

The Effect of Price, Risk, and Service Quality, on Customer Satisfaction with Brand Image as Moderating Variable at Coffee Shop X

Nur Iklima Nadila Oktavia¹, Yoanita Yuniati Mukti^{1*}, and Gita Permata Liansari¹

¹ Department of Industrial Engineering, Institut Teknologi Nasional Bandung, West Java, Indonesia

Abstract. High competition between coffee shops makes customer satisfaction an important factor. Previous research states that several variables influence customer satisfaction, namely price, risk, and service quality on customer satisfaction. This research aims to empirically test price, risk, and service quality on customer satisfaction, as well as the moderating role of brand image on the relationship between price and service quality on customer satisfaction using SEM-PLS 4.0. Data collection was carried out through questionnaires to 159 respondents. The test results show that there is a significant influence between price, risk, and service quality on consumer satisfaction, and there is no influence of brand image as a moderating variable in the relationship between price and service quality on consumer satisfaction.

1 Introduction

Today's business world is increasingly competitive in the field of coffee shop business. Nowadays, drinking coffee is not only a habit to reduce drowsiness, but has become a lifestyle for adults and teenagers, both men and women, in pursuit of daily productivity. In addition to being a place to enjoy coffee, coffee shops are also used as meeting places, means of gathering, and making an event [1]. In maintaining competence, entrepreneurs must be able to compete with other entrepreneurs. One of the key factors is prioritizing customer satisfaction so that sales can survive and increase.

Price and risk are two important variables that affect customer satisfaction in business and marketing. Research from [2] has previously shown that these two variables play a role in shaping customer perceptions of a product. However, to gain a deeper understanding of how these two variables influence customer satisfaction, more detailed follow-up research is needed. This follow-up research will identify and analyze the relationship between price, service quality risk, and brand image as moderating variables and their impact on customer satisfaction.

The object of this research refers to one of the top coffee shop brands in Indonesia in 2022, 50% of respondents stated that coffee shop X is the most recognized brand today (databooks.katadata.co.id, 2022). For the West Java region, especially the Bandung area, based on a preliminary survey, shows that 20% of the 25 most frequently visited coffee shop

* Corresponding author: yoan@itenas.ac.id

brands are coffee shop X. This study will empirically test the variables of price, risk, service quality, and brand image as moderating variables in influencing customer satisfaction at coffee shop X Bandung.

2 Methodology

2.1 Literature Review

2.1.1 Customer Satisfaction

Customer satisfaction is the extent to which a product's perceived performance matches a buyer's expectations. If the product's performance falls short of expectations, the buyer is dissatisfied. If performance matches or exceeds expectations, the buyer is satisfied or delighted [1].

2.1.2 Price

Price is the amount of money charged for a good or service or the amount of money that customers exchange for the benefits of owning or using the product or service [3]. States that there are six main efforts that a company can achieve through price, namely survival, short-term profit maximization, short-term revenue maximization, excellence in the market, and excellence in product quality. Based on the opinions of the experts above, price is the amount of money needed to get some combinations of products, services, and services [3].

2.1.3 Service Quality

Kotler and Keller [5] express the opinion that service quality is a perception of the level of service received by customers. Customers compare the service they feel with the service they expect. There are five dimensions of service quality according to the theory Tangibles, Reliability, Responsiveness, Assurance, and Empathy [5].

2.1.4 Risk

Risk is a structured approach to managing uncertainty associated with threats, by identifying potential sources of loss, measuring the financial consequences of losses occurring, and using controls to minimize actual losses or financial consequences [6]. Risk management strategies include transferring risks to other parties, avoiding risks, reducing the negative effects of risks, and accepting some or all of the consequences of certain risks.

2.1.5 Brand Image

Brand image is the perception of a brand that is described by brand associations that exist in customers' memories that are felt by someone towards a brand. Brand image can also be said to be one of the company's strategies in creating an image of the product that will always be remembered by the public when hearing the company's brand [4]. Based on the literature review, a moderation model is proposed in this study, including price and service quality as an independent variable, customer satisfaction as a dependent variable, and brand image as a moderating variable. Specifically, this study assumes the direct and indirect effects of price on customer satisfaction through brand image as a moderating variable.

2.2 Identification of Problem-Solving Methods

The research conducted will look for the relationship between price, risk, service quality on customer satisfaction with brand image as the moderating variable. The method used in solving this problem is Partial Least Square Structural Equation Modelling (PLS-SEM) to analyze the relationship. The software used in this research is SmartPLS 4.0.

