

The Factors Effect Purchase Decision of Brand X Pump in PT XYZ

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Abstract. Established in 1980, PT XYZ is the first pump manufacturer in Indonesia. Many companies have recognized the advantages of X brand pumps in terms of quality. However, along with the times, it turns out that the X brand pump has not been able to become the market leader in the pump industry market, especially in direct sales which is one of the sales segments in PT XYZ which is the Japanese target market. This research aims to examine and analyze the effect of variable brand image, product quality, product price, and delivery time on the purchase decision of brand X pump in PT XYZ. This statistic parametric study use method a multiple regression in which the data processed by the SPSS program. The population has been identified, namely 62 customers, which are Japanese companies in Indonesia that have purchased pump brand X for their own needs from PT XYZ. The determination of the number of samples used in this study with the census method proposed. The results of this study indicate that the variables of brand image, product quality, price, and delivery time have a significant and positive effect on purchasing decisions, jointly and partially.

Keywords: brand image, product quality, price perception, delivery time

1 Introduction

PT XYZ is a joint venture manufacturing company between a Japanese X brand pump company and a local Indonesian company. Established in 1980, PT XYZ can be said to be the first pump manufacturer in Indonesia to have its own factory, especially for metal casting or casting technology. Since its establishment, PT XYZ has contributed to fulfilling the needs of pumps for companies in the industrial sector in particular, both the manufacturing industry, the electrical assembly industry, the oil and gas industry and in collaboration with the government, especially the Ministry of Agriculture, in providing pumps needed in agricultural activities [1].

With PT XYZ's experience for nearly 40 years, many companies have recognized the advantages of X brand pumps in terms of quality. However, along with the times, it turns out that the X brand pump has not been able to become the market leader in the pump industry market, especially in direct sales which is one of the sales segments in PT XYZ which is the Japanese target market. companies in Indonesia as customers, PT XYZ has not been able to dominate its market because in the last 6 years from 2013 to 2018 the X brand pump is only in the number 2 position behind its competitors. 1 brand that is still the market leader [1]. This company must have a movement to seek improvements so that they can grow to dominate that market share.

In addition, this company experienced a decline in customer satisfaction scores from 2017 to 2018, particularly in product quality, product prices, and delivery times [1]. Product quality decreased from 80.97% to 80.00%, product prices from 7.50% to 76.67%, then the delivery time from 76.67% to 75.69%. However, if we look the sales results have increased from 2017 to 2018, from IDR 34,699,075,443 to IDR 46,727,189,288. A contradictory situation exists, and it seems like an interesting phenomenon where the points given by a customer about satisfaction decrease but actual sales increase [1]. This raises questions about the factors that affect the company performance or that can drive consumer decisions to buy. If left unchecked and the cause is not found, it is likely that it will affect the sales performance of PT XYZ in the future.

Previous research has shown that there are factors that influence purchasing decisions. Price and product quality influence customer purchasing decisions (Adawiyah, 2019 [2]; Barata et al, 2017 [3]; Tamunu and Tumewu, 2014 [4]). Brand image has an impact on the consumer's purchase decisions (Sallam, 2014) [5]. Product price affects customer purchasing decisions (Hustic and Greguree, 2015) [6]. Brand image, quality, and product prices affect customer purchasing decisions (Susanto, 2016) [7]. Quality does impact the purchase decision which agrees with Baltas & Argouslidis (2007) at AlHuwaishel and Al-Meshal (2018) [8]. Brand image, price, and promotion have a significant and positive influence on customer purchases (Sudaryanto et al, 2019 [9]), perceived price and perceived quality have a significant effect on consumer buying decision (Lalujan, Pengemanan, and Tumbuan, 2016) [19], brand image and price perception have a positive and significant impact on purchase decision (Umbula, Mawuntu, and Potolau, 2019) [20]. In addition, delivery time also has an influence on customer purchasing decisions (Kenedy and Kundu, 2018 [10]). On the other hand, the variables of timeliness, delivery of goods, and customer trust have a significant effect on customer satisfaction (Aminah et al, 2017 [11]).

Furthermore, a preliminary survey was conducted to determine the considerations underlying the respondents in making purchase decisions. The survey was conducted on 35 correspondents, presenting 12 variables. The survey results show that the 6 most preferred variables are: product quality, brand image, delivery time, post-sales service, and previous user experience.

Based on the results of previous research, preliminary surveys, as well as the factors assessed in the annual company survey, thus, the factors tested in this study are determined as independent variables that affect the dependent variable, namely the influence of the variable product quality, brand image, product price, and duration of product delivery (delivery time), on purchase decisions. The purchase decision according to Kotler (2013) in Ameliya (2018) [12] is a stage of the purchase decision-making process, where consumers actually make purchases. According to Swastha and Handoko (2008) [13], purchasing decisions are a process of determining whether to buy or not based on several factors of consideration.

