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The Impact of Product Quality, Price and Distribution on Purchasing Decision on the Astra Motor Products in Jakarta

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Abstract

Motorcycle competition is growing rapidly, making motorcycle manufacturers in Indonesia compete to increase the sales of each company and achieve sales targets. This relates to company stakeholders, especially to marketing managers so that they can retain both old and new customers. The purpose of this study was to examine the effect of product quality, price, and distribution of purchasing decisions on Honda Vario 125-FI motorcycles at Astra Motor Jakarta. Research respondents were drawn from 110 consumers at Astra Motor Jakarta. Methods of collecting data using a questionnaire with a Likert scale 1-10. The data analysis technique uses the Structural Equation Modeling (SEM) AMOS program version 21.0 to verify the causality of the three research hypotheses. The results of this study indicate that product quality does not have a significant effect on purchasing decisions, and prices have a significant positive influence on purchasing decisions. Meanwhile, distribution does not have a significant positive effect on purchasing decisions.

Keywords

Product quality, price, distribution, purchase decision

1. Introduction

Industrial development in the era of globalization is growing very rapidly and the development of industry today has a very large role in the development and growth of further development, then industrial development must be an integrated effort to strengthen the industrialization process in the broadest sense. The company must pay attention to the situation in developing the industry by utilizing the assets and resources that are available internally, the company is also expected to be able to develop product quality so as to place prices that are in accordance with the quality of the product itself (Zeithaml et al., 1990; Bagwell & Riordan, 1991; Kugler & Verhoogen, 2011). Since the beginning of 2015 Indonesia has participated in the Asean Economic Community making companies are required to offer products that are of high quality and have more value, so that they have different characteristics compared to their competitors. Product quality is one of the considerations of consumers before buying a product. Product quality is determined by durability, functions that can be felt by consumers, so consumers will always remember the product (Han et al., 2001; Shapiro, 1982). According to Lovelock (1994) and (Laksana, 2008) that quality is the expected level of quality and control of diversity in achieving that quality to meet consumer needs. Another factor that consumers consider before buying is price. Price is the amount of money that the customer must pay to obtain the product. Price is the amount of money that must be paid by customers to obtain products (Kotler & Armstrong, 2008). Price is the only element in the income-generating marketing mix; all other elements symbolize costs (Kotler & Armstrong, 2008). Motorbike competition is growing rapidly, making motorcycle manufacturers in Indonesia vying for motorcycle sales for each company to reach sales targets. This is a special concern for stakeholders, especially marketing managers to be able to retain old consumers and get new customers.

Weenas's (2013) study proves that product quality has a positive and significant effect on purchasing decisions and prices and has a positive and significant effect on purchasing decisions. However, it is different from the research conducted by Purwati and Heri (2012). The results of this study prove that the variable price and product quality for Honda with varian of Beat matic motorbikes does not significantly influence towards purchasing decisions. Mandey's (2013) research shows that simultaneously promotion and distribution and prices have a significant effect on purchasing decisions. Partially, promotion and distribution have a significant effect on purchasing decisions, while prices have no significant effect. This is in contrast to Masrita's (2013) research, showing that the product, price, promotion and distribution variables are mutually significant influence on purchasing decisions. Partially, three variables of product, price, and promotion, have a significant influence on purchasing decisions, while the distribution variable has a significant but not significant effect. Based on this gap, the purpose of this study is to analyze and find empirical evidence of the effect of product quality on purchasing decisions, the effect of prices on purchasing decisions and the effect of variable distribution on purchasing decisions of Honda Vario 125-FI at Astra Motor Jakarta.

2. Theoretical Review and Hypotheses

2.1. Relationship of product quality and purchasing decisions

Product quality is an important thing that companies prioritize in a product offered to consumers. If the quality of the product is getting better, the consumers are increasingly sure

to make an immediate purchase (Tsiotsou, 2006). According to Kotler and Armstrong (2008), a consumer's purchase decision is to buy the most preferred brand or the buyer's decision about which brand to buy. According to Garvin (1998), product quality is the ability of a product that can give everything bigger or superior as a comparison with competing alternatives from a market perspective. Kodu's (2013) research found empirical evidence that variable prices, product quality, and service quality simultaneously have a significant influence on purchasing decisions and partially variable prices, product quality, and service quality have a significant effect on purchasing decisions. Thus, the hypothesis in this study is as follows:

H1: There is a significant and positive influence of product quality on purchasing decisions