2.3 Research Model

The basic model of this research consists of various kinds of previous studies which are used as references to draw hypotheses in the research being conducted. The basic model used is a combined model between the model used in previous studies and the model in the current study. In this study, there are several hypotheses:

H1: Service quality has a positive effect on consumer satisfaction.

H2: Price has a positive effect on consumer satisfaction.

H3: Risk has a positive effect on customer satisfaction.

H4: Price has a positive effect on service quality.

H5: Price has a positive effect on risk.

H6: Service quality has a positive effect on consumer satisfaction, with brand image as a moderating variable.

H7: price has a positive effect on customer satisfaction, with brand image as a moderating variable.

The use of variables to be studied based on previous research can be seen in Figure 1.

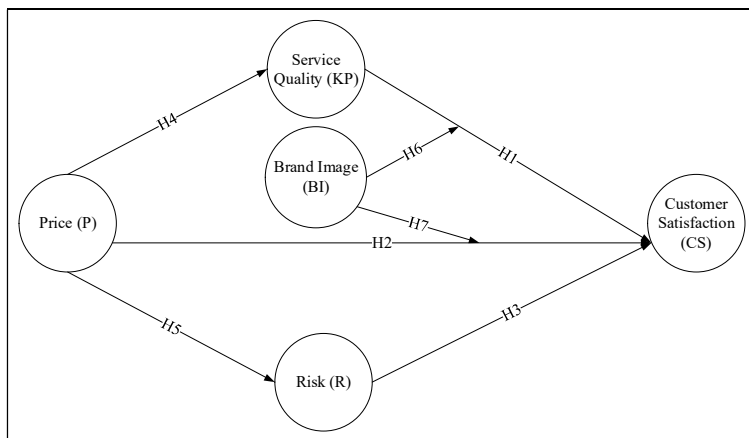


Fig. 1. Research Model

2.4 Sample Size Determination

The determination of the sample size was carried out using G*Power software. This software determines the minimum number of samples based on the test family, statistical test, type of analysis power, effect size (f^2), significance level (α), statistical power ($1-\beta$), and the number of predictor variables. Based on the results of the G*power software, the minimum number of samples in the study was 153 samples

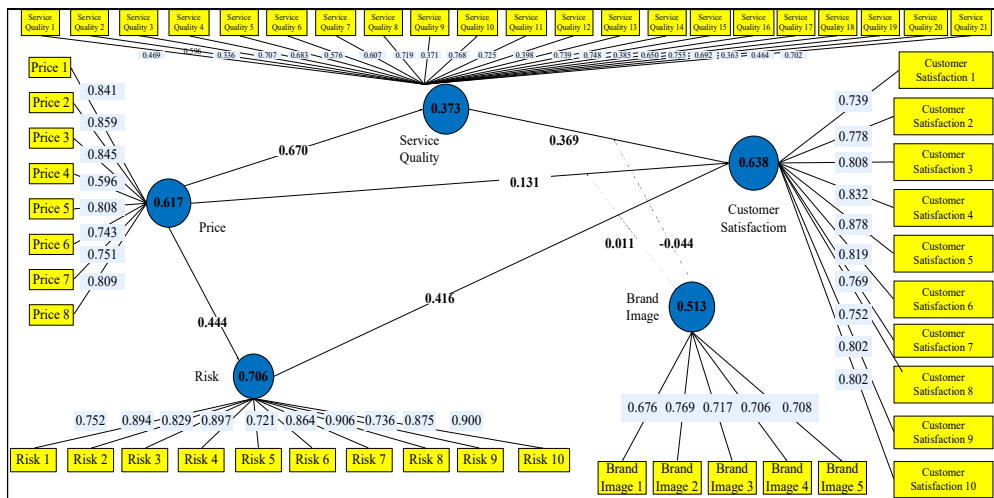
2.5 Compilation of Questionnaires

The questionnaire consists of several questions regarding the conditions at the coffee shop. Likert scale is used to measure the opinion of the respondents to the questions to be given. There are six scale options applied to all questions, are Strongly Disagree (1) to Strongly Agree (6). Respondents who can fill out this questionnaire are respondents who are over 15 years old and have bought and visited coffee shops directly, with a minimum of two visits. The results of the distribution of questionnaires 156 samples will be processed.

