THE EFFECT OF PRODUCT QUALITY, SERVICE QUALITY, AND PRICE TOWARDS BUYING DECISION ON PT. SACS' READY-MIX CONCRETE

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ABSTRACT

Nowadays, the needs of the construction sector in Indonesia are quite high, including concrete companies. The increasing demand for concrete products has led to the surge of companies engaged in the ready-mix concrete industry in Indonesia. The increasing competition in the construction sector enforces the company to carry out the correct marketing strategy to ensure its survivability and win the market share. This study aims to determine the effect of product quality, service quality, and price towards buying decision on PT. SACS' ready-mix concrete. The research method of this study is associative, to examine the relationship between the following variables: product quality; service quality; and price towards buying decision. The objects of this study that acts as independent variables include product quality (X_1), service quality (X_2), and price (X_3), while buying decision (Y) acts as the dependent variable. The population of this study is all the customers who had previously purchased ready-mix concrete products at PT. SACS. Sampling is done using non-probability sampling technique with a purposive sampling approach which resulted in 55 samples. The result of this study indicates that product quality, service quality, and price has effects towards the buying decision on ready-mix concretes. The conclusion of this study shows that the following variables: product quality; service quality; and price simultaneously possesses significant influence towards buying decision.

Keywords: Product Quality, Service Quality, Price, Buying Decision

INTRODUCTION

Today, the needs for the construction sector in Indonesia is at a quite high intensity, which includes concrete manufacturing companies. The increasing demand for concrete products has led to the surge of companies engaged in the ready-mix concrete industry in Indonesia. Entrepreneurs in construction prefer using ready-mix concretes because of its ease and practicality. The advantages offered by ready-mix products include: requires less area; assurable quality; and its ability to cover large volumes in relatively less time (Yudistira, 2015). These factors are what motivates ready-mix concrete companies to increase supply. They reacted accordingly by increasing the capacity of production, quality assurance, and service towards customers. Such factors incites a very competitive market among companies that deals ready-mix concrete. The number of competitors that emerge triggers each company to compete with each other for the existing market share (Kotler & Keller, 2011: 34). Companies with competitive advantages that aligns with the market needs and desires will end up as the winners. Kotler & Keller (2011: 20-25) states that the way to conquer the market is by providing the best quality of products and services. The company must determine the level of quality that can improve and maintain the positioning of the product in its intended target market (Assauri, 2011: 211).

PT. SINAR ABADI CITRA SARANA (SACS) is a company that provides construction services and materials, including hot-mix asphalt concretes (HMAs), paving blocks, material, and ready-mix concrete. Running a business that deals with ready-mix concrete, PT. SACS has a number of challenges

that must be faced especially on the customer satisfaction aspect, which will provide good or bad feedback as a reference for current and prospective customers for their buying decisions; and whether or not they should make subsequent purchases. Therefore, if the product quality, service quality, and price offered to prospective customers don't align with market expectation, it could result in consumers of PT. SACS moving to other competitors. This will negatively impact the survivability of PT. SACS in the future. Thus, researchers of this study are trying to increase sales to even beyond the target goal. One of the efforts made is by offering product quality, service quality, and prices that are acceptable to prospective customers; because the good product quality encourages positive word of mouth; thus, product quality is a very important aspects that needs attention from the company.

Product quality contributes toward buying decisions. Consumers can be attracted to a product if they see the value in the quality of the product, which in turn will encourage them to make a purchase. Excellent product quality is the key to winning the competition that will eventually give the product an edge in the eyes of the consumers.

Service quality also affects consumer behavior in deciding whether or not they should make a purchase. An excellent service is one of the things that consumers really appreciate when buying a product. Aspects in a service include: service responsiveness, friendliness of employees when making sales, and convenience in the transaction process.

From the consumer's point of view, prices are often used as an indicator of value, and it's often strongly correlated to the perceived benefits of an item or service. According to Kotler & Keller (2011), price is the amount of money charged for a product or service, or the sum of values that customers exchange for the benefits of having or using the product or service; and this greatly influences the consumers on their decision whether or not they should buy the product.

This study uses three variables, which is product quality, service quality , and price, with the following hypotheses:

H1: Product quality has a significant effect towards buying decisions on PT. SACS' ready-mix concrete.

H2: Service quality has a significant effect towards buying decisions on PT. SACS' ready-mix concrete.

H3: Price has a significant effect towards buying decisions on PT. SACS' ready-mix concrete.

H4: Product quality, service quality, and price has a significant effects effects simultaneously towards buying decision on PT. SACS' ready-mix concrete.