2.2. Relationship between price and purchasing decisions

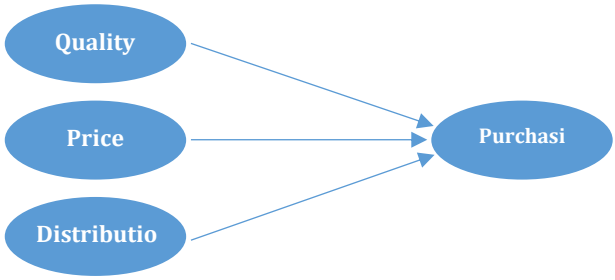
Price is one of the most important of the marketing mix, which is very closely related in the world of marketing. Where producers or companies must prepare prices that are right for consumers and companies, not low for companies and not high for consumers, because this can affect consumers in purchasing decisions (Chang & Wildt, 1994). According to Stanton (2004) and Laksana 2008), price is the amount of money, possibly added by several items, needed to obtain several combinations of products and services that accompany them. Previous research conducted by Weenas (2013) found empirical evidence that product quality, price, promotion, and service quality have a positive influence on the dependent variable of purchasing decisions. Previous research has also been carried out by Mandey (2013) which provides empirical evidence that simultaneous promotion and distribution and prices have a significant effect on purchasing decisions. Partially promotion and distribution have a significant effect on purchasing decisions, prices have no significant effect.

H2: There is a significant and positive effect of the price on the purchasing decision

2.3. Relationship between distribution and purchasing decisions

Distribution is also a matter that must be considered by the company at any time, the company must have a good strategy to anticipate the constrained distribution. The smooth and timely distribution is likely to allow consumers to make an immediate purchase decision (Peter et al., 1999; Munson & Hu, 2010). Suharno and Sutarso (2010) state that distribution channels are a group of interdependent parties involved in the process of distributing products or services, so that they are ready to be used or consumed by consumers or business users. Research conducted by Mandey (2013) provides empirical evidence that simultaneous promotion, distribution and price have a significant effect on purchasing decisions. Partially promotion and distribution have a significant effect on purchasing decisions, prices have no significant effect. Masrita (2013) provides empirical evidence that the product, price, promotion and distribution variables are mutually significant influence on purchasing decisions. Partially, 3 variables, namely product, price, and promotion, have a significant influence on purchasing decisions, while the distribution variable has a significant but not significant effect. Thus, the hypothesis in this study is as follows:

H3: There is a significant and positive influence of the distribution on purchasing decisions



Source: Kodu (2013), Weenas (2013), Mandey (2013), dan Masrita (2013)
Figure 1: Theoretical Framework

3. Research Methods

3.1. Research design

Research design is the basis for conducting research to assess the effect of product quality, price and distribution on purchasing decisions (Figure 1). The design of this study is exploratory research because this research is more pressing on gathering ideas and inputs, this is especially useful for solving broad and vague problems into narrower and more appropriate sub-problems (Churchill & Iacobucci, 2001).

3.2. Operational definition

Product quality, according to Garvin (1998) is the ability of a product that can give everything bigger or superior as a comparison with competing alternatives from the market perspective. The indicators used in this study are performance, additional privileges, reliability, endurance, conformance, service capability, aesthetics, and perceived quality. Price, according to Stanton (2004) is a sum of money that is determined to obtain several combinations of products and customers that accompany, measured with indicators price affordability, comparison with other brands, price compatibility with quality. Distribution, according to Suharno and Sutarso (2010) is a group of interdependent parties involved in the process of distributing products or services, so that they are ready to be used or consumed by consumers or business users, with indicators of product availability, delivery time, and place. Purchasing decision refers to the attitude of the consumer to buy the most preferred brand or buyer's decision about which brand to buy (Kotler & Armstrong 2008). The indicator used to measure this variable includes the stability of a product, the habit of buying a product, giving recommendations to others and making a repeat purchase.

3.3. Sampling

The sample is a subset of the population unit (Kuncoro, 2009). The number of samples in this study amounted to 110 respondents who were randomly selected during data collection and samples. On the basis of SEM it meets the number of samples that require a minimum sample of 100. According to Ghozali (2013) with an estimation model using Maximum Likelihood (ML), a minimum sample of 100 is needed. When the sample is raised above the value 100, the ML method increases its sensitivity to detect differences between data. Thus, the sample size between 100 and 200 should be used for the ML estimation method. The sample collection method used is non probability sampling of purposive sampling. The

sampling in this study is the object according to the criteria that have been determined as consumers who use the Honda Vario 125-FI, and aged more than 15 years with consideration they can be categorized as productive buyers.

3.4. Data analysis

The method that will be used in data analysis in this study is Structural Equation Modeling (SEM). The SEM is a combination of two separate statistical methods, namely factor analysis (factor analysis) developed in psychology and psychometrics and simultaneous equation modeling developed in econometrics (Ghozali 2013).

