumers experience after comparing the results or performance they perceive with their expectations. Generally, consumer expectations are the consumers' estimates of what they will receive when consuming products or services, while perceived performance is the consumers' perception of what they have received after consuming the products or services. (Susilo et al, 2018). According to Rizky Putri Ananda (2023), customer satisfaction is defined as the overall attitude shown by consumers towards goods and services after they acquire and use them. Consumer satisfaction is part of the evaluation after selection caused by specific purchase decisions and the experience of using or consuming the goods or services. Consumers can understand one of three levels of general satisfaction: if performance is below expectations, consumers will feel

disappointed; if performance meets expectations, consumers will feel satisfied, and if performance exceeds expectations, consumers will feel very satisfied. (Lilis Cucu Sumartini dan Dini Fajriany Arding Tias, 2019). According to Kotler and Keller (2018), customer satisfaction is the feeling of pleasure or disappointment that arises after comparing the perceived performance of a product (outcome) against their expectations. Consumer satisfaction can also be defined as the buyer's evaluation of the perceived performance of the chosen product or service alternatives in meeting or exceeding expectations. (Anggun Elok dkk, 2020).

According to Kotler, the marketing mix is a combination of four variables that are the core of marketing, namely product, price, distribution system, and promotion. These four elements are closely related and influence each other. According to (Deni Saputra, 2018), McCarthy grouped the marketing mix into the "4P" which are product, price, place, and promotion. This marketing mix becomes the variable in this research. To determine the level of consumer satisfaction by using the comparison of performance scores and importance scores.

a. Level of Interest
   The level of importance is a concept used to measure how important an attribute is for consumers, both in choosing and consuming a product. The level of customer importance is defined as the customer's belief before using the product in question, which encourages them to use the product (Rangkuti, 2002).
b. Performance Level
   The level of performance is the level of achievement of the implementation of a program or activity in realizing the expected results. According to (Galib, M., & Hidayat, M. 2018), performance is a description of the level of achievement of the implementation of a program, activity or policy in realizing the targets, objectives, vision and mission that are outlined through the strategic planning of an organization.

Based on the explanation above, the purpose of this research is to analyze the factors that influence consumer satisfaction levels towards Bulog rice in the mobile market program in Medan City and to analyze consumer satisfaction levels towards Bulog rice in the mobile market program in Medan City. The benefits of this research are as a source of knowledge reference for future studies and as a source of information that can support the government in the sustainability of the program.

2. Method

The type of research methodology used in this study is quantitative; quantitative research is based on positivism and aims to study a specific population and sample using statistical data (Sugiyono, 2018). According to Sugiyono (2017), the population is a generalization area consisting of an object or subject that has certain qualities and characteristics determined by the researcher and then analyzed. The sample is a part of the population, and the determination of the sample in this study uses the Convenience Sampling technique, which is a method of sample collection when the researcher does not have data on the population and selects the sample based on the ease of obtaining the sample (Willy, A., &Jogiyanto, H. 2015).

The data used in this research consists of primary and secondary data. Primary data is data that is directly provided to the data collector or data that is collected by the researcher themselves directly from the first source or the location where the research object is conducted. (sugiyono, 2018). The calculation and analysis methods used are as follows:

2.1 Multiple Linear Regression

Multiple Linear Regression is an analysis used to determine the effect of the Independent variable (X) on the dependent variable (Y). The purpose of the multiple linear regression test is to determine the direction and how much influence the relationship between the dependent variable and the dependent variable (Gozali, I. 2018). The formula for the multiple linear regression equation model is as follows:

$$Y = a + b1\ X1 + b2\ X2 + b3X3 + b4X4$$

Information:
Y   = Consumer satisfaction
A   = Constant (score)
b1,b2,b3,b4 = Regression coefficient
X1   = Price
X2   = Product quality
X3   = Promotion
X4   = Place

2.2 *Customer Satisfaction Index* (CSI)

To determine the level of consumer satisfaction using the Customer Satisfaction Index (CSI) method, According to (Bella, R. 2019) Customer Satisfaction Index (CSI) is a method that uses an index to measure the overall level of consumer satisfaction based on the level of importance and performance of the attributes of a particular product. Customer satisfaction index (CSI) is used to determine the overall level of customer satisfaction with an approach that considers the level of importance of the variables being measured (Shabrina,F, 2023). The CSI value can be obtained using the following formula:

$$CSI = \frac{WA}{HS} X\ 100\%$$

In general, if the CSI value is above 50%, it can be stated that consumers are satisfied, and vice versa, if the CSI value is less than 50%, it can be stated that consumers are not satisfied (Khairunisa, 2021).

3. Result and Discussion

Table 1. Multiple Linear Regression Test Results

Coefficientsa					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
1 (Constant)	.809	1,693		.478	.635
Price (X1)	.549	.057	.742	9,569	.000
Product (X2)	.211	.082	.221	2,568	.014
Promotion (X3)	.087	.068	.110	1.268	.211
Place (X4)	.001	.039	.002	.027	.978

a. Dependent Variable: Y
Source: SPSS data processing, 2024

Apart from the table above, the multiple linear regression model equation can be written as follows:

Y = 0,809+ 0,549X1 +0.211X2 +0.087X3 + 0.001 X4

Looking at the results in the table above, the constant value (a) of 0.809 is positive, which can be interpreted as a significant influence between the independent variables and the dependent variable. This indicates that if the price variable (X1), product variable (X2), promotion variable (X3), and place variable (X4) are valued at 0, then the consumer satisfaction variable (Y) is valued at 0.809.

