(RESEARCH ARTICLE)

The glue of trader loyalty: The role of product quality and price fairness through satisfaction in the context of Putu Ayu brand rice in East Java Province

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Abstract

The increasingly fierce competition in the rice industry has an impact on the number of choices offered to customers. The aim of this research is to analyze the influence of product quality and price fairness on the loyalty of Putu Ayu rice traders through satisfaction. This research is causality research with the research object in East Java Province. The research sample was a Putu Ayu rice trader with a minimum business experience of 1 year. Research data was obtained through questionnaires distributed directly. Research data was tested via AMOS. The research results show that product quality and satisfaction influence trader loyalty. However, price fairness has no effect on loyalty. Meanwhile, product quality and price fairness influence satisfaction. Meanwhile, satisfaction is able to significantly mediate the influence of product quality and price fairness on loyalty.

Keywords: Product Quality; Price Fairness; Satisfaction; Loyalty

1. Introduction

Loyalty plays an important role in customer retention. Loyal customers are more likely to continue buying from a brand over time. Loyalty is a firmly held commitment by customers to repurchase a preferred product or service in the future (Oliver, 1999). Marketing costs incurred by the company are more efficient when it is able to retain existing customers compared to attracting new customers. Loyal customers tend to spend more and require less marketing and promotional efforts to maintain their loyalty.

Customer loyalty consists of attitudinal and behavioral approaches (Rooij, 2015), or a combination of attitudes and behaviors (Shen & Yahya, 2021). According to Vlachos & Lin (2014)attitudinal loyalty is described as psychological and sentimental loyalty to a brand. This perspective focuses on customers' emotional relationships, trust, and positive attitudes towards brands that lead to customers' cognitive and affective attachments to brands, including their beliefs, attitudes, and preferences. Loyalty behavior leads more to repeat purchases of the same product. Loyalty behavior is characterized by customers consistently choosing to repurchase the same product or service from a particular brand or company (Vlachos & Lin, 2014). The behavior-based perspective focuses on concrete actions and observed behaviors that demonstrate customer loyalty. Customer loyalty has an important role in improving business performance and sustainability because it will not be affected by offers from competitors on similar products (Albari & Kartikasari, 2019).

Customer loyalty in rice is an important factor for the success and growth of industries including the rice industry in today's competitive market. Rice is the main food crop for more than half of the world's population, providing 25% of the energy for more than 3 billion people worldwide and it is consumed as a staple food (Tong et al., 2019). Rice is an important source of energy and nutrients for humans (Peng et al., 2014).

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Currently, customers are faced with a wide selection of types of rice and varying prices that have the potential for customers to move to other brands. This condition is experienced by CV Suko Raharjo. CV Suko Raharjo is a company that produces various types of rice under the Putu Ayu brand, such as: type C4, IR 64, pandan wangi with quality, medim, semi-premium and premium. The company was established in 2007 in East Java Province, East Java Province. Currently, the company is facing serious problems, especially regarding customer loyalty. This is shown by the company's rice sales which have decreased significantly. The data shows that the total sales in 2022 were 1,742 tons and decreased when compared to 2021 of 2,315 tons and 2020 of 2,372 tons. In addition, in 2022 there were 3 stores out of 44 wholesale stores that stopped cooperating in the sale of Putu Ayu rice.

The customer's switch to another brand is due to the better quality of the rice compared to Putu Ayu rice at a relatively cheaper price. In the context of this study, the customers in question are traders who buy Putu Ayu rice and resell it to end customers. Referring to the interview results, it shows that loyalty problems are caused by two important factors, namely product quality and price unfairness. According to Albari & Kartikasari (2019) someone who is loyal is usually not affected by prices and products offered by competitors. Loyal customers will be loyal to use the product in the future.

One of the key determinants of customer loyalty to rice products is the consistent delivery of high-quality offerings (Xhema et al., 2018). Product quality encompasses various aspects, including the taste, texture, aroma, and appearance of rice. Customers expect their rice to be of superior quality, free of impurities, and capable of providing a satisfying culinary experience. When rice consistently meets or exceeds these expectations, customers are more likely to develop brand loyalty. Previous studies show that product quality has a significant effect on product loyalty (Hakim, 2021; Albari & Kartikasari, 2019; Xhema et al., 2018). These results contradict research by Naini et al. (2022); Jannah et al. (2019); Wantara & Tambrin (2019) that product quality has no effect on customer loyalty.

