Analysis of Factors Affecting Consumer Satisfaction and Loyalty toward Bulog Rice in Mojokerto Regency

Analisis Faktor-faktor yang Memengaruhi Kepuasan dan Loyalitas Konsumen Terhadap Beras Bulog di Kabupaten Mojokerto

Andru Armana, Teguh Soedarto*, Dita Atasa

Department of Agribusiness, Faculty of Agriculture, Universitas Pembangunan Nasional "Veteran"
Jalan Rungkut Madya, Gunung Anyar, Surabaya 60294, East Java, Indonesia
*Email: teguhsoedarto@upnjatim.ac.id
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ABSTRACT

The current problem faced by BULOG is the low consumer interest in Bulog rice compared to other commercial brands, influenced by issues such as quality, limited distribution, price fluctuations, and a still-weak brand image. This situation poses a challenge for Bulog in maintaining consumer satisfaction and loyalty amid increasingly competitive rice markets. The main objective of this study is to examine the factors influencing consumer satisfaction and loyalty toward Bulog rice in Mojokerto Regency. The study was conducted from February to April 2025, focusing on maintaining consumer satisfaction and loyalty amid a tightening rice market competition. Accidental sampling was used, with 100 respondents. Data analysis was performed using Structural Equation Modeling with Partial Least Squares (SEM-PLS), emphasizing variables such as quality, price, agent services, sales location, and brand image. The findings indicate that not all variables significantly affect consumer satisfaction or loyalty. Quality, service, and location positively contribute to increased satisfaction, which in turn fosters consumer loyalty. In contrast, price has no significant effect on loyalty, while brand image does not significantly influence satisfaction. Bulog needs to innovate, particularly regarding pricing and brand image, to ensure the continued consumption of its rice among consumers. This study provides empirical evidence on how quality, service, and location influence consumer satisfaction and loyalty in the rice retail sector, highlighting the limited impact of price and brand image for staple food products in competitive markets.

Keywords: *Bulog Rice, Consumer Loyalty, Consumer Satisfaction, Price, SEM PLS*

ABSTRAK

Masalah utama yang saat ini dihadapi oleh BULOG adalah rendahnya minat konsumen terhadap beras Bulog dibandingkan dengan merek-merek komersial lainnya. Hal ini dipengaruhi oleh beberapa faktor seperti kualitas produk, distribusi yang terbatas, fluktuasi harga, serta citra merek yang masih lemah. Kondisi ini menjadi tantangan bagi Bulog dalam mempertahankan kepuasan dan loyalitas konsumen di tengah pasar beras yang semakin kompetitif. Tujuan utama penelitian ini adalah untuk menganalisis faktor-faktor yang memengaruhi kepuasan dan loyalitas konsumen terhadap beras Bulog di Kabupaten Mojokerto. Penelitian dilaksanakan pada Februari hingga April 2025, dengan fokus pada upaya mempertahankan kepuasan dan loyalitas konsumen di tengah ketatnya persaingan pasar beras. Teknik pengambilan sampel yang digunakan adalah accidental sampling dengan jumlah responden sebanyak 100 orang. Analisis data dilakukan menggunakan *Structural Equation Modeling* dengan *Partial Least Squares* (SEM-PLS), dengan menitikberatkan pada variabel kualitas, harga, layanan agen, lokasi penjualan, dan citra merek. Hasil penelitian menunjukkan bahwa tidak semua variabel berpengaruh signifikan terhadap kepuasan atau loyalitas konsumen. Variabel kualitas, layanan, dan lokasi berkontribusi positif terhadap peningkatan kepuasan konsumen yang selanjutnya mendorong loyalitas. Sebaliknya, harga tidak berpengaruh signifikan terhadap loyalitas, dan citra merek tidak berpengaruh signifikan terhadap kepuasan. Dengan demikian, Bulog perlu melakukan inovasi, khususnya dalam aspek penetapan harga dan penguatan citra merek, untuk memastikan keberlanjutan konsumsi beras Bulog di kalangan konsumen. Penelitian ini memberikan bukti empiris mengenai bagaimana kualitas, layanan, dan lokasi memengaruhi kepuasan dan loyalitas konsumen di sektor ritel beras, serta menyoroti minimnya pengaruh harga dan citra merek terhadap produk kebutuhan pokok di pasar yang kompetitif.

