

Role of Product Innovation and Brand Image Toward Customer Interest and Its Implication on Electronic Products Purchase Decision

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Abstract — PT. TJA is one of the importer companies that has a variety of electronic products and is a supplier and distributor of cleaning service tools and various cleaning tools. This study aims to analyze the effect of product innovation and brand image on customer interest which has an impact on purchase decisions for PT TJA's products. Sources of data used for research are secondary data and primary data. The research data was obtained by distributing questionnaires to respondents and through literature review. The independent variables are product innovation and brand image, the mediating variable is customer interest and the dependent variable is purchase decisions. The method of analysis in this study uses linear regression analysis with SPSS 22. Total respondents in this study is 140 folks, all respondents had made purchases and used products which were sold by PT TJA. The results of this study indicates that all variables have an effect on purchase decision.

Keywords: *product innovation, brand image, customer interest, purchase decision, electronic products*

Abstrak — PT. TJA adalah salah satu perusahaan importir yang memiliki berbagai produk elektronik dan merupakan perusahaan suplier dan distributor alat cleaning service dan berbagai alat kebersihan. Penelitian ini bertujuan untuk menganalisis pengaruh inovasi produk dan citra merek terhadap minat pelanggan yang berdampak pada keputusan pembelian produk PT TJA. Sumber data yang digunakan untuk penelitian adalah data sekunder dan data primer. Data penelitian ini diperoleh dengan menyebarkan kuesioner kepada responden dan melalui kajian pustaka. Variabel independen adalah inovasi produk dan citra merek, variabel mediasi adalah minat pelanggan dan menggunakan variabel dependen keputusan pembelian. Metode analisis dalam penelitian ini menggunakan analisis regresi linear yang ada pada aplikasi SPSS 22. Responden dalam penelitian berjumlah 140, seluruh responden telah melakukan pembelian dan menggunakan produk PT TJA. Hasil penelitian ini menunjukkan bahwa semua variabel berpengaruh pada keputusan pembelian produk.

Kata Kunci: *inovasi produk, citra merek, minat pelanggan, keputusan pembelian, produk elektronik*

INTRODUCTION

The rapid changes in technology and the enactment of the free market resulted in high competition among companies. This was exacerbated by the emergence of the covid pandemic at the end of 2019 which caused several obstacles and prohibitions

for companies, especially companies engaged in exports and imports to carry out retail trading activities, store operations and business exhibition events. However, the rapid and massive development of technology also has a positive impact on business. Advances in technology, digitalization and the

internet have created many emerging market places and online and digital marketing media.

A study of the most visited online shopping sites by Indonesian people throughout 2021 conducted by the Ministry of Communication and Information said that during this pandemic the number of online transactions increased by 400%, This figure is predicted to continue for some time to come. This is reinforced by a study on the most visited online shopping sites by the Indonesian people in 2021 conducted by the Ministry of Communication and Information Technology. Table 1 shows the results of the survey on the number of visits to the marketplace throughout 2021.

Table 1. Rank of Marketplace in 2021 Based on Number of Visits

Rank	Marketplace	Visits (.000000)
1	Tokopedia	1.200,0
2	Shopee	837,1
3	Buka Lapak	823,5
4	Lazada	445,5
5	Blibli	353,2
6	JD id	105,4
7	Orami	89,8
8	Bhineka	62,2
9	Sociolla	51,1
10	Zalora	44,5

PT TJA, which was founded in 2015, is a company engaged in the import of sanitary and household equipment specialists. The company owns the product trademark ELDAV. Several types of imported products are soap holders, tissue holders, trash bins, scrubber machines, polishing machines, vacuum cleaner machines, and so on. PT TJA expands the market by opening an online store in the marketplace in 2017.

The company is very responsive to the importance of a product innovation so that along with technological developments that continue to change, the company is always innovating. The forms of product innovation carried out are "destructive product" innovation and "sustaining product" innovation. The form of sustaining innovation that is carried out can be proven by the issuance of various types or the latest versions (Upgrades) of products such as manual soap dispensers into automatic soap dispensers, and manual trash cans into automatic trash cans. From several product improvement efforts made, it can be seen and felt clearly that the company is always trying to improve the specifications and quality of its various products from existing product innovations.