Another determinant of customer loyalty is price fairness. Pricing is an important aspect of the marketing mix, as it directly affects customers' value perceptions (Kotler & Keller, 2016). Fair pricing implies that the price charged for rice products is reasonable and aligned with the perceived value and quality. According to Kaura et al. (2015) customers are more likely to show loyalty when they perceive the price to be fair, indicating a balance between the benefits derived from the product and its cost. Several previous studies have shown that price fairness can have a significant effect on customer loyalty (Shen & Yahya, 2021; Albari & Kartikasari, 2019; Kaura et al., 2015; Asadi et al., 2014). Contrary to research Shahzad et al. (2021) that price fairness has no effect on customer loyalty.

The results showed that the relationship between product quality and price fairness to customer loyalty is still inconsistent with the results. Therefore, it is necessary to conduct further research using mediating variables to test the relationship between the two. Customer satisfaction is the result of a positive assessment of the customer on the product provided (Carranza et al., 2018). Customers are satisfied with a product when the product's performance matches or exceeds their expectations (Abu-Alhaija et al., 2019). In this study, customer satisfaction acts as a mediator in the relationship between product quality and price fairness on loyalty. Satisfied customers are more likely to develop loyalty to the brand and show positive behavior, such as repeat purchases and recommendations to others (Kotler & Keller, 2016).

Customers who have high product quality will usually tend to lead to increased satisfaction with the product or service. This satisfaction, in turn, contributes to customer loyalty, as satisfied customers are more likely to repurchase, recommend the product to others, and remain loyal to the brand over time. Previous studies show that satisfaction is able to mediate the relationship between product quality and customer loyalty (Abu-Alhaija et al., 2019; Jannah et al., 2019).

Price fairness is closely related to customer trust. When customers perceive prices to be fair, it increases their trust in the brand or business. Fair pricing practices create a sense of transparency, honesty, and integrity, leading to stronger customer satisfaction relationships and leading to loyalty. Previous studies show that satisfaction is able to mediate the relationship between price fairness and customer loyalty (Ahmed et al., 2022; Kaura et al., 2015).

Exposure to the problems that occur at CV Suko Raharjo regarding the loyalty of traders who have decreased, it is important to explore trader loyalty. The study focuses on Putu Ayu brand rice products and aims to specifically investigate the effect of product quality and price fairness on trader loyalty with satisfaction as a mediating factor. This study aims to contribute to the existing literature on trader loyalty and provide insights that can inform brand marketing strategies for rice products. By understanding the underlying mechanisms that drive loyalty, companies can better tailor their product, price, and merchant satisfaction efforts to increase merchant loyalty and gain a competitive advantage in the marketplace.

2. Literature Review

2.1. Stimulus-Organism-Response (S-O-R) Theory

Stimulus-Organism-Response (S-O-R) theory argues that the environment of mental stimuli influences behavior through the intervention of affective and cognitive organisms (Hsu et al., 2021; Jacoby, 2002) . First, the stimulus component refers to influences that arouse a person (Kamboj et al., 2018).. Stimulus is the urge to join a community that has an impact on customers' lives. The stimulus factors used in this study are product quality and price fairness in Putu Ayu rice. Second, the organism describes the cognitive and affective state of the customer and includes all processes that intervene between the stimulus and the customer's response. (Kamboj et al., 2018). Satisfaction is an affective factor that can intervene between product quality and price fairness on Putu Ayu rice with customer loyalty. Finally, response means the result of customer involvement in the brand community, which includes how customers behave towards the brand (Kamboj et al., 2018). (Kamboj et al., 2018).. Previous research has proven that customer behavior in terms of brands is to build loyalty to the brand (Schau et al., 2009). (Schau et al., 2009). In this study, customer loyalty to Putu Ayu rice is a reaction to the presence of stimulus (product quality and price fairness) and intervening (satisfaction) factors.