3 Result and Analysis

3.1 Results

In the measurement model, two types of validity were assessed (i.e., convergent and discriminant validity). Convergent validity addresses the degree to which the multiple measurement items of a particular construct join and share a high amount of variance [7]. Three indicators of convergent validity are outer loadings, average variance extracted (AVE), and composite reliability (CR). Outer loadings refer to an estimated relationship in the reflective measurement models, which indicate the items' absolute contribution to their assigned construct [7]. As shown in Table 2, all the outer loadings are greater than 0.60 and significant at 0.05. The following is the final research model that has passed the results of data processing can be seen in Figure 2



Note: The dashed line indicates the moderating variable.

Fig. 2. Final Research Model

The results of the outer model evaluation with the convergent validity test show that all items measure each of the same constructs. This is valid because the outer loading value of each item is > 0.40 and the Average Variance Extracted (AVE) value of each construct is > 0.50. The results of convergent validity testing show that eight items are eliminated, is KP3, KP19, KP9, KP15, KP12, KP20, KP1, and KP6. The results of the internal consistency reliability test are reliable because the Composite Reliability (CR) and Cronbach's Alpha (CA) values are at a value of 0.70 to 0.90. The results of the internal consistency reliability test show that five items are eliminated, namely BT1, BT2, PI1, RE1, and RE3. The following are the results of the convergent validity and internal consistency reliability test in Table 1.

Table 1. Convergent Validity and Internal Consistency Reliability

Variable	Item Code	Outer Loading	Cronbach's alpha	Composite reliability		Average variance extracted (AVE)
				(rho A)	(rho C)	
Brand Image	BI1	0.676	0.764	0.771	0.84	0.513
	BI2	0.769				
	BI3	0.717				
	BI4	0.706				
	BI5	0.708				
Customer Satisfaction	CS1	0.738	0.937	0.938	0.946	0.638
	CS10	0.802				
	CS2	0.778				
	CS3	0.808				
	CS4	0.833				
	CS5	0.879				
	CS6	0.819				
	CS7	0.769				
	CS8	0.753				
	CS9	0.802				
Service Quality	KP10	0.783	0.918	0.923	0.93	0.507
	KP11	0.741				
	KP13	0.768				
	KP14	0.772				
	KP16	0.657				
	KP17	0.782				
	KP18	0.695				
	KP2	0.571				
	KP21	0.729				
	KP4	0.731				
Price	KP5	0.698	0.909	0.919	0.927	0.617
	KP6	0.574				
	KP8	0.709				
	P1	0.841				
	P2	0.858				
	P3	0.846				
	P4	0.595				
	P5	0.807				
	P6	0.743				
	P7	0.751				
Risk	P8	0.808	0.953	0.964	0.96	0.706
	R1	0.752				
	R10	0.9				
	R2	0.895				
	R3	0.829				
	R4	0.897				
	R5	0.72				
	R6	0.864				
	R7	0.906				
R8	0.736					
	R9	0.875				

A discriminant validity test shows the uniqueness of a construct. The discriminant validity test results are valid because the HeteroTrait-MonoTrait (HTMT) value is <0.90. The discriminant validity test results show that the research results are valid, so there are no items that are >0.90. The results of the discriminant validity test can be seen in Table 2.

Table 2. Discriminant Validity: Heterotrait-Monotrait Ratio (HTMT) Statistics

	Brand Image	Price	Customer Satisfaction	Service Quality	Risk	Brand Image x Service Quality	Brand Image x Price
Brand Image							
Price	0.594						
Customer Satisfaction	0.725	0.62					
Service Quality	0.757	0.75	0.751				
Risk	0.448	0.457	0.501	0.55			
Brand Image x Service Quality	0.419	0.305	0.31	0.343	0.057		
Brand Image x Price	0.378	0.253	0.274	0.292	0.053	0.781	

The significance test aims to estimate the relationship in the inner model that explains the hypothesized relationship on the construct. The indicators used are seen based on the standard error value with the bootstrapping method along with drawing conclusions using the t-value and confidence interval value. The $t\text{-value} > 1.645$ concludes that the hypothesis is accepted, and if the confidence interval value range does not contain a value of 0, it concludes that the effect is significant. The results of the significance test can be seen in Table 3.

Table 3. Summary of Hypotheses Testing

Hypothesis	Path	Std. Beta	Std. Error	t-value	Bias	Conf Interval		Decision
						5%	95%	
H1	Service Quality -> Customer Satisfaction	0.354	0.092	3.851	0.002	0.21	0.51	Supported
H2	Price -> C S	0.437	0.094	4.657	0.003	0.28	0.59	Supported
H3	Risk -> C S	0.138	0.072	1.910	0.003	0.02	0.26	Supported
H4	Price -> Ser Qual	0.693	0.046	14.943	0.006	0.60	0.76	Supported
H5	Price -> Risk	0.444	0.066	6.685	0.010	0.33	0.56	Supported
H6	Br im x S Qual -> CS	-0.025	0.090	0.275	0.006	-0.17	0.13	Unsupported
H7	Br im x Price -> CS	-0.019	0.097	0.195	-0.003	-0.17	0.16	Unsupported

Note: $p < 0.05$ (one-tailed test).

