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The Influence Of Product Quality And Product Design On Consumer Purchasing Decisions On CV. New Jaya Blessings Medan

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ABSTRACT

This research aims to find outthe influence of product quality and product design on consumer purchasing decisions at CV. Thanks to Jaya Baru Medan.This type of research uses quantitative research. The population of this study was 100 employees with a sample of 50 employees. The sampling technique uses the Slovin formula. Data analysis using multiple linear regression, the following results were obtained. HThe results of this research illustrate that there is a significant influence between product quality on consumer purchasing decisions at CV. Thanks to Jaya Baru Medan where the value of t > t table is 1.678 (8.498 > 1.678) in the positive direction. So Ha is accepted and H0 is rejected so it can be concluded that the product quality variable partially has a positive and significant effect on consumer purchasing decisions at CV. Thanks to Jaya Baru Medan. There is a significant influence between product design on consumer purchasing decisions at CV. Thanks to Jaya Baru Medan where the calculated t value < t table 1.678 (-1.637 < 1.678). So Ha is rejected and H0 is accepted so it can be concluded that partial product design has no effect and is not significant with a negative value on consumer purchasing decisions on CV. Thanks to Jaya Baru Medan.There isproduct quality and product design on consumer purchasing decisions at CV. Thanks to Jaya Baru Medan.

Keywords: Product Quality, Product Design, and Consumer Purchasing Decisions

I. INTRODUCTION

There are many ways that companies use to attract consumers, one of which is by studying consumer behavior in making consumer purchasing decisions. Purchasing decisions are an important thing that companies must pay attention to, because consumers will form a point of view on the products offered so that they form the intention to buy the product they like most and lead to the purchasing decision process. Many factors influence consumer behavior in decisions to purchase goods or services, one of which is product quality and product design.

Wardrobe Product Sales Data for the 2021-2022 Period

No.	Type	2021		2022	
		Price	Sold	Price	Sold
1.	Bet ai 3 door cupboard	Rp. 1,675,000	1,680 Units	Rp. 1,675,000	960 Units
2.	3 sliding door wardrobe	Rp. 2,250,000	1,200 Units	Rp.2,250,000	720 Units
3.	1 door crystal wardrobe	Rp. 1,150,000	960 Units	Rp. 1,150,000	480 Units

Source: CV. Thanks to Jaya Baru Medan

Based on the table above, sales in 2022 will experience a decline in sales, because the quality of this cupboard product is weak and seen from 3 aspects, namely the product is easily damaged and has a short economic life, weak durability, and the appearance of the product is less attractive because it is not there is a change in the appearance of the product.

So from several factors that can influence consumer satisfaction, researchers took two factors that can influence consumer satisfaction, namely product quality and product design, because these two factors are in accordance with the problems that occur in the company to be studied.Thus, the author is interested in conducting research with the title "The Influence of

Product Quality and Product Design on Consumer Purchasing Decisions at CV. Thanks to Jaya Baru Medan.

II. LITERATURE REVIEW

A. Product quality

Kotler and Armstrong (2016: 36), a product is anything that can be offered to the market to get attention, be purchased, used or consumed that can satisfy a want or need. The quality of a product or service is a hope and dream for all parties, so marketers before marketing their products must pay attention to the condition and appearance of the product that consumers will use.

Product Quality Indicators

Sangadji and Sopiah (2013:329), there are six elements of product quality and these are used as indicators of product quality, namely:

1. Performance, level of achievement of targets, objectives, mission, vision of the company's organization as stated in an organization's strategic plan.
2. Reliability, to know that the measurement results remain consistent if carried out twice or more on the same symptom using the same measuring instrument.
3. Features, a product offered with a variety of features is a competitive tool to differentiate a company's products from competitors' products.
4. Durability is the level of durability or how long the product is used.
5. Consistency, that isdetermination and stability in action.

Product Design

Product design is an activity that designs a form which is then processed through the production process and the final result is a product resulting from the production process and whose value and use can fulfill consumer desires which are adapted to changing times and developments.

Product Design Indicators

Kotler and Keller (2019:143), product design indicators that influence purchasing decisions include:

1. Performance (Performance), as a description of the level of achievement of the targets, objectives, mission, vision of the company organization as stated in the strategic plan of an organization.
2. Features, subjective characteristics regarding aesthetic values related to personal considerations and a reflection of individual preferences.
3. Reliability, the probability that a product will work satisfactorily or not within a certain time period.
4. Conformance (conformance to specifications), the basic operating characteristics of a product meet certain consumer specifications or no defects are found in the product.
5. Durability, regarding how long or how long the product in question lasts before the product must be replaced.