2.2. The Effect of Product Quality on Merchant Loyalty

A successful marketing formula seen from the future of the product should be as close as possible to the benefits that the merchant is looking for (Agyekum et al., 2015). Product quality is an important thing that marketers need to pay attention to. Products are considered quality because they meet the requirements or are standardized (Kotler & Keller, 2016). (Kotler & Keller, 2016). A quality product is a product that successfully meets the needs and desires of the trader, so that the trader's goals can be met after consuming the product. In the context of rice products, the quality of rice must be really considered by marketers. High-quality rice, such as unbroken, white, has a low moisture content, and does not have fleas that are neatly packaged can encourage traders to be loyal to consume the rice. This can lead to trader loyalty (Albari & Kartikasari, 2019). Previous studies show that product quality can have a significant effect on trader loyalty (Hakim, 2021; Rimawan et al., 2017). Referring to this, the research hypothesis can be formulated as follows.

H_1 : Product quality has a positive effect on merchant loyalty

2.3. The Effect of Product Quality on Merchant Satisfaction

Product quality based on users' view of quality (Xu, 2017). Product quality is the ability of a product to meet or exceed the expectations of merchants (Hoe & Mansori, 2018). (Hoe & Mansori, 2018). When companies are able to produce quality rice products and are superior to competitors, it makes traders feel happy. The pleasure experienced by traders occurs because the rice products consumed are of high quality and have met or exceeded their expectations. Merchants in this case are more likely to be satisfied with their purchases (Albari & Kartikasari, 2019). Similar to the study by Ing et al. (2020); Xu (2017) that product quality can significantly increase merchant loyalty. Referring to this, the research hypothesis can be formulated as follows.

H_2 : Product quality has a positive effect on merchant satisfaction

2.4. The Effect of Price Fairness on Merchant Loyalty

Fair pricing is an important factor in competitive business competition (Kotler & Keller, 2016). Price fairness refers to the perceived difference in price compared to competitors' prices in the same industry. (Shahzad et al., 2021).. In the context of rice pricing, traders believe that they are paying a fair price, they are more likely to feel happy because the price offered on rice products is in accordance with the quality of the product and the market price. This indicates that customers feel that the rice products purchased have met and even exceeded their expectations, so they are satisfied with their purchase. Customers who believe in the fairness of their prices are more likely to be satisfied. (Bei & Chiao, 2006). Research results by Shen & Yahya (2021); Kaura et al. (2015) that price fairness has a significant effect on customer satisfaction. Referring to this, the research hypothesis can be formulated as follows.

H_3 : Price fairness has a positive effect on trader satisfaction

2.5. The Effect of Price Fairness on Merchant Loyalty

Price as an external cue used by customers to determine the quality of a product or service. (Ahmed et al., 2022). Shahzad et al. (2021) said that perceived price fairness is evident when the perceived differences between prices are healthy, adequate, or justified. Merchants perceive that the prices they pay for rice products are fair and reasonable,

positively influencing their attitudes and behaviors towards the brand. Customers are more likely to choose rice brands that offer fair prices based on comparisons with competitors' prices (Xia et al., 2004). (Xia et al., 2004). Customers believe that the rice brand does not take advantage of them at a reasonable cost which leads to increased customer loyalty (Bei & Chiao, 2006). (Bei & Chiao, 2006). Previous research shows that price fairness has a significant impact on customer loyalty. (Ahmed et al., 2022; Dhisasmito & Kumar, 2020). Referring to this, the research hypothesis can be formulated as follows.

H_4 : Price fairness has a positive effect on trader loyalty

2.6. The Effect of Satisfaction on Merchant Loyalty

Merchant satisfaction is recognized as a highly significant predictor of merchant loyalty and has maintained a prominent status in the loyalty literature. (Shahzad et al., 2021).. In the context of rice products, traders will feel satisfied if the purchased rice cooks up fluffy, whole, and white. Merchants feel that the benefits obtained from purchasing this rice are in line with or even exceed their expectations, which encourages them to become increasingly loyal. Loyal traders have a loyal attitude that will make repurchases and recommend to others (Ahmed et al., 2022). (Ahmed et al., 2022). The results of previous research show that satisfaction has a significant effect on trader loyalty (Abu-Alhaija et al., 2022). (Abu-Alhaija et al., 2019; Kaura et al., 2015). Referring to this, the research hypothesis can be formulated as follows.