Kata kunci: Beras Bulog, Harga, Kepuasan Konsumen, Loyalitas Konsumen, SEM PLS

INTRODUCTION

Mojokerto Regency has significant potential in the agricultural sector, particularly in rice production, which continues to increase through the use of productive paddy fields. The majority of its population works as farmers who depend on agricultural yields for their livelihoods. In addition to meeting household consumption needs, harvested crops are sold to improve farmers' welfare. Agricultural productivity is influenced by income levels and the size of cultivated land, where larger cultivated areas result in higher yields (Asnita et al., 2023). Within the broader framework of national food security, Mojokerto plays a strategic role as one of the primary rice barns in East Java Province.

Perum BULOG, as a government agency, bears a crucial responsibility in maintaining food price stability, particularly rice. Its roles include managing government rice reserves, procuring crops from local farmers, and distributing quality rice to the public (Kurnia et al., 2020). The Mojokerto Branch of BULOG serves as a strategic operational unit that faces several specific challenges, such as fluctuations in unhusked rice prices, inconsistent product quality, distribution limitations, and relatively low consumer interest in BULOG rice compared to commercial brands. Furthermore, the negative perception held by some consumers regarding the quality of BULOG rice weakens their loyalty, despite BULOG's distribution programs having reached various segments of society. Intensifying competition with premium rice brands in the retail market further underscores the urgency to understand the factors shaping consumer satisfaction and loyalty toward BULOG products at the regional level.

Several previous studies have examined the determinants of rice purchasing behavior across different contexts. Sembiring et al. (2025) found that consumers' decisions to purchase premium rice in Malang City were significantly influenced by income, lifestyle, and price, with price serving as the primary determinant. Similarly, Indriani & Imran (2025) identified that rice availability, distribution agility, and price interaction affect supply chain performance, where technological and economic changes also influence farmers' loyalty toward distributors. Lestari et al. (2024) concluded that product quality, price, and place exert positive and significant effects on purchasing decisions for rice in Cipanas Market, Cianjur Regency. In addition, Choerunnisa et al. (2024) observed that consumer behavior at Rumah Pangan Kita (RPK) in Semarang City was mainly affected by premium rice prices, substitute rice prices, income, and family size, while promotion and product information were typically sought independently by consumers. Likewise, Setiawan & Safitri (2019) demonstrated that product quality and price have a positive impact on consumer satisfaction, which subsequently influences repurchase intention for Batang Gadis rice at the agent level.

However, most of these studies have focused primarily on commercial rice products within general market contexts, leaving limited understanding of BULOG rice, which possesses distinctive socio-economic and distributional characteristics. Few studies have comprehensively analyzed how quality, price, service, location, and brand image interact to shape consumer satisfaction and loyalty toward BULOG rice, particularly in regions with strong agricultural potential such as Mojokerto Regency. This gap highlights the need for a more context-specific and empirical investigation to identify the key factors influencing consumer satisfaction and loyalty toward BULOG rice.

Therefore, this study aims to analyze the factors influencing consumer satisfaction and loyalty toward BULOG rice in Mojokerto Regency. The results are expected to contribute theoretically to the development of consumer behavior studies in the context of government-managed food products, as well as provide practical recommendations for Perum BULOG to enhance its product image, pricing strategy, and distribution effectiveness within increasingly competitive rice markets.

RESEARCH METHODS

This study was conducted at Perum BULOG Mojokerto Branch Office, purposively selected for its strategic role in distributing rice to the local community. The research period was from February to April 2025, focusing on consumers who had purchased or were currently purchasing rice from BULOG's Rumah Pangan Kita (RPK) agents. Since the total population was unknown, non-probability accidental sampling was used, and the sample size of 100 respondents was determined using the Cochran formula (Arif et al., 2017). The study employed both primary and secondary

data sources. Primary data were collected through interviews and direct field observations, while secondary data were obtained from BULOG internal reports, official publications, government databases, academic journals, scientific articles, and other relevant literature. The integration of these data sources provided a comprehensive understanding of the factors affecting consumer satisfaction and loyalty toward BULOG rice products, allowing the study to capture both practical consumer experiences and broader institutional insights.