3.5. Validity and instrument reliability

Test the validity of the variable items indicates that all are valid with the range from 0.195 to 0.780 for product variable, 0.518 to 0.765 for price, 0.644-0.718 for distribution and 0.447-0.638 for purchasing decision. With the value of R-table of 0.361, the results reveal that all items are valid, except for first item of product variable with the score of 0.195 (Table 1). The testing of reliability shows that the value of Cronbach's Alpha for variables of produc, price, distribution and purchasing decision, is 0.908, 0.753, 0.820, and 0.778, respectively. Then it can be declared that variable statements are reliable (Table 2).

Table 1: Validity Testing

Variable	Item No.	R-arithmetic interval	R-table	Verification
Product	1	0.195	0.361	Not Valid
	2-16	0.476-0.780		Valid
Price	17-19	0.518-0.765	0.361	Valid
Distribution	20-22	0.644-0.718	0.361	Valid
Purchasing Decision	23-27	0.447-0.638	0.361	Valid

Table 2: Reliability Testing

Variable	Cronbach's Alpha	Verification
Product	0.908	Reliable
Price	0.753	Reliable
Distribution	0.820	Reliable
Purchasing Decision	0.778	Reliable

4. Methods

4.1. Normality test

From the critical ratio of skewness, all indicators show normal distribution because the value is <2.58, except for P3 indicator which has C.R -2,679, P7 which has c.r -3,548, P10 which has c.r -2,669, P22 which has c.r -2.809. To test multivariate normality, the multivariate value in the table shows 1.610 <2.58. Thus, it is multivariate with normal distribution.

4.2. Outlier evaluation

The criteria used are based on the value of chi-squares on the degree of freedom 26, namely the number of indicator variables at the significance level p <0.001. Mahalanobis distance

value χ2 (26, 0.001) = 54.1 because all values of Mahalanobis distance are below 54.1, it can be concluded that there are no outliers in the research data.

Furthermore, the results of AMOS output give a determinant of sample covariance matrix of 393.822. This value is far from zero so it can be concluded that there are no multicollinearity and singularity problems in the data analyzed.

This structural model as a whole approaches the fit criteria after making Modification Indices. Some approaches for the minimum index requirements, namely GFI, AGFI, TLI, and CFI show the marginal level of a model. After carrying out confirmatory tests on the variables of product quality, price, distribution, and purchasing decisions, this study shows that almost all variable construct indicators have a probability value p <0.05 and also meet the convergent validity value. Therefore, all data in the model is valid (Table 3; Figure 2).

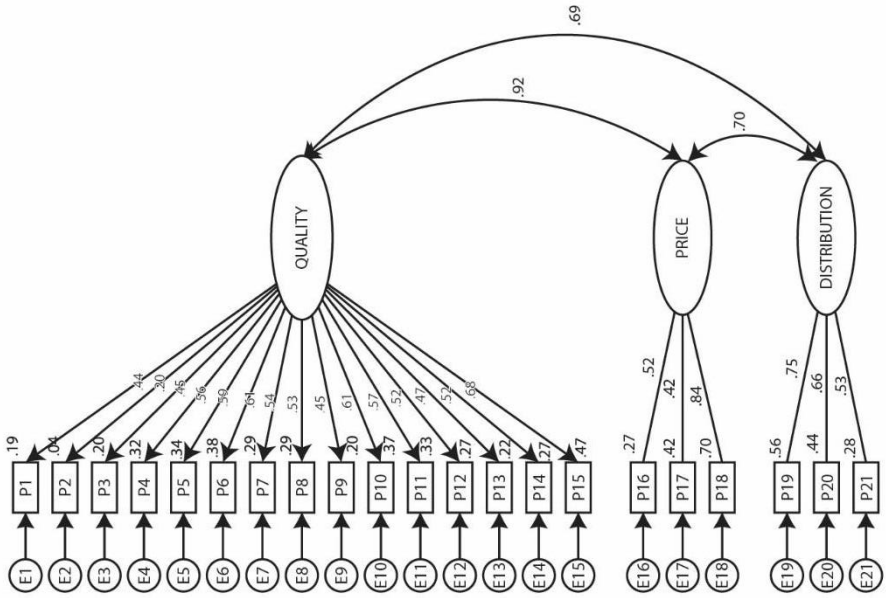


Figure 2: Exogenous Variable Confirmatory Test with CFA

Table 3: goodness of Fit Test

Goodness of Fit Index	Cut-Off Value	Results	Evaluation
X^2-Chi Square	-	348.690	Marginal
Significance Probability	≥ 0.05	0.003	Unfit
RMSEA	≤ 0.08	0.047	Good
GFI	≥ 0.90	0.816	Marginal
AGFI	≥ 0.90	0.769	Marginal
CMIN/DF	≤ 2.00	1.245	Good
TLI	≥ 0.95	0.917	Marginal
CFI	≥ 0.95	0.928	Marginal

4.3. Hypothesis testing

In testing the hypothesis, a hypothesis can be accepted (Ha = accepted) if the criterion critical ratio is more than 2.58 at a significance level of 0.01 or more than 1.96 for significance of 0.05.