H_5 : Satisfaction has a positive effect on merchant loyalty

2.7. The Effect of Product Quality on Merchant Loyalty Mediated by Satisfaction

The main goal of a company is to make loyal merchants. In the marketing of rice products, this goal can be achieved by making quality rice products. These products can be produced to a standard and meet the needs and desires of merchants (Hakim, 2021). When companies can produce high-quality rice, merchants are likely to feel satisfied. When they buy and consume rice with comparable, even greater benefits than expected, they will usually be happy and result in loyal traders. Previous research proves that satisfaction is able to mediate the relationship between product quality and trader loyalty. (Hakim, 2021; Abu-Alhaija et al., 2019; Jannah et al., 2019). Referring to this, the research hypothesis can be formulated as follows.

H_6 : Satisfaction is able to mediate the relationship between product quality and merchant loyalty

2.8. The Effect of Price Fairness on Merchant Loyalty Mediated by Satisfaction
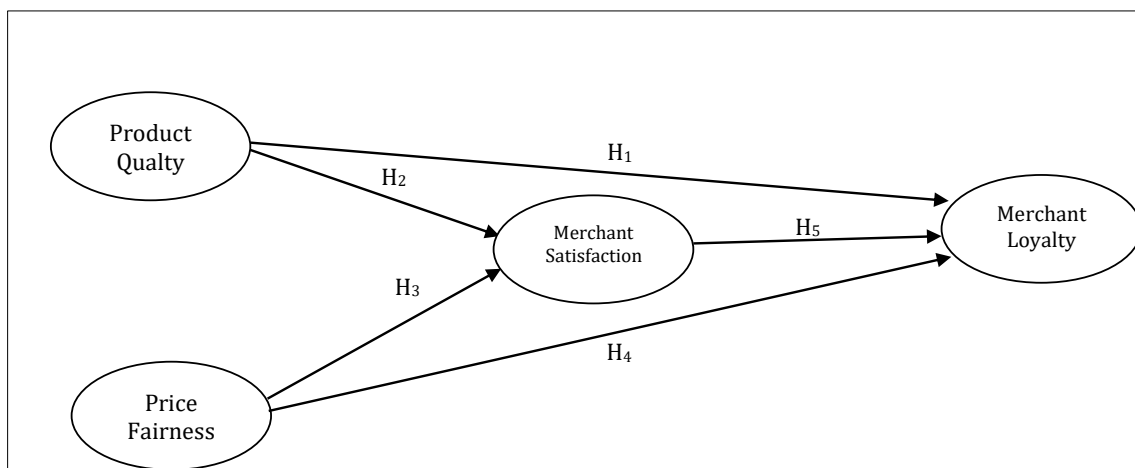

Figure 1 Framework Model

Price has traditionally been considered a determinant of merchant satisfaction, as reflected in the value of certain services (Han et al., 2020). In the marketing of rice products, price fairness is an important factor that traders consider by comparing with the price of rice products offered by competitors. A price that is fair relative to the market price can encourage traders to be more satisfied because they get greater benefits from the product. This can encourage them to be loyal to use the product in the future, thus forming loyal traders (Ahmed et al., 2022). (Ahmed et al., 2022). This shows that satisfaction is a mediator between price fairness and merchant loyalty. Previous studies show that

satisfaction is able to significantly mediate between price fairness and merchant loyalty. (Shen & Yahya, 2021; Ahmed et al., 2022; Kaura et al., 2015). Referring to this, the research hypothesis can be formulated as follows.

H_7 : Satisfaction is able to mediate the relationship between price fairness and merchant loyalty

3. Methods

This research is a type of causality research. Causality research seeks to determine how variables or events interact with each other (Creswell, 2018). (Creswell, 2018). This test aims to create a causal relationship by determining whether changes in one variable have an impact on changes in other variables. The population in this study were all Putu Ayu brand rice product traders consisting of 41 wholesale stores and 178 retail stores spread across East Java Province. The sample in this study used purposive sampling technique based on certain criteria. The criteria in this study are business customers, namely Putu Ayu rice wholesale and retail stores in East Java Province, which have been partners for more than 1 year. The number of samples that met the research sample criteria was 211 samples consisting of 39 wholesale stores and 172 retail stores. While the number of samples that did not meet the criteria was 8 samples consisting of 2 wholesale stores and 6 retail stores. Here are the number of samples that meet the research criteria.

