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The Relationship Between Product Quality and Purchase Intention at PT. Lontar Papyrus Pulp and Paper Medan

Hubungan Kualitas Produk dengan Minat Beli Pada PT. Lontar Papyrus Pulp and Paper Medan

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Abstract: customer's expectations. It is the group of features and characteristics of a saleable good which determine its desirability and which can be controlled by a manufacturer to meet certain basic requirements. Research is conducted at PT. Lontar Papyrus Pulp and Paper Medan which having problem with the customers' purchase intention because of the product quality of the company. The indicators of variable X (Product quality) are performance, features, conformance, reliability, durability, serviceability, aesthetics, and customer perceived quality. The indicators of variable Y (Customer Purchase Intention) are product orders, customer satisfaction, loyalty, and repeat order. The population that the writer uses is the customers of PT. Lontar Papyrus Pulp and Paper Medan which are 92 people. To determine sample size, use simple random technique which all population member has same chance to be selected as sample. The results of the data calculations are product quality has relationship with purchase intention which can be seen from hypothesis test and has a positive and significantly strong relationship with purchase intention from correlation test and linear regression equation. The writer give several recommendations which make sure they sell all products in a good and complete condition to customers, check the products so that they can do all the features for its intended purpose, provide a clear and trusted warranty for certain period of time to customers, and may regularly to do product quality check up on the products they offering to the customers.

Abstrak: harapan pelanggan. Ini adalah sekelompok fitur dan karakteristik barang yang dapat dijual yang menentukan keinginannya dan yang dapat dikendalikan oleh produsen untuk memenuhi persyaratan dasar tertentu. Penelitian dilakukan di PT. Lontar Papyrus Pulp and Paper Medan yang bermasalah dengan niat beli pelanggan karena kualitas produk perusahaan. Indikator variabel X (kualitas produk) adalah kinerja, fitur, kesesuaian, kehandalan, daya tahan, kemudahan servis, estetika, dan kualitas yang dirasakan pelanggan. Indikator variabel Y (Niat Beli Pelanggan) adalah pesanan produk, kepuasan pelanggan, loyalitas, dan pengulangan memesan. Populasi yang penulis gunakan adalah pelanggan PT. Lontar Papyrus Pulp and Paper Medan yang berjumlah 92 orang. Untuk menentukan besar sampel digunakan teknik acak sederhana dimana semua anggota populasi mempunyai kesempatan yang sama untuk dipilih menjadi sampel. Hasil perhitungan data adalah kualitas produk memiliki hubungan dengan niat beli yang dapat dilihat dari uji hipotesis dan memiliki hubungan positif dan kuat secara signifikan dengan niat beli dari uji korelasi dan persamaan regresi linier. Penulis memberikan beberapa rekomendasi yaitu memastikan mereka menjual semua produk dalam kondisi baik dan lengkap kepada pelanggan, memeriksa produk agar dapat melakukan semua fitur untuk tujuan yang dimaksudkan, memberikan garansi yang jelas dan terpercaya untuk jangka waktu tertentu kepada pelanggan, dan dapat secara rutin melakukan pemeriksaan kualitas produk terhadap produk yang mereka tawarkan kepada pelanggan.

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INTRODUCTION

Product quality is derived from the difference between actual products and the alternative products that could be made available or provided by the particular industry. It can also be determined by the way customers perceive product quality in the market. It is difficult to meet the customers' expectation on quality since their understanding is varied and inconsistent. The differences of quality perspectives are pertinent in economic, technological, social and cultural achievement. Customers are seeking reliable products that suit the purpose and able to withstand the intended functions. With the increase of customer purchasing power supported by multiple and flexible financing scheme, customers find themselves surrounded with many options to choose.

Purchase intention has been widely used in the literature as a predictor of subsequent purchasing. More specifically, purchase intention is negatively driven by the perceived risk associated with the purchase. The greater the perceived risk associated with the act of buying from the company, the lower the future purchasing intention from the customers. According to Shaharudin, et.al (2011:8166), "The past research findings on the impact of perceived product quality on purchase intentions were contradictory to some which reported a direct positive impact of perceived product quality towards purchase intention. Generally, product quality has an impact towards the purchase/repurchase intentions of four different types of products. However, the effects are not entirely representing the link towards the purchase intentions especially when dealing with two dimensional product quality attributes framework".

The customers experience the quality of the paper is not good due to easily damaged and thin. The thickness and reliability of the CDB paper are not good. Customer certainly want to buy the products with the guaranteed quality products although the price may be more expensive. Moreover, there are many companies offer similar products with a better quality and maybe more affordable price. Product quality becomes one of determining level of purchase intention felt by customers who will then have a positive impact in the long term for the company. This problem effects the customers' purchase intention and impact to the sales of the product orders and result in the unstable financial in the company.