Data were collected using a structured questionnaire designed to assess relationships among variables affecting consumer satisfaction and loyalty. Questionnaire items were adapted from previous studies and measured on a Likert scale (1 = strongly disagree to 5 = strongly agree). Before data collection, the questionnaire underwent expert validation and pilot testing to ensure clarity and reliability. The data were analyzed using a quantitative descriptive approach combined with Structural Equation Modeling–Partial Least Squares (SEM-PLS) to examine causal relationships among product quality, price, agent service, sales location, brand, consumer satisfaction, and loyalty. SEM-PLS was chosen for its ability to handle multivariate relationships effectively, especially in models with multiple dependent variables and relatively small sample sizes, making it suitable for this study.

This study employs seven main variables adopted from marketing and consumer behavior theories. These variables consist of Product Quality (X1), Price (X2), Agent Service (X3), Sales Location (X4), Brand (X5), Consumer Satisfaction (Y1), and Consumer Loyalty (Y2). The indicators for each variable are developed based on the theories proposed by marketing experts such as Kolter & Keller (2021) and Tjiptono (2019), who emphasize the importance of product quality, appropriate pricing, service, and sales location in influencing consumer satisfaction and loyalty. Each indicator reflects a specific dimension of these factors to ensure that the measurement is more accurate and relevant to the context of BULOG rice consumers in Mojokerto Regency.

Table 1. Research Variables and Indicators

Variable	Indicator	References
Product Quality (X1)	Rice color (X1.1) Rice cleanliness (X1.2) Broken grain percentage (X1.3) Rice tenderness (X1.4) Durability (X1.5) Aroma (X1.6) Taste (X1.7)	Kolter & Keller (2021); Tjiptono (2019); Naini et al. (2022); Aprelyani (2023)
Price (X2)	Price affordability (X2.1) Price-quality match (X2.2) Attractive discounts or promotions (X2.3)	Kolter & Keller (2021); Tjiptono (2019); Hira et al. (2024); Harisandi & Purwanto (2022)
Agent Service (X3)	Agent friendliness (X3.1) Service speed (X3.2) Ability to provide information (X3.3)	Kolter & Keller (2021); Tjiptono (2019); Naini et al. (2022); Aprelyani (2023)
Sales Location (X4)	Accessibility of sales location (X4.1) Adequate facilities (X4.2)	Kolter & Keller (2021); Tjiptono (2019); Karsiningsih et al. (2024); Al-Ardi et al (2024)
Brand (X5)	Customer perception of BULOG rice brand (X5.1) Price/promotion influence on brand switching (X5.2) BULOG brand quality (X5.3)	Kolter & Keller (2021); Tjiptono (2019); Karsiningsih et al. (2024); Al-Ardi et al (2024)
Consumer Satisfaction (Y1)	Product quality satisfaction (Y1.1) Product price satisfaction (Y1.2) Product suitability (Y1.3)	Kolter & Keller (2021); Tjiptono (2019); Naini et al. (2022); Aprelyani (2023)
Consumer Loyalty (Y2)	Repurchase intention (Y2.1) Product recommendation (Y2.2) Resistance to switching to competitors (Y2.3)	Kolter & Keller (2021); Tjiptono (2019); Naini et al. (2022); Aprelyani (2023)

Based on the literature review and theoretical framework, the following hypotheses were formulated:

H1: Product quality has a positive and significant effect on consumer satisfaction.

H2: Price has a positive and significant effect on consumer satisfaction.
H3: Agent service has a positive and significant effect on consumer satisfaction.
H4: Sales location has a positive and significant effect on consumer satisfaction.
H5: Brand has a positive and significant effect on consumer satisfaction.
H6: Consumer satisfaction has a positive and significant effect on consumer loyalty.

This study used SEM-PLS analysis with SmartPLS 4 to ensure all indicators met adequate validity and reliability. The results provided a foundation for confirming the instruments' feasibility in measuring the latent variables before structural analysis.
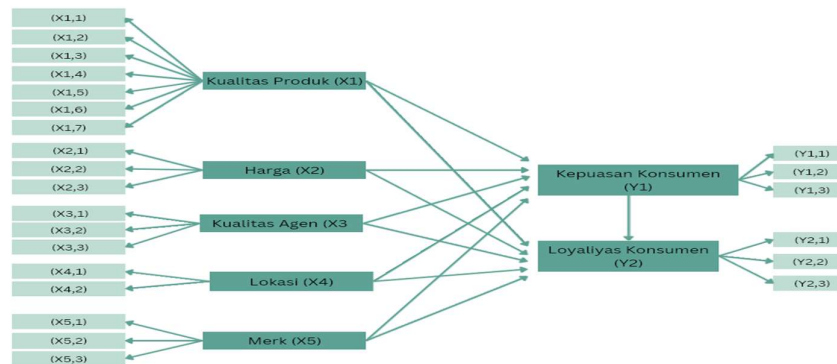

Figure 1. Model Framework

In this study, the evaluation process of the outer model was carried out through a series of statistical tests aimed at assessing construct validity both convergent and discriminant as well as examining the internal reliability of each construct being analyzed.