The effect size test aims to measure the effect of individual exogenous variables on endogenous variables. The results of the coefficient of determination test and effect size test can be seen in Table 4.

Table 4. Determination Coefficient and Effect Size

Hypothesis	Path	f ²	Interpretation	R ²	Interpretation
H1	Service Quality -> Customer Satisfaction	0.109	Small		Medium
H2	Price -> CS	0.020	Small	0.554	Medium
H3	Risk -> CS	0.030	Small		Medium
H6	Br im x S Qual -> CS	0.001	Small		Medium
H7	Br im x Price -> CS	0.000	No Effect		Medium
H4	Price -> Service Quality	0.923	High Effect	0.477	Medium
H5	Price -> Risk	0.245	Medium	0.192	Weak

Further testing uses features in the software that are used to determine which variables or items need to be improved. If the importance value of a service has a high value, but the performance of the service has a low value, it is necessary to make improvements to the variable or item. This can be used as a way to achieve customer satisfaction with a service. The following are the results IPMA graph which can be seen in Figure 3.

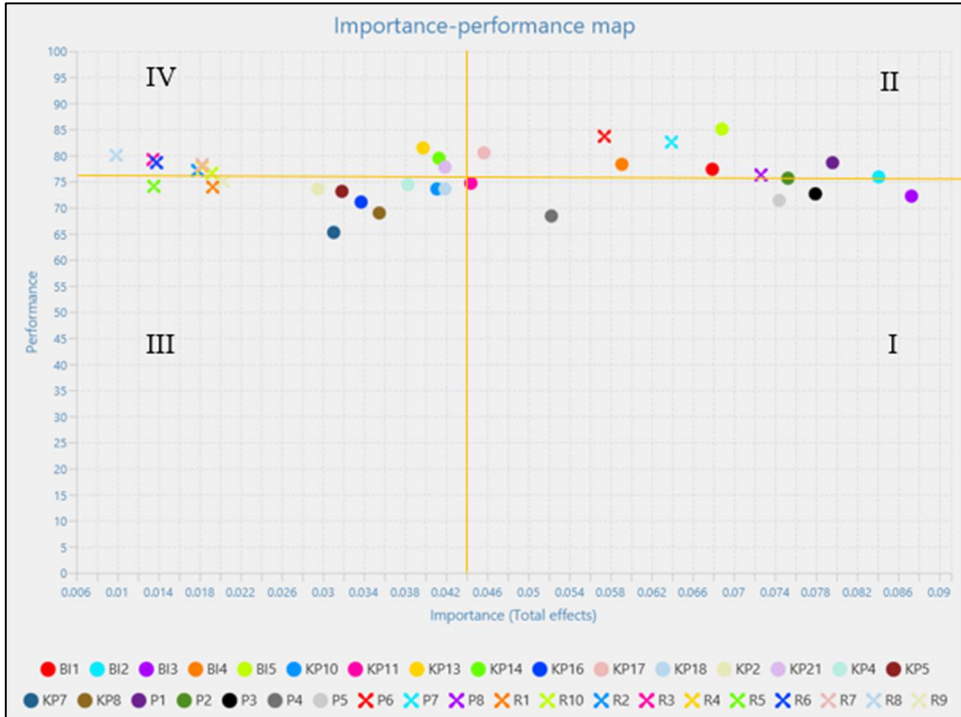


Fig. 3. IPMA Calculation Result Chart

Based on the graph in Figure 4, several items have a high level of importance but performance values that tend to be low. These items include P2, P3, P4, P5, P8, KP11, BI1, BI2, and BI3. These items include price variables, brand image, and service quality. This states that these items need to be repaired, to increase consumer satisfaction.

3.2 Analysis

3.2.1 Relationship between Price and Service Quality

Based on the results of the significance value test, the results obtained for the relationship between the price variable and service quality have a positive effect with a path coefficient value of 0.693. The highest contribution is given by the largest outer loading value to show the construct of price, outer value The largest loading is in P2 with an outer loading value of 0.858 which is found in the item "Reasonable product prices". Meanwhile, the smallest outer loading value is in P4 with a value of 0.595 with the item "competitive prices with similar coffee shops". It can be concluded that increasing the item that has the largest outer loading value will increase the price variable on service quality [8,9]. This is in line with the research conducted, the appropriate price will be in line with the quality of services provided.