2 Research Method

The analytical method used in this study is quantitative analysis with multiple regression using the SPSS tool. The population has been identified, namely 62 customers, which are Japanese companies in Indonesia that have purchased pump brand X for their own needs from PT XYZ. The determination of the number of samples used in this study with the

census method proposed by Sugiyono (2013) [18], namely sampling type is a technique of determining the sample when all members of the population are used as samples and another term for saturated sample is census. But the feedback from the given questionnaires are only 54 respondents. Questionnaires are sent via email to purchasing decision-makers in the Purchasing or Procurement Division.

3 Results and Discussion

83% of respondents are large companies, the remaining 17% are service companies and others. In addition, the average company has been established for a long time, namely before 2000. Even, 37% of the respondent companies that were established before 1990. The number of employees of all the respondent companies is over 100 people. There are less than 100 people as much as 2%, the employees are between 100-300 people as much as 41%, the employees are between 300-500 people as many as 15%, the employees are 500-1000 people as many as 20%. The results of the validity and reliability tests show that all data representing the variables are valid and reliable. Besides that, it meets the standard of normality, does not occur multicollinearity, and does not occur heterogeneity. Thus, the existing data can be processed further.

The results of the F test show that the variables of product quality, brand image, time of delivery of goods, and prices together have a significant and positive effect on purchasing decisions. The R2 value of 59.2% indicates that the Y variable can be explained by changes in the variables X1, X2, X3, and X4 of 59.2%. Meanwhile, the remaining 40.8% is explained by other factors outside the model.

Table 1. Simultaneous test results F ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.430	4	6.607	17.758	0.000 ^b
	Residual	18.232	49	0.372		
	Total	44.662	53			

The t test results produce the following equation: Y (purchase decision) = $-1.365 + 0.325 X_1$ (brand image) + $0.27 X_2$ (product quality) + $0.428 X_3$ (product price) + $0.266 X_4$ (delivery time).

Table 2. Result of t-test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
	(Constant)	-1.365	0.778		-1.754	0.086
	Brand Image (X1)	0.325	0.111	0.293	2.917	0.005
1	Quality Product(X2)	0.270	0.108	0.237	2.508	0.016
	Price (X3)	0.428	0.093	0.449	4.629	0.000
	Delevery Time (X4)	0.266	0.099	0.252	2.688	0.010

In the table above the sig value of variable X1 = 0.005 <0.05 so that means this independent variable has a positive and significant effect on variable Y. The higher X1, the higher Y. And vice versa. In the table above, the sig value of variable X2 = 0.016 <0.05 so that means this independent variable has a positive and significant effect on variable Y. The higher X2, the higher Y. And vice versa. In the table above the sig value of the variable X3 = 0.000 <0.05 so that means this independent variable has a positive and significant effect on variable Y. The higher X3, the higher Y. And vice versa. In the table above the sig value of the variable X4 = 0.010 <0.05 so that means this independent variable partially has a positive and significant effect on variable Y. The higher X4, the higher Y. And vice versa.

Table 3. Correlation between variables

NO.	VARIABLE	INDICATOR	The purchase decision of pump brand X is based on				
			Y1	Y2	Y3	Y4	
1	BRAND IMAGE	Pumps of the X brand are well known	X1.1	.453**	.314*	.465**	0,245
		Pumps of the X brand are very familiar.	X1.2	.457**	.399**	.524**	.345*
		X brand pumps have a good reputation.	X1.3	.425**	.434**	.389**	.350**
		X brand pumps have a match between good reputation and actual performance given.	X1.4	.449**	.358**	.440**	.381**
2	KUALITAS PRODUK	The product can work fine.	X2.1	.318*	0,265	.300*	0,244
		The product has a fairly good efficiency value.	X2.2	0,187	0,173	0,179	0,241
		Products can meet the specifications needed by consumers.	X2.3	.312*	.376**	.370**	.284*
		Products have quality in accordance with consumer expectations.	X2.4	0,200	.284*	0,221	0,199
		The product can maintain its quality of performance in a vulnerable period of long use.	X2.5	.278*	.336*	.369**	0,254
		The product can maintain its performance in changing environmental conditions.	X2.6	0,197	0,241	0,225	0,124

This research shows that the brand image variable has a significant and positive effect on purchasing decisions, with an effect of 32.5%. This means that if there is an increase in recognition and trust in the brand image by 100%, there will be an increase in purchasing decisions by 32.5%. These results are consistent with previous research conducted by Susanto (2016) [7], Amron (2018) [14], and Sudaryanto; Subagio; Awaliyah; Wulandari; and Hanum (2019) [9].