The less of customer purchase intentions occur because several factors which the product quality does not meet their expectations and desired, thickness and reliability of the CDB paper are not good, the company only give one time guarantee once the customers receive, later than that is not company's responsibility. In conclusion, the customers do not experience the products are as good as the company reputation and image. In order to archive the optimal purchase intention, the company needs to improve the quality of the products that the customers want and need so that they do not switch to other companies. It can be said that the quality is a great strategic weapon to win the business competition. Then, the company with the best quality of products will grow and continue to exist in the business market.

LITERATURE REVIEW

Product Quality. The most fundamental definition of a quality product is one that meets the expectations of the customer. However, even this definition is too high level to be considered adequate. In order to develop a more complete definition of quality, we must consider some of the key dimensions of a quality product or service. According to Korman (2013:1256), "Product is the key element that brings value to the customer brand name and packaging (Kotler and Armstrong, 2010:127). Product quality is derived from the difference between actual products and the alternative products that could be made available or provided by the particular industry (Hardie and Walsh, 1994:105). A product's quality has a significant impact towards the product or service performance, thus it is linked to a customer's and satisfaction". Bianca (2013:30), "Product quality refers to the perception of the degree to which the product or service meets the customer's expectations". It is the group of features and characteristics of a saleable good which determine its desirability and which can be controlled by a manufacturer to meet

certain basic requirements. Most businesses that produce goods for sale have a product quality or assurance department that monitors outgoing products for customer acceptability.

Product quality should be begin on customer's need and end with customer satisfaction and positive perception towards the product quality. As the party that buys and consumes the products, customers are the one who consider whether the product quality of the company is good or not." But, participation and interaction of customers in product delivery also give influence in product quality evaluation. Therefore, the same product can be appreciated differently by different customers. Every company has its own target in creating customer satisfaction. The first element which supports a company in reaching its target to give customer satisfaction is product quality. Through product quality, a company will be able to get more customers, maintain the existing customers even prevent them to run away from the company and change over to the competitor's products. Thus, product provider must interact attractively with customers to create superior value during product encounters. According to Kotler and Keller (2012:23): "Product providers must understand two attributes of product quality: first, quality is defined by the customer, not by the producer-seller. Second, customers assess product quality by company their expectations to their perceptions of how the product is performed".

Product quality can be created through the fulfillment of customer's expectation. Therefore, there are two main factors that influence product quality: the expected product and perceived product. So, the products will be considered good or positive. If perceived product exceeds expected product, so the product quality will be considered as ideal quality. Otherwise, if perceived product is worse than expected product, the product quality will be considered bad or negative. Therefore, the good or not a product quality is depend on the product provider's ability in fulfill customers expectation consistently.

Bianca (2013:31), "Product quality can be created through the fulfillment of customer's expectation". There are two main factors that influence product quality: the expected product and perceived product. So, the products will be considered good or positive. If perceived product exceeds expected product, so the product quality will be considered as ideal quality. Otherwise, if perceived product is worse than expected product, the product quality will be considered bad or negative. Therefore, the good or not a product quality is depend on the product provider's ability in fulfill customers expectation consistently. Product-based approach is based on its economical roots which the differences of the elements or attributes infatuated by the product are being considered as reflecting to the differences in quality. The user-based approach is where quality of products and services meets or surpasses customer' expectation. Quality was of two parts namely, the quality of design and also the quality of conformance. Providing satisfaction to customers by the design the products to the needs of customer is referred to the quality of design. In manufacturing- based approach has its origins from operation and production management; hence it is called as conformance to specification. The degree of the product meets certain standard designation it is called as quality of conformance which it has internal focus on the contrary of external focus of the user-based approached and quality is being reflected in outcome of engineering and also manufacturing processes. Lastly, value-based approached compared quality towards the performance at the satisfactory price or conformance at the affordable price which customer uses price as the measurement to quality. Besides that, quality set at a high level off product or services, it expand reputation, increase customer retention, attracting new customer from the word of mouth, and also increasing the financial performance as well ask profitability. In value based approach, quality is being defined as the product or services meet the customers need and wants or expectation. Quality of design and quality of conformance is the origin of quality. The quality of design is used in addressing product quality to the design which designated and met customer's needs.