4.4. Parameter estimation calculation results

The following table presents the calculation of parameter estimation results of the study. The overall CR value did not meet the requirements (<2.58) at the 0.01 significance level occurred in the relationship between price → purchasing decision (CR = 2.244 and P = 0.025), product quality → purchasing decision (CR = 1.449 and P = 0.147), and distribution → purchasing decisions (CR = 0.641 and P = 0.521). So that the causality relationship of these variables is not acceptable (Table 4; Figure 3).

Table 4: Parameter Estimation Calculation

Hypothesis	Estimate	S.E.	C.R.	P	Label
PD ← PR	.575	.256	2.244	.025	par_5
PD ←QL	.485	.335	1.449	.147	par_17
PD ←DT	.129	.202	.641	.521	par_18

**Note: PD: purchasing decision; PR: product; QL: quality; DT: distribution*

The results of the test data using SEM showed that product quality did not have a positive effect on purchasing decisions at the 0.05 significance level. This shows that this study does not support previous research conducted by Weenas (2013) and Kodu (2013). The results of the study show that prices have a positive effect on purchasing decisions at the 0.05 significance level. Moreoever, the research results show the distribution has no effect on purchasing decisions at the 0.05 significance level. This shows that this study supports previous research conducted by Masrita (2013).

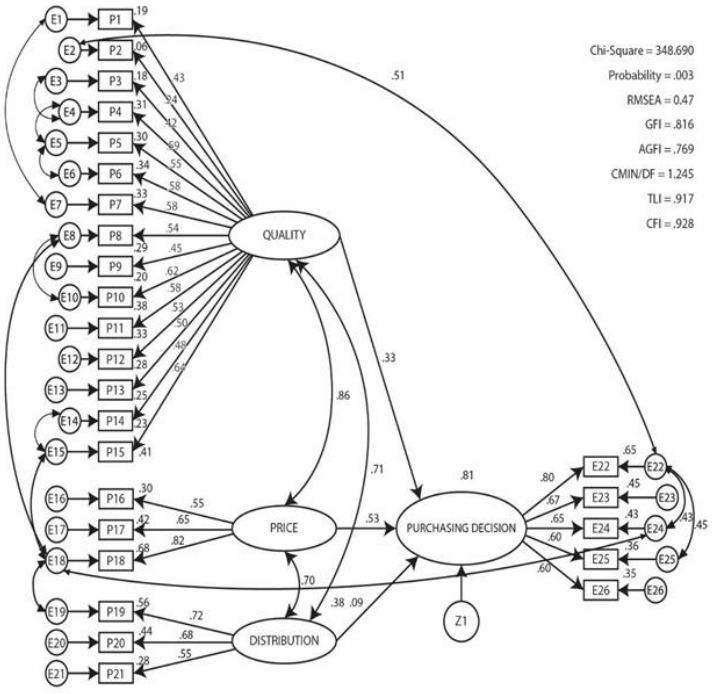


Figure 3: Full Structural Model

5. Conclusion

Product quality does not have a significant and positive influence on purchasing decisions. The lowest indicator of influence is P2 or the price of a Honda vario cheaper than its competitors. According to respondents the price offered is not cheaper with its competitors, this is what makes consumers hesitant to buy it. In terms of price, this variable has a significant and positive influence on consumer decisions in buying Honda Vario 125-FI products. The most dominant indicator influencing consumer purchasing decisions is P18 or price compatibility with quality. According to respondents the price offered is in accordance with the quality received by the respondents. Distribution variables do not have a significant effect on consumer purchasing decisions. The least influential indicator is P1 or place. According to the place respondents or dealers, it is still not extensive so it is not easy to reach some consumers who want to buy it. Product quality does not have a significant and positive influence on purchasing decisions. The lowest indicator of influence is P2 or the price of a Honda Vario cheaper than its competitors. According to respondents the price offered is not cheaper with its competitors, this is what makes consumers hesitant to buy it. In terms of price, this variable has a significant and positive influence on consumer decisions in buying Honda Vario 125-FI products. The most dominant indicator influencing consumer purchasing decisions is P18 or price compatibility with quality. According to respondents the price offered is in accordance with the quality received by the respondents. Distribution variable does not have a significant effect on consumer purchasing decisions. The least influential indicator is P1 or place. According to respondents, the place or dealer is still less extensive so it is not easy to reach some consumers who want to buy it.

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