RESULTS AND DISCUSSION

Convergent Validity Test

Factor Loading Value

The test based on the factor loading value for each indicator must meet the required conditions. The criterion used to assess convergent validity is the outer loading value, which should be above 0.7 (Sofyani, 2025).

Table 2. Factor Loading Values

Research Variable	Indicator	Loading Factor	Requirement	Conclusion
Product Quality (X1)	X1.1	0.754		Valid
	X1.2	0.771		Valid
	X1.3	0.818		Valid
	X1.4	0.861	*Loading Factor > 0,7*	Valid
	X1.5	0.751		Valid
	X1.6	0.772		Valid
	X1.7	0.849		Valid
Price (X2)	X2.1	0.915		Valid
	X2.2	0.912	*Loading Factor > 0,7*	Valid
	X2.3	0.883		Valid
Agent Service (X3)	X3.1	0.828		Valid
	X3.2	0.870	*Loading Factor > 0,7*	Valid
	X3.3	0.854		Valid
Sales Location (X4)	X4.1	0.936	*Loading Factor > 0,7*	Valid
	X4.2	0.934		Valid
Bran (X5)	X5.1	0.816	*Loading Factor > 0,7*	Valid
	X5.2	0.864		Valid

Research Variable	Indicator	Loading Factor	Requirement	Conclusion
	X5.3	0.733		Valid
Consumer Satisfaction (Y1)	Y1.1	0.922	*Loading Factor* > 0,7	Valid
	Y1.2	0.933		Valid
	Y1.3	0.895		Valid
Consumer Loyalty (Y2)	Y2.1	0.851	*Loading Factor* >0,7	Valid
	Y2.2	0.899		Valid
	Y2.3	0.888		Valid

Source: Primary data processed (2025)

Table 2 shows that all indicators have factor loading values above 0.7. Therefore, all items are declared valid based on the loading factor approach. This indicates that the question items can be well represented by their respective variables and are significant, demonstrating that the discriminant validity criteria have been met. High factor loading values also reflect that these indicators strongly and consistently represent their respective constructs.

Average Variance Extracted (AVE) Value

The AVE (Average Variance Extracted) value measures how well a latent construct explains the variance of its indicators. An AVE above 0.5 indicates good convergent validity, meaning the construct explains more than 50% of the indicator variance (Hair & Alamer, 2022).

Table 3. Average Variance Extracted (AVE) Values

Research Variable	AVE	Requirement	Description
Product Quality (X1)	0.637	AVE > 0,50	Valid
Price (X2)	0.817	AVE > 0,50	Valid
Agent Service (X3)	0.724	AVE > 0,50	Valid
Sales Location (X4)	0.874	AVE > 0,50	Valid
Brand (X5)	0.650	AVE > 0,50	Valid
Consumer Satisfaction (Y1)	0.841	AVE > 0,50	Valid
Consumer Loyalty (Y2)	0.774	AVE > 0,50	Valid

Source: Primary data processed (2025)

The data in Table 3 show that all research variables have AVE values greater than 0.50. This indicates that each variable meets the AVE criterion, meaning each latent construct explains more than 50% of the variance of its indicators. Therefore, the variables can be considered to have good convergent validity and are suitable to proceed to the discriminant validity test.

Discriminant Validity Test

Table 4. Discriminant Validity Test (Fornell–Larcker Criterion)

	(X1)	(X2)	(X3)	(X4)	(X5)	(Y1)	(Y2)
Product Quality (X1)	0,798						
Price (X2)	0.201	0.904					
Agent Service (X3)	0.567	0.314	0,851				
Sales Location (X4)	0.349	0.360	0.511	0,935			
Brand (X5)	0.430	0.357	0.602	0.520	0,806		
Consumer Satisfaction (Y1)	0.553	0.490	0.645	0.564	0.516	0,917	
Consumer Loyalty (Y2)	0.576	0.435	0.684	0.619	0.666	0.691	0.880

Source: Primary data processed (2025)