In general, consumers will compare the experience of using a product with other products. The brand image created by the company if it is in accordance with consumer expectations, it will attract customer interest which affects purchase decisions (Aaker, 1996). Customer interest will grow because of

the motive based on the attributes that match the desire or need in using a product (Ganesh, Mark & Kristy, 2000). After consumers have an interest in a product, there will be interest from customers to buy, after that is the emergence of purchase decisions (Atilgan, Aksoy & Akinci, 2005). Purchase decision is a concept in buying behavior where consumers decide to act or do something and in this case make a purchase for a particular product or service. Consumers have a background behind their choices in making decisions to buy and use products (Bigne, Sanchez & Sanchez, 2001). Purchase decisions for products can be based on two things, namely consumer loyalty and purchase decisions because the brand image of a product is good in the community and is supported by product innovation (Kamolshotiros, 2012).

Brand image is the process by which a person selects, organizes, and interprets input information to create a meaningful picture (Ajagbe, Long & Solomon, 2014). Brand image is the excitement of all associations related to a brand that already exists in the minds of consumers. Brand image is an association of all available information about the products, services and companies of the brand (Ajagbe et al., 2015). This information is obtained in two ways, the first through direct consumer experience, which consists of functional satisfaction and emotional satisfaction (Yasin, Noor & Mohamad, 2007). The brand must not only be able to work optimally and deliver the promised performance, but also must be able to understand consumer needs, carry the values that are desired by consumers and also meet the consumer's individual needs which will contribute to the relationship with the brand (Ajagbe, Oluyinka & Long, 2011).

Understanding consumer behavior is not an easy job, but it is quite difficult and complex (Bristow, Schneider & Schuler, 2002). This is due to the large number of variables that influence it and these variables tend to interact with each other. However, if this can be done, then a company that produces goods and services will be able to gain much greater profits than its competitors because by understanding consumer behavior, the company can provide better satisfaction to its consumers (Macdonald & Sharp, 2000).

If only every consumer has a constant behavior, perhaps the study of consumer behavior is not so important (Oh, 2003). But considering that consumers are always interacting with their environment, then that behavior will automatically occur will change even in a matter of days. Consumer behavior here is important to understand why and what influences changes in consumer behavior (Bucklin, Gupta & Siddarth, 1998).

Every decision taken by consumers must be based on certain reasons, either directly or indirectly (Wei, 2012). The consumer decision-making process is closely related to psychological problems and

external factors (Sanchez et al., 2012). By understanding consumer behavior, marketers will find it easy to describe how the decision process is made (Clemons, 2008).

The purpose of this research is to test and analyze the effect of each independent variable (product innovation and brand image) on purchase intention and to analyze the effect of purchase interest on purchase decisions on products marketed by a company engaged in the import of electronic products in Jakarta.

METHODS

The method of analysis begins by testing the validity and reliability of the research instrument. The validity test parameter uses a comparison of the value of r_{count} and r_{table} , if $r_{count} > r_{table}$, then the instrument or question item has a significant correlation with the total score (valid). If $r_{count} < r_{table}$, then the instrument or question item is not significantly correlated with the total score (invalid). The reliability test uses the parameter value of Cronbach's alpha statistic (α), if $\alpha > 0,6$ (reliable). Conversely, if the value of $\alpha < 0,6$ (not reliable). Total respondents of this research is 140 (Hair et al. 2010). After passing the data quality test, the classical assumption test was analyzed using the normality test, multicollinearity test and heteroscedasticity test. The normality test uses the Kolmogorov-Smirnof statistical test, with the residual parameters normally distributed if it has a significance $> 0,05$. The multicollinearity test uses the VIF value as a parameter, if the VIF value is lower than 5 (VIF < 5), it can be concluded that the data is free from multicollinearity symptoms. The heteroscedasticity test uses the glesjer test, namely by regressing the value with the dependent variable, where the regression model is said to have no problems if the significance level is below 5% ($\alpha = 5\%$). Multiple linear analysis is performed when the number of independent variables is more than 1 following the formula (1).

$$Y = a + b_1X_1 + b_2X_2 + \dots + e \quad (1)$$

T test is used to determine whether there is a significant (significant) relationship or influence between the independent variables partially on the dependent variable. Determination of the null hypothesis and the alternative hypothesis, $H_0: b_1 = b_2 = 0$, meaning that there is no significant effect between the independent variables partially on the dependent variable. $H_0: b_1 = b_2 \neq 0$, it means that there is a significant influence between the independent variables on the dependent variable. F_{count} is the F value resulting from the analysis calculation, which then the value will be compared with F_{Table} for certain numerators and denumerators. If $F_{count} > F_{Table}$, then the independent variables together

have a significant effect on the dependent variable. Variable of product innovation uses three indicators, namely durability, reliability and accuracy. Variable of brand image uses three dimensions, namely company image, user image and product image. The variable customers interest uses four dimensions, namely transactional interest, referential interest, preferential interest and exploratory interest. Variable of purchase decision uses six measurement dimensions, namely product selection, brand selection, purchase channel selection, purchase timing, purchase amount and payment method determination.