Buying decision

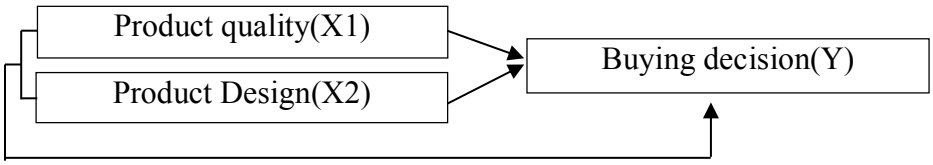
Swastha and Irawan (2018:9) purchasing decisions are consumers' understanding of the wants and needs for a product by assessing existing sources by setting purchase goals and identifying alternatives so that the decision maker to buy is accompanied by behavior after making the purchase.

Purchase Decision Indicators

Tjiptono (2012: 184), dimensions and indicators of purchasing decisions show that a consumer's decision to purchase a product includes six sub-decisions, namely:

1. Product Choice, consumers can make decisions to buy a product or use their money for other purposes.
2. Brand Choice, consumers must make decisions about which brand to buy. Each brand has its own differences.
3. Choice of Dealer, Consumers must make a decision about which dealer to visit.
4. Purchase Time, consumer decisions in selecting purchasing times can vary, for example some buy every day, once a week, once every two weeks and so on.
5. Purchase Amount., Consumers can make decisions about how much product to spend at any one time. There may be more than one purchase made.

Thinking Framework Image



Hypothesis

H0 = Product quality has no effect on purchasing decisions at CV. Thanks to Jaya Baru Medan.
H1 = Product quality influences purchasing decisions at CV. Thanks to Jaya Baru Medan.
H0 = Product design has no influence on purchasing decisions at CV. Thanks to Jaya Baru Medan.
H2 = Product design influences purchasing decisions at CV. Thanks to Jaya Baru Medan.
H0 = Product quality and product design have no influence on purchasing decisions at CV. Thanks to Jaya Baru Medan.
H3 = Product quality and product design influence purchasing decisions at CV. Thanks to Jaya Baru Medan.

III. RESEARCH METHODOLOGY

This research was conducted at CV. Thanks to Jaya Baru Medan which is located at Jalan Veteran Pasar 5 Helvetia Medan, Medan Helvetia District, 20123, Medan. The population of this research is all employeesas much100 consumers. The research sample was 50 consumers who used CV cupboard products. Thanks to Jaya Baru Medan

Data Collection Methods: interviews and questionnaires. Data Analysis Techniques: validity test, reliability test, classic assumption test (normality test, multicollinearity test), hypothesis testing (multiple linear regression, t test, F test, determination test)

Variable Operational Definition Table

Variable	Operational definition	Indicator	Scale
Product quality (X1)	a dynamic state associated with a product, service, person, process, environment that achieves or exceeds expectations. Goetsch and Davis (2017:3)	1. Performance. 2. Reliability 3. Feature 4. Durability 5. Consistency Sopiah(2013:329)	*Likert*
Product	the function and style of the	1. Performance	*Likert*

design (X2)	product as a design that is developed into a product that is attractive, cheap, safe and not expensive to use and service. Kotler & Armstrong (2016: 282)	2. Privileges 3. Reliability 4. Suitability 5. Durability Kotler and Keller (2019:143)	
Purchase Decision (Y)	Consumers' actions whether they want to buy a product or not. Tjipto (2012:89)	1. Product type decisions 2. Product form decisions 3. Brand decision 4. Design decisions 5. Product quality decisions Tjipto (2012:89)	*Likert*

IV. RESULT AND DISCUSSION

Product Quality Validity Test Table (Variable X1)