Table 1 Research Sample

Criteria	Total
Wholesale Store	41
Retail Store	178
Sample Quantity	219
Grocery stores that are partners < 1 year	(2)
Retail stores that are partners < 1 year	(6)
Number of samples that meet the criteria	211

Research data was obtained through the distribution of questionnaires that were distributed directly. The questionnaire was divided into two sections. The first part each contains questions about the respondents' demographics, such as gender, age, education, and occupation. The second part contains statements about respondents' perceptions of the variables of product quality, price fairness, customer satisfaction, and customer loyalty. To make the process of processing and analyzing research data easier, the questionnaires were distributed directly through questionnaire sheets when distributing Putu Ayu rice to wholesale and retail stores. The Structural Equation Modeling (SEM) program is used to study the relationship between complex variables. This study was statistically tested with the AMOS program in three stages: model fit test; and research hypothesis testing. The assessment criterion is that the p-value ≤ 0.05, so the hypothesis is accepted. However, if the p-value > 0.05, the hypothesis is rejected.

Table 2 Operational Definition and Measurement of Research Variables

Variables	Operational Definition	Indicator	Source
Product quality	Physical, chemical, organoleptic (sense-perceived), and functional characteristics of Putu Ayu rice that affect its value and utility used in various food dishes.	Packaging	Čater & Čater (2010)
		Standard quality	
		Product reliability	
		Quality consistency	
Price fairness	The principles underlying the pricing of Putu Ayu rice are considered fair, reasonable, and in accordance with the value provided to the trader.	Affordable	Dhisasmito & Kumar (2020)
		Reasonable price	
		Price is worth the taste	
		Overall the pricing options are superior to others	
Satisfaction		Fun experience	

Loyalty	The level of satisfaction felt by traders after they use Putu Ayu rice that exceeds trader expectations	In line with expectations	Dhisasmito & Kumar (2020)
		Overall satisfied	
Loyalty	Merchants consistently choose and support Putu Ayu rice over a long period of time	Recommendation	Dhisasmito & Kumar (2020)
		Provide positive information	
		Buyback	

4. Results and discussion

4.1. Respondent Characteristics

This study analyzes the effect of product quality and price fairness on customer loyalty mediated by customer satisfaction on Putu Ayu brand rice in East Java Province. The research sample that met the criteria was 211 respondents who were merchant partners of CV Suko Raharjo. To find out the characteristics of respondents, researchers conducted descriptive statistical analysis which can be seen in Table 3. The results of the study in Table 3 show that most respondents are male as many as 167 respondents (79.1%), trading for 1 year to 5 years as many as 93 respondents (44.1%) with ages 46 years to 60 years as many as 80 respondents (37.9%), and most have a high school / vocational high school education as many as 136 respondents (64.%).

Table 3 Respondent Characteristics

Description	Category	Frequency	%
Gender	Male	167	79.1
	Female	44	20.9
Length of business	1-5 years	93	44.1
	6-10 years	92	43.6
	>10 years	26	12.3
Age	18-30 years old	7	3.3
	31-45 years old	74	35.1
	46-60 years old	80	37.9
	>60 years	50	23.7
Education	Not graduated from elementary school	16	7.6
	Elementary School Equivalent	27	12.8
	Junior High School	32	15.2
	SMA/SMK Equivalent	136	64.5
Total		211	100.0

4.2. CFA Test Results

The CFA test was conducted to analyze the feasibility of the instrument from each item tested. This test uses three tests, namely: Convergent Validity test (loading factor ≥ 0.50); Construct Reliability (CR ≥ 0.70); and Variance Extracted (AVE ≥ 0.50). The Convergent Validity test results in Table 4 show that overall, each item of the product quality variable; price fairness; satisfaction; and customer loyalty has a loading factor > 0.50. These results indicate that the data meets the Convergent Validity criteria. The overall Construct Reliability test results have a CR value > 0.70, which means that the research data meets the Construct Reliability criteria. The Variance Extracted test results show that overall it has an AVE value > 0.50, which means that the data is declared to meet the Variance Extracted criteria.