Based on Table 4 (Fornell–Larcker Criterion), all constructs meet the discriminant validity criteria, as the square root of each construct's AVE value is greater than its correlations with other constructs. For instance, Product Quality (0.798) exceeds its correlation with Consumer Loyalty (0.576), Price (0.904) is higher than its correlation with Consumer Satisfaction (0.490), Agent Service (0.851) is greater than its correlation with Consumer Loyalty (0.684), and Sales Location (0.935) surpasses its correlation with Consumer Loyalty (0.619). Likewise, Brand (0.806), Consumer Satisfaction (0.917), and Consumer Loyalty (0.880) also have higher AVE square root values than their correlations with other constructs. These results confirm that the model fulfills discriminant validity and is suitable for further structural analysis.

Reliability Test

Table 5. Cronbach's Alpha and Composite Reliability Values

Research Variable	Cronbach's Alpha	Composite Reability	Requirement	Conclusion
Product Quality (X1)	0.904	0.924	*Loading Factor > 0,7*	Reliabel
Price (X2)	0.889	0.930	*Loading Factor > 0,7*	Reliabel
Agent Service (X3)	0.810	0.887	*Loading Factor > 0,7*	Reliabel
Sales Location (X4)	0.855	0.933	*Loading Factor > 0,7*	Reliabel
Brand (X5)	0.734	0.847	*Loading Factor > 0,7*	Reliabel
Consumer Satisfaction (Y1)	0.905	0.941	*Loading Factor > 0,7*	Reliabel
Consumer Loyalty (Y2)	0.854	0.911	*Loading Factor > 0,7*	Reliabel

Source: Primary data processed (2025)

Based on Table 5, all reflective constructs in this study demonstrate excellent reliability. This is indicated by Cronbach's Alpha values exceeding the threshold of 0.7, ranging from 0.734 to 0.905, showing a high level of internal consistency among indicators within each variable. Furthermore, the Composite Reliability values are also above 0.7, ranging from 0.847 to 0.941, confirming strong reliability. Therefore, the results indicate that the measurement model is reliable and suitable for subsequent analysis stages.

Inner Model

R² Value Test

The R² test measures how well exogenous variables explain endogenous ones, where higher R² values indicate stronger predictive power classified as weak (≤ 0.19), moderate (0.33), and substantial (≥ 0.67).

Table 6. R² value

Variabel	R-square	R-square adjusted
Kepuasan Konsumen (Y1)	0.592	0.570
Loyalitas Konsumen (Y2)	0.684	0.663

Source: Primary data processed (2025)

The adjusted R² value for Consumer Satisfaction (Y1) is 0.570, indicating that Quality, Price, Service, Location, and Brand explain 57% of its variance (moderate level, 0.33–0.67), while the adjusted R² for Consumer Loyalty (Y2) is 0.663, meaning the model explains 66.3% of loyalty variance with a substantial contribution. The remainder, namely 33.7%, comes from the influence of external variables not explained in this research.

Uji F square

The f-square test evaluates how much each exogenous construct contributes to changes in the endogenous variable, with effect sizes categorized as small (0.02), medium (0.15), and large (0.35) (Budiarsi, 2020).

Table 7. F square value

Variable		f-square
Quality	→ Customer Satisfaction	0.098
Quality	→ Customer Loyalty	0.056
Price	→ Customer Satisfaction	0.136
Price	→ Customer Loyalty	0.018
Agent Service	→ Customer Satisfaction	0.106
Agent Service	→ Customer Loyalty	0.048
Location	→ Customer Satisfaction	0.076
Location	→ Customer Loyalty	0.071
Brand	→ Customer Satisfaction	0.001
Brand	→ Customer Loyalty	0.107
Customer Satisfaction	→ Customer Loyalty	0.050

Source: Primary data processed (2025)

Based on the F-square test results, the quality variable shows an F-square of 0.098 on customer satisfaction and 0.056 on customer loyalty, both indicating a small effect. The price variable contributes 0.136 to customer satisfaction (close to medium) and 0.018 to customer loyalty (small effect). Agent service has an F-square of 0.106 on customer satisfaction and 0.048 on customer loyalty, both small effects. The location variable shows values of 0.076 and 0.071 for customer satisfaction and loyalty, respectively, also categorized as small. Meanwhile, the brand variable has a very small effect on customer satisfaction (0.001) but slightly higher on customer loyalty (0.107). Finally, customer satisfaction contributes a small effect (0.050) to customer loyalty.