RESULTS AND DISCUSSION

Based on descriptive analysis, it is known that of the 140 respondents who were sampled by the researcher, there were 57,1% of respondents with male gender and 42,9% female. Most of the respondents were aged 18-26 years (42,9%) and 57,1% were aged 27-40 years. The percentage of respondents who obtained product information through e-commerce was 26,8%, physical stores (17,6%), business exhibitions (12,5%), business partners (33,4%), and others were 9,7%. The percentage of respondents who use soap dispensers is 20,08%, tissue dispensers (30,68%), vacuum cleaners (22,3%), polishing machines (20,49%) and others (6,45%).

The results of the analysis of the average value of each indicator per variable show that two indicators of product innovation variables that have values below the average are "Good durability" and "The number of variations of the product". The results of the analysis of the average value of each indicator variable of brand image show that two indicators with a mean value below the average are "Efforts to improve brand image" and "Products have sophisticated features". The results of the analysis of the average value of each indicator variable of customer interest show two indicators with a mean value below the average, namely "Desire to make PT TJA's products the main preference" and "Customer curiosity about the latest product information from the company". The results of the analysis of the average value of each indicator of the purchase decision variable show two indicators with a mean value below the average, namely "The decision to purchase products by credit" and "Price is the biggest consideration in buying a product from PT TJA".

The results of the validity test for all indicators indicate that the instrument used in the study is valid ($r_{count} > r_{table}$).

Table 2. Result of Validity Test (Product Innovation)

No.	Item	r_{count}
1	X ₁₁	0,760
2	X ₁₂	0,761
3	X ₁₃	0,656
4	X ₁₄	0,572
5	X ₁₅	0,598

Table 3. Result of Validity Test (Brand Image)

No.	Item	r _{count}
1	X ₂₁	0,526
2	X ₂₂	0,480
3	X ₂₃	0,577
4	X ₄	0,676
5	X ₂₅	0,537
6	X ₂₆	0,686
7	X ₂₇	0,740
8	X ₂₈	0,599
9	X ₂₉	0,625
10	X ₂₁₀	0,644
11	X ₂₁₁	0,764

Table 4. Result of Validity Test (Customer Interest)

No.	Item	r _{count}
1	X ₃₁	0,862
2	X ₃₂	0,864
3	X ₃₃	0,877
4	X ₃₄	0,759

Table 5. Result of Validity Test (Purchase Decision)

No.	Item	r _{count}
1	X ₄₁	0,752
2	X ₄₂	0,681
3	X ₄₃	0,557
4	X ₄₄	0,640
5	X ₄₅	0,722
6	X ₄₆	0,622
7	X ₄₇	0,451

The results of the validity test of all variables involving five indicators of product innovation

Table 7. Regression Analysis Product Innovation → Brand Image

	Unstandardized	Coeff. Std.	Std. Coeff.	t	Sig.
	B	Error	Beta		
(Constant)	24,990	2,515		9,935	,000
X1	0,162	,125	,587	8,522	,000

Dependent Variable: Brand Image

$Y = 24,990 + 0,162X1 + e$. The results of the multiple linear regression analysis equation above can be interpreted that the product innovation regression coefficient (b) is positive at 0,162 which means that if the other independent variables are fixed and the product innovation variable has increased by 1, it will affect the increase in brand image by 0,162. Table 7

Table 8. Regression Analysis Brand Image → Customer Interest

	Unstandardized	Coeff. Std.	Std. Coeff.	t	Sig.
	B	Error	Beta		
(Constant)	,110	1,943		,057	,955
X2	,331	,042	,559	7,911	,000

Dependent Variable: Customer Interest

$Y = 0,110 + 0,331X2 + e$. The results of the multiple linear regression analysis equation above can be interpreted that the brand image regression coefficient (b) is positive at 0,331 which means that if the other independent variables are fixed and the customer interest variable has increased by 1, it will affect the increase in customer interest by 0,331.

variables, 11 indicators of brand image variables, four indicators of customer interest variables and seven indicators of purchase decision variables show that the entire r_{count} value of each indicator has a value greater than r_{table}, so it can be concluded that the instrument used in the study is valid.

Table 6. Reliability Test

No.	Item	r _{count}
1	Product Innovation	0,685
2	Brand Image	0,843
3	Customer Interest	0,861
4	Purchase Decision	0,739

The results of the reliability test show that all of the Cronbach alpha values for each variable are greater than 0,6 so it can be concluded that all variables are reliable.