Purchase Intension. According to Fornell (2013:65): "Customers' purchasing intention is series of choices made by a customer prior to making a purchase that begins once the customer has established a willingness to buy". The customer must then decide where to make the purchase, what brand, model, or size to purchase, when to buy, how much to spend, and what method of payment will be used. The marketer attempts to influence each of these decisions by supplying information that may shape the customer's evaluation process. According to Saleem (2015:2), "There are lots of factors that impact the

consumers purchase intention, but dealer cannot control, such as individual, social, psychological and literary factors. In order to achieve target customers efficiently. On the basis of actuality, persons make dealings and decisions, the marketers should recognize the whole concepts so, they can more readily conclude what influences consumers to buy. An individual awake plan to make an attempt to purchase the product relate with the quality perception". According to Beard (2013:84) for definitions of customers' purchaisng intention, "An optimization process through which buyers seek the product or the brand that will yield the greatest satisfaction. In order to find which brand will produce the highest utility, buyers compare these brands along attributes they consider as important". The choice process can be considered as the search for the most satisfying trade-off among brands that possess desirable attributes at different levels. Assume that a buyer judges – wrongly or rightly – that all the brands of one product on the market have exactly the same level of a given attribute. This attribute does not enable the customer to differentiate among different brands, since it is present in all of them. This attribute is called an inherent attribute. Obviously, in this case, to choose a brand, one would have to compare the different brands along other important attributes. For example, a buyer may perhaps think that all the umbrellas on the market are waterproof, whether or not this opinion is technically well-founded. The customer who perceives this as a fact cannot use the water-resistance attribute to compare umbrellas, since all the brands are perceived as being equal on this attribute.

Hypothesis Formulation

Ho: Product Quality does not have relationship with purchase intention at PT. Lontar Papyrus Pulp and Paper Medan.

Ha: Product quality has relationship with purchase intention at PT. Lontar Papyrus Pulp and Paper Medan.

METHODOLOGY

Research Design. According to Cooper and Schindler (2012:135), "The research design is used by the writer in analyzing this research is correlation research". The writer does a descriptive quantitative research for skripsi writing. Quantitative research is objective and statistical in nature and focuses on measuring phenomena. The purpose of quantitative research is to study complex situations and develop generalizations that contribute to the theory. Research design is a plan and structure of investigation so conceived as to obtain the answer of the research question. The plan is the overall scheme or program of research. Research design is all process in planning and doing the research. Data analysis methods that the writer used are as follows: 1. The writer used descriptive research method and correlational (casual research) research. Descriptive research methods were done by collecting, categorizing, analyzing, and also interpreting the data that is relevant with the problem. The descriptive research use interview and questionnaires. 2. Correlational research is a plan that defines the research question, hypotheses to be examined, and the number and type of variables to be studied. It also assesses the relationship between the variables by using well-developed principles of scientific inquiry. The correlational research uses correlation statistic such as correlation coefficient, determination, regression equity, etc.

Research Object. Sample is part of employees that has been selected by the writer to represent the customers of PT. Lontar Papyrus Pulp and Paper Medan According to Sugiyono (2011:98),"In addition to the purpose of the study and population size, three criteria usually will need to be specified to determine the appropriate sample size. The level of precision, the level of confidence or risk, and the degree of variability in the attributes being measured. The level of precision, sometimes calles sampling error is the range in which the true value of the population is estimated to be. This range is often expressed in percentage points (e.g.5%). Thus, if a researcher finds that 60% of customers in the sample have adopted a recommended practice with a precision rate of 5%, then he or she can conclude that between 55% and 65% of customers in the population have adopted the practice". The approach to determining sample size os the application of a simplified formula for prapations in Slovin's formula

provides a simplified formula to calculate the sample size in this skripsi. A 95% confidence level and $p=0.05$ are assumed, the sample size is 92 customers. The writer uses the simple random sampling which each member of the population has an equal and known chance of being selected. When there is large population, it is often difficult or impossible to identify every member of population.

Operational Variables. An operational definition is a description of the one particular way in which you will measure the dependent variable. Operational definitions are necessary so that reader will know exactly what the dependent variable is and how it was measured. There are two variables that have being applied in this research, named: 1) Independent variable (variable X) is a factor that can be varied or manipulated in the research. In this research, the independent variable (variable X) is product quality. 2) Dependent variable (variable Y) is a variable that the writer trying to predict. In this research, the dependent variable (variable Y) is purchase intention.

RESULT

Normality Test. Normality test is used to test the sample used whether is normal or not. Normality test is used to determine if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed.

Table 1. One-Sample Kolmogorov-Smirnov Test

		Product Quality	Purchase Intention
N		92	92
Normal Parameters ^a	Mean	20.75	21.12
	Std. Deviation	2.260	2.745
Most Extreme Differences	Absolute	.176	.245
	Positive	.176	.245
	Negative	-.163	-.121
Kolmogorov-Smirnov Z		2.145	1.302
Asymp. Sig. (2-tailed)		.232	.256

a. Test distribution is Normal.