Model Fit Test

Model fit test evaluates the overall suitability of the structural model, where an SRMR value below 0.08 indicates good fit, and values under 0.10 are still considered acceptable for further analysis.

Table 8. Model Fit Test

Parameter	*Saturated Model*	*Estimated Model*
SRMR	0.069	0.069

Source: Primary data processed (2025)

The obtained SRMR value of 0.069 is still considered feasible and can be accepted as a statistically fit model. Thus, the structural model is stated to have an adequate level of suitability for further analysis.

Hypothesis Testing

The hypothesis testing aims to confirm the proposed hypotheses, where relationships between latent variables are considered statistically significant if the p-value is less than 0.05 at a 5% significance level.

Table 9. Path Coefficient Test Results

Variabel	Original Sample	Sample Mean	Standard Deviation	T statistics	P values	Description
Product Quality → Consumer Satisfaction	0.245	0.255	0.096	2.561	0.010	Accepted
Product Quality → Consumer Loyalty	0.171	0.171	0.070	2.428	0.015	Accepted
Price → Consumer Satisfaction	0.260	0.246	0.097	2.683	0.007	Accepted
Price → Consumer Loyalty	0.088	0.088	0.079	1.116	0.265	Rejected
Agent Service → Consumer Satisfaction	0.298	0.285	0.121	2.458	0.014	Accepted
Agent Service → Consumer Loyalty	0.186	0.176	0.086	2.148	0.032	Accepted
Sales Location → Consumer Satisfaction	0.220	0.219	0.095	2.329	0.020	Accepted
Sales Location → Consumer Loyalty	0.194	0.194	0.071	2.728	0.006	Accepted
Brand → Consumer Satisfaction	0.024	0.042	0.125	0.195	0.845	Rejected
Brand → Consumer Loyalty	0.247	0.259	0.100	2.456	0.014	Accepted
Consumer Satisfaction → Consumer Loyalty	0.196	0.190	0.092	2.127	0.033	Accepted

Source: Primary data processed (2025)

Quality → Consumer Satisfaction

Based on SEM-PLS hypothesis testing, product quality has a significant positive effect on consumer satisfaction ($p = 0.010$). Consumers pay close attention to aspects such as cleanliness, texture, aroma, and storage durability of BULOG rice. Consistently high quality fosters trust in

BULOG as a reliable provider, meeting consumer expectations with every purchase. Quality perception goes beyond physical characteristics, reflecting assurance from BULOG as a government institution responsible for national food security. When quality is consistent, consumers feel confident about the product and consider it worth the price, which ultimately enhances overall satisfaction. In line with Kolter & Keller (2021) theory, satisfaction arises when product performance meets or exceeds expectations; hence, the better the quality of BULOG rice, the higher the satisfaction and the stronger the consumer's loyalty to the product.

High product quality reduces complaints and dissatisfaction. Most respondents reported that BULOG rice exceeds their expectations, making it a key factor in brand preference. Consistent quality prevents negative experiences and reinforces BULOG's image as a reliable, government-standard rice provider, distinguishing it from competitors. Quality-conscious consumers prioritize trusted products that ensure family food safety (Karsiningsih et al., 2024). Thus, product quality not only meets consumers' physical expectations but also creates a sense of safety that enhances emotional satisfaction. The results of this study are consistent with the findings of Rizki et al. (2024), who stated that the physical quality of rice is the main factor shaping buyer satisfaction, as it influences perceived value and trust in food products. Rizki et al. (2024) also emphasized that consumers who perceive a product as high-quality are less likely to switch to other brands, even when faced with competitive pricing.

Quality → Consumer Loyalty

Based on the hypothesis results, quality was found to have a strong influence on consumer loyalty, with a P-value of 0.015 (<0.05). This indicates that consumers who perceive Bulog rice as adequate or superior in quality tend to remain loyal rather than switching to other brands. Consistent product quality over time builds consumer trust and comfort, reinforcing loyalty. Product quality not only enhances satisfaction but also strengthens consumers' commitment to continue using the same product. In the case of Bulog rice, maintaining consistent quality fosters trust and long-term preference. Therefore, Bulog should focus on continuous quality improvement through better packaging, warehouse supervision, and distribution control (Mahanani, 2021). This finding aligns with Rizki et al. (2024), who emphasized that physical attributes such as aroma and cleanliness are key determinants of consumer loyalty in food products showing that consumers are more loyal to rice brands with consistent and expected quality.