3.2.2 Relationship between Price and Risk

Based on the results of the significance value test, the results obtained for the relationship between the price variable and risk are that it has a positive effect with a path coefficient value of 0.444. The highest contribution is given by the largest outer loading value to show the construct of price, the largest outer loading value is found in P2 with an outer loading value of 0.858 contained in the item "Reasonable product price". Meanwhile, the smallest outer loading value is P4 with a value of 0.595 with the item "competitive prices with similar coffee shops". It can be concluded that increasing these items will increase the price variable against risk. This is in line with research [2], but contradicts research that states that price has a negative influence on risk [3].

3.2.3 Relationship between Price and Customer Satisfaction

Based on the results of testing the significance value, the results for the relationship between the price variable and customer satisfaction are positive with a path coefficient value of 0.437. This means that if the price of a coffee shop tends to be high, it means that consumer satisfaction will be higher. Based on this, the research conducted is in line with the results of this study because price has a significant influence on consumer satisfaction [10].

3.2.4 Relationship between Service Quality and Consumer Satisfaction

Based on the results of the significance value test, the results for the relationship between service quality variables and customer satisfaction are positive with a path coefficient value of 0.354. The highest contribution is given by the largest outer loading value to show the construct of service quality, the largest outer loading value is found in KP10 with a value outer loading is 0.783 which is found in the item "Employees serve according to the promised time" While the smallest outer loading value is found in KP2 with a value of 0.571 with the item "Visually attractive coffee shop space". It can be concluded that an increase in the item that has the greatest outer loading value will increase the service quality variable on customer satisfaction.

3.2.5 Relationship between risk and consumer satisfaction

Based on the results of the significance value test, the results for the relationship between the risk variable and consumer satisfaction are positive with a path coefficient value of 0.138. The highest contribution is given by the largest outer loading value to show the construct of risk, the largest outer loading value is found in the R7 indicator with an outer value loading of 0.906 contained in the item "I feel it takes a long time to be served". Meanwhile, the smallest outer loading value is found in R5 with a value of 0.720 with the item "I feel disappointed because the product does not meet my expectations". It can be concluded that the increase in these items will increase the risk variable on consumer satisfaction.

3.2.6 Relationship between Brand Image and Service Quality on Consumer Satisfaction

Based on the results of testing the significance value, it was found that the relationship between brand image and service quality on customer satisfaction has a negative effect with a path coefficient value of -0.025. It can be interpreted that if the service quality of a coffee shop tends to be high, it means that consumer satisfaction will not be higher. As well as The brand image variable, it cannot be a variable that affects improving service quality on

customer satisfaction. The results of this study are not in line with research conducted [9] which states that brand image variables can increase the influence of service quality on customer satisfaction.

3.2.7 Relationship between Brand Image and Price on Consumer Satisfaction

Based on the results of the significance value test, the results obtained for the relationship between the brand image variable and price on consumer satisfaction have a negative effect with a path coefficient value of -0.019. The results shown in the calculation of the R² coefficient value obtained a value of 0.554 or 55.4% and are included in the medium category. However, this has no effect for an f² value of 0.000, which shows that the service quality variable on consumer satisfaction with the brand image variable as a moderating variable has absolutely no effect. Research states that the brand image variable can increase the influence of price on consumer satisfaction, this is not in line with the results of the research [9]

4 Conclusions

The research findings reveal that the price factor significantly and positively impacts service quality, risk, and customer satisfaction. Moreover, service quality demonstrates a noteworthy positive influence on customer satisfaction, while risk also plays a pivotal role in enhancing customer contentment. The significance testing results underscore that the price variable notably boosts service quality, indicating superior room and employee services that warrant higher pricing. Similarly, a higher price correlates with increased perceived risk. This price perception serves as a measure for customer satisfaction, alongside service quality significantly enhancing it. Moreover, lower risk perceptions tend to elevate customer satisfaction levels. However, the brand image variable lacks significant influence in moderating both service quality and price to customer satisfaction, suggesting it isn't a pivotal factor in improving quality or affecting price perception. Consequently, coffee shop X customers don't view brand image as a driver for heightened satisfaction. Overall, 55.4% of customer satisfaction stems from price, service quality, and risk, while 44.6% remains influenced by other extraneous variables beyond the study's scope.

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