Table 4 CFA Test Results

Variables	Item	Loading Factor	Cronbach Alpha	AVE	Conclusion
Product Quality	KP1	0.617	0.743	0.548	Valid and Reliable
	KP2	0.667			
	KP3	0.678			
	KP4	0.627			
Price Fairness	KH1	0.676	0.787	0.639	Valid and Reliable
	KH2	0.721			
	KH3	0.663			
	KH4	0.71			
Satisfaction	KEP1	0.681	0.732	0.567	Valid and Reliable
	KEP2	0.727			
	KEP3	0.663			
Loyalty	LOY1	0.669	0.702	0.509	Valid and Reliable
	LOY2	0.652			
	LOY3	0.669			

4.3. GoF Test Results

Structural evaluation of the model using GoF. The GoF test aims to test whether the research model has model fit. We conducted the GoF test with several approaches. The results in Table 5 show that the Chi Square value (89.557 < 91.670); probability level (0.068 > 0.05); GFI (0.944 > 0.90); AGFI (0.918 > 0.90); CMIN/DF (1.261 < 2.00). 0.90); CMIN/DF (1.261 < 2.00); CFI (0.980 > 0.90); TLI (0.975 > 0.90); RMSEA 0.035 < 0.08) which means the research data is in the good fit category. According to Hair et al. (2010) if the research data is declared good fit, it has fulfilled the structural model and also meets the CFA criteria, so this research data is relevant for hypothesis testing.

Table 5 GoF Test Results

Goodnes of Fit Index	Critical Limit	Results	Conclusion
Chi Square	91.670	89.557	Good fit
Probability	≥ 0.05	0.068	Good fit
GFI	≥ 0.90	0.944	Good fit
AGFI	≥ 0.90	0.918	Good fit
CMIN/DF	≤ 2.00	1.261	Good fit
CFI	≥ 0.90	0.980	Good fit
TLI	≥ 0.90	0.975	Good fit
RMSEA	≤ 0.08	0.035	Good fit

Description: 2χ - Chi Square is expected to be small. 2χ 0.05 with df = 71 is 91.670

4.4. Hypothesis Test Results

After the data has met the criteria for normality, CFA and GoF, the next step is to conduct hypothesis testing. Hypothesis testing is carried out to analyze the influence between variables with nine hypotheses proposed. The P-Value value is the basis for research criteria whether the hypothesis is accepted or rejected. The hypothesis is accepted if the P-Value ≤ 0.05. While the beta coefficient value is to see the direction of influence and the amount of influence between variables.

The research results in Table 6 show that the effect of product quality on trader loyalty has a value of β = 0.500 with a P-Value of 0.002 <0.005. This means that product quality has a positive effect on trader loyalty, so H1 is accepted. Meanwhile, product quality on trader satisfaction has a value of β = 0.599 with a P-Value of 0.000 <0.005, which means that product quality has an effect on trader satisfaction, so H2 is accepted.

Table 6 Hypothesis Test Results

					β	P	Conclusion
Loyalty	<---	Product_Quality			0.500	0.002	H1 accepted
Satisfaction	<---	Product_Quality			0.599	0.000	H2 accepted
Satisfaction	<---	Fairness_Price			0.374	0.001	H3 accepted
Loyalty	<---	Fairness_Price			-0.155	0.183	H4 rejected
Loyalty	<---	Satisfaction			0.552	0.002	H5 accepted
Loyalty	<---	Satisfaction	<---	Product_Quality	0.137	0.016	H6 accepted
Loyalty	<---	Satisfaction	<---	Fairness_Price	0.094	0.028	H7 accepted
Squared Multiple Correlations							
Satisfaction					0.673		
Loyalty					0.860		

The results showed that the effect of price fairness on satisfaction value β = 0.374 with a P-Value of 0.001 <0.05. This means that price fairness has a significant effect on trader satisfaction, so H3 is accepted. Meanwhile, price justice on loyalty has β = 0.155 with a P-Value of 0.183> 0.05, which means that price justice has no effect on trader loyalty, so H4 is rejected. The results of research on the effect of satisfaction on trader loyalty have β = 0.552 with a P-Value of 0.002 <0.05, which means that satisfaction has a significant effect on trader loyalty, so H5 is accepted. In mediation through trader satisfaction, the results showed that product quality has β = 0.137 with a P-value of 0.016 <0.05. This means that trader satisfaction mediates the effect of product quality on trader loyalty significantly, so H6 is accepted. While price fairness has β = 0.094 with a P-Value of 0.028 <0.05, which means that satisfaction is able to mediate the effect between product quality and trader loyalty, so H7 is accepted. In R^2 shows that trader satisfaction can be explained by product quality and price fairness by 67.3%, while the remaining 32.7% is explained by other variables not studied. Meanwhile, trader loyalty is explained by the variables of product quality, price fairness, and trader satisfaction by 86.60%, while the remaining 13.4% is explained by other variables.