Based on the results of the normality test, the Asymp Sig. product innovation variable is 0,0046, brand image variable (0,043), consumer interest variable (0,000) and purchase decision variable (0,094) smaller than 0,05. The results of the heteroscedasticity test show that the sig. of the three independent variables product innovation (0,094), brand image (0,099) and customer interest (0,860) is greater than 0,05. In the multicollinearity test results, the VIF value of the product innovation variable is 2,250 (VIF < 10), the brand image variable (1,670) and the customer interest variable (2,108). All VIF values are less than 10, so it can be concluded that free from multicollinearity.

also shows that the t value of the effect of product innovation on brand image is 8,522 (t_{count} > t_{table}, 8,522 > 1,977), so it can be concluded that product innovation has a positive and significant effect on brand image. The better product innovation carried out by the company will further improve the brand image of the company and the products marketed.

Table 8 also shows that the t value of the influence of brand image on customer interest is 7,911 (t_{count} > t_{table}, 7,911 > 1,977), so it can be concluded that brand image has a positive and significant effect on customer interest. The better the brand image built by the company, the more customer interest will be to buy or repurchase PT TJA's products.

Table 9. Regression Analysis Product Innovation → Customer Interest

	Unstandardized	Coeff. Std.	Std. Coeff.	t	Sig.
	B	Error	Beta		
(Constant)	,354	1,308		,270	,787
X1	,253	,065	,703	11,61	,000

Dependent Variable: Customer Interest

$Y = 0,354 + 0,253X1 + e$. The results of the multiple linear regression analysis equation above can be interpreted that the product innovation regression coefficient (b) is positive at 0,753 which means that if the other independent variables have a fixed value and the customer interest variable has increased by 1, it will affect the increase in customer interest by 0,253. Table 9 also shows that the t value of the effect of

product innovation on customer interest is 11,61 ($t_{count} > t_{table}$, $11,61 > 1,977$), so it can be concluded that product innovation has a positive and significant effect on customer interest. The better the product innovation carried out by the company, the more customer interest in buying products marketed by PT TJA.

Table 10. Regression Analysis Customer Interest → Purchase Decision

	Unstandardized	Coeff. Std.	Std. Coeff.	t	Sig.
	B	Error	Beta		
(Constant)	11,467	1,473		7,787	,000
X3	,3843	,094	,607	8,983	,000

Dependent Variable: Purchase Decision

$Y = 11,467 + 0,3843X1 + e$. The results of the multiple linear regression analysis equation above can be interpreted that the customer interest regression coefficient (b) is positive at 0,3843 which means that if the other independent variables are fixed and the customer interest variable has increased by 1, it will

affect an increase in purchase decisions by 0,3843. Table 10 also shows that the t value of the influence of customer interest on purchase decisions is 8,983 ($t_{count} > t_{table}$, $8,983 > 1,977$), so it can be concluded that customer interest has a positive and significant effect on purchase decisions.

Table 11. Determination Test R²

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,627 ^a	,393	,380	3,394

Based on the results of the determination test in Table 11, it can be concluded that the number in the R square column shows a number of 0,93 or 39,3%. This shows that the percentage of the contribution of the independent variables, namely product innovation, brand image, and customer interest simultaneously on the variable of purchase decision is 39,3% and the remaining 60,7% is influenced by other variables or factors that not discussed in this study.

CONCLUSION

Product innovation affects the brand image, so that it means that the better the product innovation, the higher the brand image that can be obtained. So that in developing a product, the company must pay more attention to the innovation it has because this will greatly affect the consumer's impression of the product being offered. Brand image affects customer interest, so that in developing a product the company must pay more attention to the quality it has because this will greatly affect the consumer's impression of the brand image of the product being offered. Product innovation has an influence on customer interest, so that in developing a product the company must pay more attention to the innovation it has because this will greatly affect the consumer's impression of the product being offered. Customer interest has an effect on

purchase decisions, the better the product, the higher the customer interest that can be obtained so that it affects consumer purchase decisions.

Suggestions that can be given by researchers for company management are, PT TJA must be able to maintain or improve the reliability of its products. In addition, management must also be able to create more product variations other than issuing Upgrade products from each product issued. The company must continue to maintain the characteristics of its products so that people can easily identify and identify PT TJA's products. In addition, an effective and efficient promotional program is needed to build and shape the brand image of the product. Companies need to pay more attention to product characteristics such as what consumers want and need so that products can become consumers' main preferences.

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