Application of Kolmogorov Smirnov test is that if the significance is below 0.05, it means that the data to be tested have significant differences with the standard normal data. In other words, the data are not normally distributed. Based on the result above, the significant or probability value which is 0.232 and 0.256 which is greater than 0.05. This means, the sample has normal distribution.

Correlation Test. The correlation test can be used to know the correlation between independent variable and dependent variable.

Table 2. Coefficient of Correlation

		X	Y
X	Pearson Correlation	1	.842**
	Sig. (2-tailed)		.000
	N	92	92

Y	Pearson Correlation	.842**	1
	Sig. (2-tailed)	.000	
	N	92	92

The result of calculation of correlation coefficient between Variable X (product quality) and Variable Y (purchase intention), the writer got the result of 0.842 which is indicated as positive and significantly strong. This means product quality has a significantly strong relationship on purchase intention at PT. Lontar Papyrus Pulp and Paper Medan.

Determination Test. The writer then calculate the impact percentage of product quality toward purchase intention through determination test. The closer determinant coefficient approach 100%, the greater influence variable X contribution to the value of variable Y.

Table 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.842 ^a	.709	.698	2.826

a. Predictors: (Constant); purchase intention

The percentage impact of product quality on purchase intention is 70.9% and the remaining 29.1% is impacted by other factors which are not discussed in this skripsi. Product quality has high determination on purchase intention at PT. Lontar Papyrus Pulp and Paper Medan.

Linear Regression Equation. Linear Regression analysis is a statistical data technique that analyzes the linear relationships between two variables by estimating coefficient for an equation for a straight line.

Table 4. Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	72.94	.750		2.483	.018
	Total_X	.721	.072	.810	9.295	.000

a. Dependent Variable: purchase intention

After the calculation, the writer concludes that when product quality is at (X=1), the purchase intention is 73.66 which increase 0.72 point. Product quality has a positive equation on purchase intention which indicated by the increase of product quality will result in the increase of purchase intention.

Hypothesis Test. Sugiyono (2012:139) stated that, "Uji hipotesa Z dipakai apabila jumlah sampel yang digunakan lebih dari 30 orang". (The test the hypothesis is ztest if the size of sample is more than 30 people).

$$Z_{\text{count}} = \frac{r}{1/\sqrt{n-1}}$$

$$= \frac{0.842}{1/\sqrt{92-1}}$$

$$= \frac{0.842}{0.104}$$

$$= 8.10$$

The confidence level of hypothesis test is 95% and 5% error degree, this research discussed two variables (X and Y), so use the two tailed hypothesis test, Since use the two-tailed hypothesis test, $0.95/2=0.4750$. The ztable is 1.96. From the calculation above, the writer got count = 8.10. The count > ztable ($+8.10 > +1.96$). Null hypothesis (Ho) is rejected and Alternative hypothesis (Ha) is accepted. Product quality has relationship with purchase intention at PT. Lontar Papyrus Pulp and Paper Medan.

DISCUSSION

All points in the questionnaires are valid. It has been tested by validity test, the results validity of variable X and Y got high and very high data validity. All the statements of questionnaires can be used and carried out.

All questionnaires are reliable and trustworthy. It has been tested through reliability test by using Cronbach Alpha test. The results then show that the reliability of variable X is 0.843 and Variable Y is 0.857 which show good data reliability.

The normality value for variable X (product quality) and variable Y (purchase intention) is 0.232 and 0.256 which is greater than 0.05. The sample has normal distribution, so the data set is well-modeled by a normal distribution, this is good for the sample gives normal result.

The statistics variable X (product quality) got result the customers disagree that the company offers good product quality and variable Y (purchase intention), customers moderate that they have good purchase intention.

The correlation test value is 0.842 which variable X (working environment) has a strong relation with variable Y (employee job satisfaction) at PT. Lontar Papyrus Pulp and Paper Medan.

Based on determination test result, product quality give around 70.9% determination on purchase intention while the remaining of 29.1% is affected by other factors which are not discussed in this research.

The linear regression equation shows product quality has a positive equation on purchase intention which indicated by the increase of product quality will result in the increase of purchase intention and vise versa.

The value of hypothesis test is count > ztable ($8.10 > 1.96$), then Ha is accepted which product quality has relationship with purchase intention at PT. Lontar Papyrus Pulp and Paper Medan.

CONCLUSIONS

Product quality has relationship with purchase decision at PT.Lontar Papayrus Pulp and Paper Medan which can be seen from the result of hypothesis test.

The correlation test proved that product quality has a significantly strong and positive relationship with purchase decision. Determination test showed product quality has high determination on purchase intention.

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