RESEARCH METHODS

This study is conducted using quantitative approach which aims to determine the effect of product quality, service quality, and price towards buying decision on PT. SACS' ready-mix concrete. The population of this study includes all of the customers who had previously purchased ready-mix concrete products at PT. SACS. This study uses non-probability sampling technique with purposive sampling approach, which is a technique of determining samples using certain considerations. (Sugiyono, 2014). This study uses purposive sampling, which consists of 55 B2C customers; while B2B customers weren't part of the sample because it has a total population size of five, therefore it does not meet the sampling criteria. Data collection is done through questionnaire. Variables in this study include product quality (X_1), service quality (X_2), and price (X_3) as independent variables; while buying decision (Y) acts as the dependent variable. Data analysis is conducted using multiple linear regression method to observe the effect of product quality, service quality, and price (independent variables) towards buying decision (dependent variable).

This study also went through validity and reliability test. According Ridwan dan Sunarto (2013), validity test is the essence of the truth of a study. A statement is considered valid if it is able to correctly measure what is intended and can present data from variables carried out with SPSS software. This study uses the Pearson correlation coefficient to measure validity. If the significant value is less than 0.05, then all variables are considered valid.

According to Ridwan dan Sunarto (2013), reliability is a tool for measuring a questionnaire which is an indicator of a variable. Reliability test in this study uses Cronbach's Alpha ($\propto$). If the Cronbach's Alpha coefficient is larger than the set critical value of 0.6, then the statements in the questionnaire are considered reliable. According to Sekaran (2014), a reliability score below 0.6 is considered insufficient, 0.7 is considered acceptable, and above is ideal. In addition to using multiple regression,

the reliability and validity test of this study also uses other techniques, namely through hypothesis testing (f test and t test) and classical assumption test. Classical assumption test consists of: normality test; multicollinearity test; heteroscedasticity test; linearity test; and autocorrelation test.

Results

From the results of the causality analysis of the following variables: product quality (X_1); service quality (X_2); and price (X_3) towards the buying decision (Y). This analysis of effect uses multiple linear regression as a tool to measure the magnitude of influence. The results of these measurements are as follows:

Table 1: Multiple Linear Regression Result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	1.088	0.418		2.605	0.012		
X_1	0.271	0.098	0.324	2.769	0.008	0.855	1.170
X_2	0.225	0.099	0.250	2.265	0.028	0.962	1.039
X_3	0.301	0.109	0.325	2.754	0.008	0.843	1.186

Based on the data shown on Table 1, the regression equation used in this research can be presented as $Y= 1.088 + 0.271X_1 + 0.225X_2 + 0.301X_3$. From the data provided on the table above, the individual Sig. values of each variables can be broken down as follows:

1. The value of Sig. on the product quality (X_1) variable as seen on the table above is 0.008 which is less than 0.05, therefore product quality (X_1) possesses a partially significant effect on buying decision (Y).
2. The value of Sig. on the service quality (X_2) variable as seen on the table above is 0.028 which is less than 0.05, therefore service quality (X_2) possesses a partially significant effect on buying decision (Y).
3. The value of Sig. on the price (X_3) variable as seen on the table above is 0.008 which is less than 0.05, therefore price (X_3) possesses a partially significant effect on buying decision (Y).

Data on the table above shows that the variable that has the highest significance value is price (X_3), which possesses a beta value of 0.325 on Standardized Coefficients; and the variable with the lowest significance value is service quality (X_2) which possesses a beta value of 0.250 on Standardized Coefficients.

The f-test result reveals that the variable meets the standard significance value of < 0.05. From the table above it can also be seen that the multicollinearity test resulted in a VIF value of 1.170, 1.039, and 1.186 on all corresponding independent variables. Each VIF value on the independent variables (X_1, X_2, X_3) is less than 10, therefore it can be concluded that there is no multicollinearity on the regression model used in this study.

Table 2: Normality Test

		Unstandardized Residual
N		55
Normal Parameters[a,b]	Mean	0.000000
	Std. Deviation	0.44252401
Most Extreme Differences	Absolute	0.107
	Positive	0.107
	Negative	-0.085
Test Statistic		0.107
Asymp. Sig. (2-tailed)		0.172[c]

From the normality test results above, it can be seen that the Kolmogorov-Smirnov significance value is 0.172, which is larger than 0.05; therefore it can be concluded that the residual is normally distributed at the level of 0.05.

Table 3: Heteroscedasticity Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.146	0.257		0.565	0.574
X1_AVR	0.023	0.060	0.056	0.375	0.709
X2_AVR	-0.037	0.061	-0.084	-0.602	0.550
X3_AVR	0.080	0.067	0.178	2.293	0.238

Based on Table 3 it can be seen that the Sig. values of the following independent variables: product quality (X_1); service quality (X_1); and price (X_1) are 0.709, 0.550, and 0.238 each. All the Sig. values above are greater than 0.05, which means it can be concluded that the residual variance does not have heteroscedasticity.