5. Discussion

5.1. The Effect of Product Quality on Merchant Loyalty

Product quality has a very important role in shaping trader loyalty. The results showed that product quality has a significant effect on trader loyalty, so H1 is accepted. This finding is supported by previous research that loyalty can be formed by the quality of products produced by the company (Hakim, 2021). (Hakim, 2021). In a competitive market environment, high-quality products can be a differentiating factor that makes Putu Ayu rice stand out compared to its competitors. Through memorable and informative packaging, maintaining the quality of the rice including moisture content is the company's way of maintaining the quality of the rice. This advantage can increase the loyalty of traders who choose quality over other brands. (Kotler & Keller, 2016). Merchants will be more loyal because the product is very profitable and does not disappoint customers who buy rice from their stores. Agreeing with the findings by Rimawan et al. (2017) that product quality can significantly increase customer loyalty.

5.2. The Effect of Product Quality on Merchant Satisfaction

Product quality has a direct impact on customer satisfaction. The results showed that the product quality of Putu Ayu rice has a significant effect on customer satisfaction. These results are consistent with the hypothesis proposed so that H2 is accepted. This means that the quality of Putu Ayu rice can fulfill the expectations of rice traders. Previous findings by Ing et al. (2020); Xu (2017) that product quality can significantly increase customer satisfaction. In this case, Putu Ayu rice products that are always maintained often offer a better user experience. Good quality in terms of taste, texture, aroma, and appearance including maintaining consistent moisture content in accordance with the standard can enhance

the positive experience of the merchant. Such rice tends to be easier to sell and desirable to the merchant's customers. Customer satisfaction with product quality can increase sales, strengthen merchants' relationships with their customers, and increase merchants' satisfaction with successful sales.

5.3. The Effect of Price Fairness on Merchant Satisfaction

Price fairness plays an important role in building a positive relationship between producers and traders. The results showed that price fairness had a significant positive effect on trader satisfaction, so H3 was accepted. These results are in line with research by Shen & Yahya (2021); Kaura et al. (2015) that satisfaction can be influenced by price fairness. In this study, Putu Ayu rice has set a fair price. This fair price can empower traders to do their business better. They feel more valued as business partners and feel more motivated to invest time and effort in selling the producer's products. Fair pricing can prevent merchants from charging too high a price to their customers. Fair pricing can help prevent customer dissatisfaction that can arise if they feel the price they pay is not proportional to the value of the product. In this case, merchants feel that fair pricing can increase their satisfaction (Bei & Chiao, 2006).

5.4. The Effect of Price Fairness on Merchant Loyalty

The results showed that price fairness had no effect on trader loyalty, so H4 was rejected. This means that the size of Putu Ayu rice pricing does not have an impact on trader loyalty. These results are supported by research Shahzad et al. (2021) that price fairness has no impact on customer loyalty. These results contradict some of the findings by Shen & Yahya (2021); Albari & Kartikasari (2019) that price fairness affects customer loyalty. In this study, Putu Ayu rice price policy has been adjusted to the market and competes with other similar products. However, traders may consider the price as fair and not a major factor in their decision to keep doing business with the brand. Merchants may see Putu Ayu rice as a brand that has a certain value or image that keeps it in demand by customers, regardless of price. Brand value, reputation, and positive image may be the main factors influencing merchant loyalty.

5.5. The Effect of Satisfaction on Merchant Loyalty

The results show that traders' satisfaction with Putu Ayu rice can have a significant impact on their loyalty. These results are in accordance with the research hypothesis, so H5 is accepted. These results are in line with several previous researchers who stated that there is a significant influence between satisfaction and loyalty. (Abu-Alhaija et al., 2019; Kaura et al., 2015). This study shows that trader satisfaction is related to consistent and good quality product availability. In the course of Putu Ayu rice being stably available and of good quality at all times, traders can fulfill their customers' demands well, and increase customer satisfaction. This makes traders feel satisfied because they have met their expectations which encourages them to remain loyal to buy and sell to customers.