Price → Consumer Satisfaction

The hypothesis analysis shows that price significantly affects consumer satisfaction, with a P-value of 0.007 (<0.05). This indicates that the more affordable Bulog rice is, the higher the consumer satisfaction. Affordable pricing aligned with consumers' purchasing power especially among lower-income groups creates a sense of security in meeting basic needs and strengthens the positive perception of Bulog as a provider of affordable yet quality rice. During price hikes, Bulog's stable rice prices provide relief, making consumers feel supported by government intervention through the Highest Retail Price (HET) policy. Competitive pricing plays a crucial role in shaping satisfaction, particularly for price-sensitive consumers. When Bulog's rice is priced equal to or lower than market alternatives without compromising quality, consumers perceive it as a beneficial transaction. Price satisfaction also builds trust, as consumers view Bulog as a socially responsible institution committed to protecting vulnerable groups. These findings align with Setiawan & Safitri (2019), who found a significant relationship between price and consumer satisfaction in staple food products showing that consumers feel satisfied when product value matches the price paid.

Price → Consumer Loyalty

Based on the test results, the price variable does not show a strong influence on Bulog rice consumer loyalty. This is proven by the P-value of 0.265 (<0.05). This means that, statistically, pricing is not strong enough to explain consumer loyalty. Even though price is an important factor in initial purchasing decisions, in the long term consumer loyalty does not solely depend on aspects of cheap or affordable prices. This condition shows that competitive prices do not necessarily create emotional attachment or repeat purchase habits. Consumers may feel satisfied with the price given, but are not necessarily encouraged to continue choosing the same product if there are other factors that are more dominant. These results are in line with research Asia et al. (2023) that loyalty cannot be formed only from the price aspect, because loyal consumers usually consider more emotional and experiential factors than purely transactional value.

Agent Services → Customer Satisfaction

The influence of agent services on consumer satisfaction is significant, with a P-value of 0.014 (<0.05). This indicates that service quality such as responsiveness, friendliness, transparency, and accessibility provided by Bulog's "Rumah Pangan Kita" agents plays an important role in shaping customer satisfaction. Consumers feel valued and comfortable when transactions are handled professionally, meaning that better service quality leads to higher satisfaction. Friendly and responsive agents enhance the overall buying experience, making customers more likely to remain satisfied. Several respondents noted that the comfort and good service at Bulog agents are key reasons for their satisfaction, in addition to affordable rice prices. Therefore, Bulog should strengthen agent capacity through customer service training to ensure consistent service standards across all "Rumah Pangan Kita" outlets in Mojokerto. These results align with Eviyani et al. (2023), who found that distribution-level service quality influences loyalty formation through satisfaction, as professional and communicative agents reinforce positive consumer perceptions.

Agent Services → Consumer Loyalty

Testing of the agent service hypothesis was also proven to have a positive and significant influence on consumer loyalty as indicated by a P-value of 0.032 (<0.05). Consumers who are satisfied with service tend to make repeat purchases and recommend products to others. Loyalty is formed not only because of product quality, but also positive interaction experiences during the purchasing process. Consumers who feel appreciated by agents tend to continue to return to the same place. This is because good service provides a positive experience that strengthens consumers' attachment to the product. Many respondents said that they became regular customers because Bulog agents treated them well, not just because of the price or product quality. Bulog can use these results as a reference to strengthen agent training, so that service quality becomes one of Bulog's assessment factors for future evaluations. This research is strengthened by Pratiwi (2025) who states that consumer loyalty is largely influenced by the quality of personal interactions between customers and providers. A pleasant interaction with an agent not only provides a positive shopping experience, but also strengthens the consumer's emotional bond with the product. Agents who are always ready to help consumers' needs will create a sense of attachment, so that consumers feel more comfortable shopping at the same place.

Location → Consumer Satisfaction

The hypothesis results show that location has a strong influence on consumer satisfaction, with a P-value of 0.020 (<0.05). Location refers to the ease of access and distance from the sales point to consumers. Strategically located Bulog agents or Rumah Pangan Kita (RPK) outlets significantly enhance consumer satisfaction. Easy-to-reach locations save consumers time and costs, increasing convenience, especially for busy households. Therefore, Bulog should optimize distribution through RPKs near residential areas, particularly in remote regions. This finding aligns with Ahmad & Mohammad (2020), indicating that ease of access to retail locations affects both satisfaction and loyalty, particularly where consumer mobility is limited. Conversely, difficult-to-reach locations reduce satisfaction due to inconvenience.