The regression coefficient value for the price variable (X1) is 0.549, meaning that as the price variable (X1) increases, the Y variable will also increase by 0.549. This indicates that as the price indicator increases, the level of consumer satisfaction also

rises. The Price variable (X1) has a t-value of 9.569, meaning that the t-value > t-table, which is 9.569 > 1.679. Looking at the significance value of variable X1 (0.000) < α (0.05), this means that price has a significant effect on the satisfaction of bulog rice consumers. This is in line with the research by Ahmad Nur Rizal et al. (2020), which found a significant effect of the price variable (X1) on consumer satisfaction.

The regression coefficient for Product variable (X2) is 0.211, meaning that as the variable (X2) increases, the variable Y will increase by 0.211. This indicates that the higher the product quality, the higher the consumer satisfaction. The Product variable (X2) has a t-value of 2.568, meaning t-value > t-table, specifically 2.568 > 1.679. Looking at the significance value of variable X2 (0.014) < α (0.05), this means that product quality significantly affects on the satisfaction of bulog rice consumers. The results of this study are in line with the research conducted by Salsabila Sifa Riyandani et al. (2021), which found that the product quality variable, either partially or individually, affects consumer satisfaction.

The regression coefficient for the Promotion variable (X3) is 0.087, meaning that as the variable (X3) increases, the variable Y will increase by 0.087. This indicates that the better the promotion, the higher the consumer satisfaction. The Promotion variable (X3) has a t-value of 1.268, meaning that the t-value < t-table, which is 1.268 < 1.679. Looking at the significance value of the X3 variable (0.211) > α (0.05), this means that promotion does not have a significant effect on the satisfaction of bulog rice consumers. The results of this study are in line with the research conducted by Suci Ramadhani Badri et al. (2024), which found that there is no significant effect of Promotion on Consumer Satisfaction.

The regression coefficient of the Place variable (X4) is 0.001, meaning that as the Place variable (X4) increases, the Y variable will increase by 0.001. This indicates that the more effective the place, the higher the consumer satisfaction. the Place variable (X4) has a t-value of 0.027, meaning t-value < t-table, which is 0.027 < 1.679. Based on the significant value of variable X4 (0.978) > α (0.05), it means that the place does not have a significant effect on the satisfaction of Bulog rice consumers. The results of this study are in line with the research conducted by Suci Ramadhani Badri, et al. (2024), which found that there is no significant effect of place (Distribution) on consumer satisfaction.

Table 2. Test Results Customer Satisfaction Index (CSI)

Indicator	Average Importance Score	Importance Weighting Factor	Average Performance Score	Weighted Score
Price				
Affordable prices	4.8	5.61%	4.96	0.27
Price is cheaper than others	4.8	5.61%	4.96	0.27
Price According to Quality	4.84	5.66%	4.94	0.28
Prices can help the economy	4.74	5.54%	4.22	0.23
Product				
Clean & not dirty rice	4.9	5.72%	4.96	0.28
Whole & unbroken rice	4.88	5.71%	4.94	0.28
yellowish white color, not pungent & does not change if stored for a long time	4.86	5.68%	4.98	0.28
Good packaging, no damage & durable	4.84	5.66%	4.94	0.28
Promotion				
Using good socialization to the community	4.84	5.66%	3.6	0.2
There is no maximum purchase	4.88	5.71%	4.92	0.28

There are no requirements such as KTP/KK	4.86	5.68%	4.94	0.28
People outside the location can buy	4.88	5.71%	4.92	0.28
Can buy individually/not in a package	4.84	5.66%	1.94	0.11
Sells other basic commodities besides sugar, oil & rice	4.84	5.66%	1.78	0.1
Place				
Strategic location & easy toreach	4.52	5.29%	4.42	0.23
Clean place	4.42	5.17%	4.46	0.23
Comfortable place	4.24	4.96%	4.54	0.22
A place known to many people	4.46	5.22%	4.54	0.23
TOTAL	**85.44**	**100%**	**78.94**	
		Weighted Average		**4.33**
		Customer Satisfaction Index (CSI)		**86.4%**

Source: primary processing in processing, 2024

The results of the calculation of the level of consumer satisfaction with Bulog rice in the mobile market program in Medan city can be seen in the table above. shows that the results of the calculation of the Customer Satisfaction Index (CSI) on consumer satisfaction with Bulog rice in the mobile market program in Medan city are 86.4%. The CSI value is obtained by dividing the Weighted Average value by the maximum scale used in this study, which is a maximum scale of 5.The Customer Satisfaction Index (CSI) value obtained is in the satisfaction index range of 82%-100%, which means that consumers are "Very Satisfied" with the performance of the attributes contained in consumer satisfaction with Bulog rice in the mobile market program in Medan city.

4. Conclusion

Based on the results of the multiple linear regression test, the Price variable (X1) and the Product variable (X2) have a significant influence on the satisfaction of Bulog rice consumers in the mobile market program in Medan city, while the Promotion variable (X3) and the Place variable (X4) do not have a significant influence on the satisfaction of Bulog rice consumers in the mobile market program in Medan city. Based on the calculation of the Customer Satisfaction Index (CSI), the satisfaction level obtained is already within the "very satisfied" criteria, which is 86.4%.

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