5.6. The Effect of Product Quality on Merchant Loyalty Mediated by Satisfaction

Merchant satisfaction is a mediator variable in the influence between product quality and merchant loyalty. The results showed that satisfaction mediated the effect between product quality and merchant loyalty significantly, so H6 was accepted. These results are supported by previous research, such as that conducted by Hakim (2021); Abu-Alhaija et al. (2019) that there is a significant influence between the quality of Putu Ayu rice products and loyalty through satisfaction. Jannah et al. (2019) also found that satisfaction is able to mediate between product quality and loyalty. In this study, satisfaction plays an important role as a mediator between product quality and merchant loyalty. This means that product quality not only has a direct impact on loyalty, but also affects loyalty through satisfaction. In this case, the product quality of Putu Ayu rice adds value to the merchant's business, ensures the reliability of the products sold, and builds a positive reputation in the eyes of the merchant's customers which encourages the merchant to feel satisfied. Satisfaction arises due to the quality of the product provided by the manufacturer or distributor. Satisfied merchants tend to feel happy with their business relationship and have a positive perception of Putu Ayu rice products. This can indirectly increase trader loyalty. Abu-Alhaija et al. (2019) that there is a significant influence between the quality of Putu Ayu rice products and loyalty through satisfaction.

5.7. The Effect of Price Fairness on Merchant Loyalty Mediated by Satisfaction

The results showed that satisfaction was able to mediate the effect between price fairness and customer loyalty significantly, so H7 was accepted. These results are supported by previous research which states that price fairness has a significant effect on loyalty through satisfaction. (Shen & Yahya, 2021; Ahmed et al., 2022; Kaura et al., 2015). In this study, price fairness in Putu Ayu rice can create trust between producers and traders. The findings show that the pricing of Putu Ayu rice is considered fair compared to the price of rice offered by competitors. Traders feel that the price they pay is fair for the quality of the product received, so they feel satisfied with the pricing. The satisfaction felt by traders

arises because they feel happy with the fair pricing. The pricing makes it easier for traders to sell Putu Ayu rice to end consumers, resulting in trader loyalty to make future purchases.

6. Conclusion

Referring to the discussion that has been presented previously, it can be formulated as follows.

- Product quality has a significant effect on trader loyalty. Putu Ayu rice product quality that is getting better and more consistent over time can encourage traders to be loyal to use the brand.
- Product quality has a significant effect on trader satisfaction. The quality of Putu Ayu rice products that are getting better and more consistent over time can meet the expectations of traders, so they feel satisfied in buying and selling these products.
- Price fairness has a significant effect on trader satisfaction. Fair pricing on Putu Ayu rice can increase trader satisfaction.
- Price fairness has no effect on trader loyalty. Traders consider that fair pricing has no impact on trader loyalty.
- Satisfaction has a significant effect on trader loyalty. Traders assess that Putu Ayu rice has met their expectations so that it can increase their loyalty to make future purchases.
- Satisfaction mediates the influence between product quality on trader loyalty. The higher quality Putu Ayu rice can increase trader satisfaction which in turn can form loyal traders.
- Satisfaction mediates the effect between price fairness and trader loyalty. Pricing on Putu Ayu rice that is increasingly fair and reasonable can increase trader satisfaction which in turn can form loyal traders.

Advice

- The indicator of product quality that has the lowest average is product reliability (KP3). This means that companies must increase information on each package regarding packaging information, weight, and the like to increase trust.
- The price fairness indicator that has the lowest average is the price commensurate with taste (KH3). This means that the company must evaluate the price set with the quality of Putu Ayu rice flavor.
- The satisfaction indicator that has the lowest average is overall satisfied (KEP3). This means that companies need to improve the quality of rice both from moisture content, color, and the like to increase trader satisfaction.
- The loyalty indicator that has the lowest average is about repurchase (LOY3). This means that companies need to provide incentives or discounts at certain times to encourage traders to make repurchases.
- The results showed that loyalty was explained by the variables of product quality, price fairness, and customer satisfaction by 86.60%. This means that other variables need to be added to influence loyalty, such as company reputation and brand image.

Compliance with ethical standards

Disclosure of conflict of interest

The author discloses that there is no conflict of interest declare.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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