Location → Consumer Loyalty

The hypothesis results indicate that location strongly influences consumer loyalty, with a P-value of 0.006 (<0.05). A strategic location not only facilitates immediate purchases but also encourages repeat buying due to convenience and efficiency. The closer and more accessible the Bulog or RPK outlet, the higher the likelihood that consumers will continue buying from the same place. Easy access fosters habitual repurchasing, which gradually develops into loyalty, as consumers see no reason to switch to distant outlets or competing brands. Respondents cited location as a key reason for remaining loyal to Bulog rice, even when competitors offered similar prices. To maintain loyalty, Bulog should ensure strategic and evenly distributed outlets. This aligns with Rosa (2021), emphasizing that accessible, convenient locations foster repeated purchases and build consumer loyalty, offering a competitive advantage over less strategically located competitors.

Brand → Consumer Satisfaction

The test results showed that the influence of the brand on consumer satisfaction was declared not significant, with a P-value of 0.845 (>0.05). These results indicate that the existence or brand recognition of Bulog rice products is not strong enough to directly form or increase consumer satisfaction. Brands such as "SPHP Rice" or other names used in distribution programs are

sometimes not widely promoted, so they are less well known. Not all consumers know or realize that the rice they consume comes from Bulog. This finding supports the results of a previous study by Fairus et al. (2023) which concluded that brands cannot be used as the main factor in creating satisfaction, especially in the basic needs product category. Factors such as quality and affordability are more dominant than brand strength

Brand → Consumer Loyalty

The Bulog brand has also been proven to have a significant effect on loyalty as indicated by the P-value of 0.014 (<0.05). This means that the stronger consumers' positive perceptions of the Bulog brand, the more likely they are to be loyal. Consumers who trust a brand will feel more comfortable making repeat purchases, because they believe the product they purchased is safe and secure. This trust is an important basis for building long-term loyalty. The Bulog brand, which is synonymous with the government, creates a sense of pride and security for some consumers because the rice has passed good quality control late. Research respondents revealed that Bulog's big name makes them reluctant to switch to other brands, because there is no guarantee that other brands can offer cheap and consistent quality and prices like Bulog. This research is strengthened by Maharani et al. (2023) findings which show that brands owned by public institutions have an influence on loyalty because consumers associate them with credibility, price stability, security guarantees and availability.

Consumer Satisfaction → Consumer Loyalty

Consumer satisfaction has a significant positive effect on loyalty (P = 0.033), indicating that highly satisfied consumers are more likely to remain loyal to Bulog rice. Satisfaction shapes repeat purchase behavior and overall consumer experience, as loyal behavior reflects both product preference and the perceived quality of the purchasing experience (Rasyid & Fianto, 2023). Therefore, creating and maintaining satisfaction is a strategic key in building long-term loyalty to Bulog rice products. The satisfaction felt by consumers after purchasing and using Bulog rice will be the main foundation for loyalty. Satisfied consumers will tend to buy the same product repeatedly and will be reluctant to switch to another brand. This relationship occurs because satisfaction creates confidence that the product has met or exceeded expectations, so consumers feel no need to take the risk of trying other products that may not be as good as their experience with Bulog rice. This is in line with Kolter & Keller (2021) theory which states that satisfaction is an important prerequisite for building long-term loyalty. This research is in line with the theory and findings of Siswadi et al. (2020) which shows that satisfaction is an important mediating variable that forms loyalty, especially for products that are consumed regularly such as rice.

CONCLUSIONS

The findings confirm that product quality, agent service, and sales location significantly influence consumer satisfaction and loyalty toward BULOG rice. High-quality products, when consistently maintained, strengthen consumer trust and foster long-term loyalty. Meanwhile, friendly and responsive service, coupled with accessible sales points, enhances the overall customer experience. Although price positively affects satisfaction, it is not a dominant factor in shaping loyalty, indicating that consumers value quality and convenience more than affordability. The brand variable, while not significantly influencing satisfaction, contributes to loyalty formation due to BULOG's strong institutional image. In light of these findings, BULOG is advised to reinforce its brand identity through comprehensive and educational marketing campaigns, highlighting product quality, service excellence, and national trust. Strengthening brand perception can enhance consumer attachment and sustain loyalty across broader market segments.

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