However, there is a contradiction with the results of the study which states that brand image has no effect on Adawiyah's purchasing decisions (2019) [2]. In the indicator brand image variable with the highest correlation value is X1.2, namely, pump brand X is very familiar. The strength of this brand image needs to be maintained by improving quality and making product innovations and service innovations so that the X brand pump can always meet the changing needs of consumers. The t-test results show that the variable product quality has a significant and positive effect on purchasing decisions, with an effect of 27%. This means that if there is an increase in recognition and trust in product quality by 100%,

there will be an increase in purchasing decisions by 27%. This result is in accordance with previous research conducted by Tamunu and Tumewu, 2014) [4]; Susanto, 2016 [7]; Brata; Husaini; and Ali, 2017 [3]; Anggita and Ali, 2017 [15].

In the product quality variable, there is one indicator that has the highest correlation value among other indicators of purchasing decisions, namely the X2.8 indicator, which states that the product is chosen because of the perceived quality of its country of origin (Japan). This means that until now the perception of the quality of a product is strongly influenced by the perception of the quality of the country of origin. This shows that Japanese products are known to have good quality.

The t-test results show that the variable product price has a significant and positive effect on purchasing decisions, with an effect of 42.8%. This means that if there is an increase in perception and trust in prices by 100%, there will be an increase in purchasing decisions by 42.8%. This is in accordance with the results of previous researchers, including Tamunu and Tumewu, 2014 [4], Susanto, 2016 [7], Anggi, 2016 [16], Brata; Husaini; and Ali, 2017 [3], Ameliya, 2018 [12], Amron, 2018 [14], Albari and Safitri, 2018 [17], and Sudaryanto; Subagio; Awaliyah; Wulandari; and Hanum, 2019 [9].

In the price perception variable, there is one indicator, X3.2, which states that the price of the product is more affordable than the average price of competing brands which is the most strongly connected to purchasing decisions. This condition is really very, very important for PT XYZ regarding pump brand X, because in the minds of customers the price given still tends to have a fairly competitive price compared to competitors, so it becomes a strong consideration in deciding to purchase pump brand X.

PT XYZ must really maintain the perception of the price of the pump brand X to remain in the perception of price affordability compared to competing brands in the minds of customers. Product X's competitive price is related to several other divisions. The thing that needs to be considered is the determination of high-quality suppliers that have competitive prices. Other than that. It needs to be supported by the Engineering division related to the Research and Development process for the products to be sold so that both in terms of design and material selection are made as efficiently as possible without reducing the quality that will be produced.

Also, the role of the Production Planning and Inventory Control (PPIC) division is necessary for formulating their production processes so that they have an effective and efficient lead time related to the production completion time, as well as the role of Sales and Marketing in determining the profit and selling price that will be given to customers so that prices still within purchasing power range consumer and can continue to compete with competitors.

The t-test results show that the delivery time variable has a significant and positive effect on purchasing decisions, with an effect of 26.6%. This means that if there is an increase in delivery speed by 100%, there will be an increase in purchasing decisions by 26.6%. This is in accordance with the results of previous research that the delivery time has an effect on purchasing decisions (Kenedy and Kundu, 2018 [10]; Aminah; Rafani; and Hariyani, 2017 [11]).

From the results of the indicator correlation analysis, it was found that the X4 variable or the delivery time variable had one indicator whose correlation was quite strong among other indicators of purchasing decision variables, namely the X4.2 indicator which stated that the product was delivered in accordance with the estimated delivery time given. Based on this, the management of PT XYZ needs to maintain a commitment between the delivery time that has been promised to customers and the realization of the delivery time made. This means

that whether or not this commitment is maintained will have a big impact on customers, especially regarding the value of trust they will give to PT XYZ. On the other hand, the results of this study provide input for similar companies in order to penetrate customers and place their products in a better perception of delivery time commitments.

4 Conclusions

The results of this study indicate that the variables of brand image, product quality, price, and delivery time have a significant and positive effect on purchasing decisions, jointly and partially. This answers the problems and phenomena that occur, where there is a decrease in satisfaction with product quality, price, and delivery time, on the other hand, there is an increase in company performance. This condition, particularly the decline in product quality satisfaction, price, and delivery time, is still reinforced by a strong brand image, particularly regarding consumer perceptions that products produced by Japanese companies are of good quality and can be accounted for. So even though the results of this study, show that product quality, price, and delivery time have an effect on purchasing decisions, in fact, they feel less satisfied. But, in this case, consumers still consider the brand image factor, so what happens is consumers still choose and decide to buy product X, with an increase in sales, despite experiencing dissatisfaction with some of these factors.

Further researchers can develop this research by adding independent variables, including after-sales service, or other variables, because the R² value of 59.2% indicates that the Y variable can be explained by changes in the X₁, X₂, X₃, and X₄ variables. Meanwhile, the remaining 40.8% is explained by other factors outside the model.

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