Table 4: Autocorrelation Test

Model	R	R-squared	Adjusted R-squared	Std. Error of the Estimate	Durbin-Watson
1	0.635	0.403	0.368	0.455	2.193

From the data provided on Table 4 above, the autocorrelation test yields a Durbin-Watson value of 2.193. In this study, the number sample used in this research (*n*) is 55 subjects, with three independent variables (*k*). The independent variables are: product quality (X_1); service quality (X_1); and price (X_1). Based on Durbin-Watson, if researchers used a significance value of 0.05, n = 55, and k = 3, then it will result in the d_U value of 1.64062. Therefore the range of reference will be from 1.64062 (d_U) up to 2.50969 (4-d_U). Because the Durbin-Watson value is 2.193; which sits in the range between d_U and 4-d_U, thus it can be concluded that there is no autocorrelation.

In this study there are 3 independent variables and one dependent variable. Independent variables consists of product quality(X_1), service quality (X_1), and price (X_1), while buying decision (Y) acts as the dependent variable. All of these variables are tested to find out how big and until what extent to which the independent variables simultaneously or individually affect the dependent variable, which is the buying decision. From the results of data processing obtained simultaneously, all the independent variables have a significant effect towards the dependent variable, which is the buying decision on PT. SACS ready-mix concrete with a determination level of 36.8%. Therefore it can be said that the independent variables used in this study can provide almost all the information needed that affects the dependent variable which is buying decision. From the results of the partial test, it can also be seen from the three independent variables that are used, all three inflicts a significant effect towards the dependent variable, which is the buying decision.

Discussion

The effect of product quality on buying decisions

The results of this study are similar to previous study conducted by Ackaradejruangsri (2013) which states that product quality has a significant effect on buying decisions. If the quality of the product offered has good quality ingredients and a variety of product variants, the potential for purchases will also increase. Alfred's research (2013) is that product quality variables are factors that influence buying decisions because consumers will look for products that are of high quality. The results of this study are also supported by Pandersolang and Tawas (2015) research supporting the findings of this study, which states that product quality has a significant effect on buying decisions. Product quality has a positive and significant effect on buying decisions, namely if the quality of the

company's products such as easy during the casting process, ready-mix concreate has good product durability, and has many product type variants increases, the buying decision will also increase. Having a good quality of ready-mix concreate products will affect the repurchases made by consumers.

The effect of service quality on buying decisions

Based on the results of the study indicate that the service quality variable has a t-count value of 2.265 with a significance level of 0.028 which is smaller than 0.05 so it can be concluded that service quality has a significant effect on buying decisions. This shows that service quality contributes significantly to consumers to buy ready-mix concreate PT. SACS. Service quality variables have a positive effect, meaning that an increase in customer service can improve buying decisions. This means that the services provided by PT. SACS as consumers get documents on the test results of ready-mix concreate labs, the volume of concrete in accordance with the order, the products sent on time, the quality of readymix is guaranteed, and employees are easily contacted and as much as possible meet consumer needs significantly influence the buying decisions. Langkey (2014) states that good service quality will make consumers want to buy products or services again so that the quality of service will determine whether the consumer comes back or not.

The results of this study are in accordance with Mongdong's (2015) study which shows that service quality has a significant effect on buyingdecisions. This research was also supported by Suliyanthini (2015) that service quality also had a significant effect on buying decisions. In the Kodu study (2013) also stated that service quality also had a significant effect on buying decisions.

The effect of price on buying decisions

In this study partial prices have a significant influence on buying decisions. This can be seen with a t value of 2.754 (Sig.0,008). The research conducted by Anwar (2015) shows the same results where prices show significance towards buying decisions. Price is one of the important variables in marketing, where prices can influence consumers in making decisions to buy a product (Mongi et al., 2013). Heryanto's research (2016) is that the price variable is a factor that influences buying decisions. In Weenas (2013) research also determines prices that have a significant influence on buying decisions because they choose products that are relatively cheaper. Ghanimata (2012) also stated positive and significant prices for buying decisions. Price is important and positive for buying decisions.

Conclusion

Based on the results of statistical and descriptive data analysis, it can be concluded that:

1. Product quality (X_1) has a positive and significant effect towards buying decision on PT. SACS' ready-mix concrete. Therefore, the first hypothesis (H1) is accepted because the results obtained are in accordance with the hypothesis.
2. Service quality (X_1) has a positive and significant effect towards buying decision on PT. SACS' ready-mix concrete. Therefore, the first hypothesis (H2) is accepted because the results obtained are in accordance with the hypothesis.
3. Price(X_1) has a positive and significant effect towards buying decision on PT. SACS' ready-mix concrete. Therefore, the first hypothesis (H3) is accepted because the results obtained are in accordance with the hypothesis.
4. The following variables: product quality (X_1); service quality (X_1); and price X_1 has ( ) positive and significant effects simultaneously towards buying decision on PT. SACS' ready-mix concrete.

The findings of this research are expected to be used as a reference for PT. SACS to:

1. Maintain the quality of the products offered especially during the casting process, and to also maintain its diverse variant of products;
2. Improve service quality according to the indicators mentioned in the study;
3. Improve pricing strategies according to the indicators mentioned in the study.

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