Statement	rcount	rtable	Note
1. I carry out my duties in accordance with applicable procedures	0.609	0.304	Valid
2. I try to complete tasks with a full sense of responsibility	0.629	0.304	Valid
3. I feel that the materials used in the wardrobe products last a long time/are not easily damaged	0.652	0.304	Valid
4. I feel the sturdiness of the wardrobe product is very strong	0.623	0.304	Valid
5. I feel the colors in each wardrobe product are good	0.601	0.304	Valid
6. The features of the cupboard product remain the same without any change in feature color	0.622	0.304	Valid
7. The wardrobe product I bought at CV. Thanks to Jaya Baru Medan, it has a long shelf life	0.692	0.304	Valid
8. The durability of cupboard products is very useful for me so that I don't always replace cupboards	0.658	0.304	Valid
9. CV. Thanks to Jaya Baru Medan, it is very consistent in the wardrobe products it sells	0.609	0.304	Valid
10. I always subscribe to CV. Thanks to Jaya Baru Medan because the company is very consistent in product quality	0.629	0.304	Valid

Source: Processed data (2023)

In the table you can see the results of the product quality variable validity test, which shows that each variable indicator has been tested by comparing the rcount value with rtable (0.05). From the test table it is known that all statements are declared valid and have met the validity requirements, meaning that the 10 statements are relevant to be used as indicators of the physical work environment.

Product Design Validity Test Table (Variable X2)

Statement	rcount	rtable	Note
1. Product design of wardrobes is useful for me	0.612	0.304	Valid
2. Wardrobe product design is in great demand by individuals	0.626	0.304	Valid
3. The cupboard design is special	0.647	0.304	Valid

4. The specialty of the product design is very luxurious	0.603	0.304	Valid
5. Cupboard products have very useful reliability	0.587	0.304	Valid
6. Closet products are very useful	0.617	0.304	Valid
7. Wardrobe products are price appropriate	0.687	0.304	Valid
8. The design of the cupboard really suits the shape of the proc	0.654	0.304	Valid
9. Cupboard products have quite a long shelf life	0.587	0.304	Valid
10. Durability of cupboard products according to price	0.617	0.304	Valid

Source: Processed data (2023)

Based on the table, you can see the results of the validity test for the Product Design variable (X2), which shows that each variable indicator has been tested by comparing the calculated r value with r table (0.05). From the test table it is known that all statements are declared valid and have met the validity requirements, meaning that all 10 statements are valid to be used as indicators of Product Design (X2).

Purchasing Decision Validity Test Table (Variable Y)

Statement	rcount	rtable	Note
1. Wardrobe products according to product type	0.628	0.304	Valid
2. The product information provided is appropriate	0.644	0.304	Valid
3. Shape the product according to taste	0.666	0.304	Valid
4. I am interested in buying	0.623	0.304	Valid
5. According to the brand I want	0.602	0.304	Valid
6. Never be disappointed after buying a cupboard	0.636	0.304	Valid
7. Cupboard products according to the desired design	0.702	0.304	Valid
8. Very satisfied with the cupboard design	0.670	0.304	Valid
9. Wardrobe products match the desired quality	0.666	0.304	Valid
10. Product quality compared to others	0.623	0.304	Valid

Source: Processed data (2023)

Based on the table above, you can see the results of the validity test of the purchasing decision variable (Y), which shows that each variable indicator has been tested by comparing the calculated r value with r table (0.05).

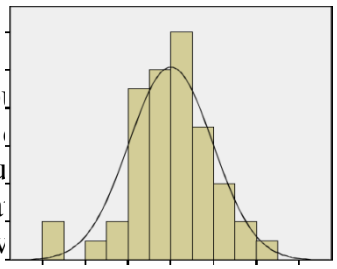
Table of Variable Instrument Reliability Test Results

Variable	Croncbac's Alpha	Status
Product Quality (X1)	0.756	Reliable
Product Design (X2)	0.725	Reliable
Purchase Decision (Y)	0.768	Reliable

Source: Data processed (2023)

From the results of the calculation of the reliability test for the physical work environment (X1) at = 0.756,

Histogram image of data normality test



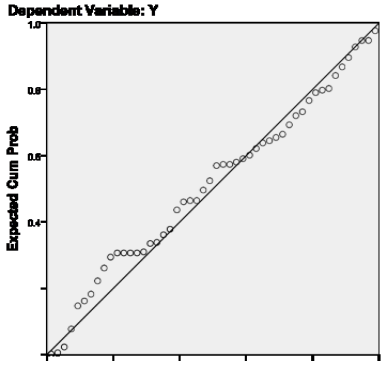
Based on the image below, it can be seen that the distrib variables show normal results, this can be shown by the which forms an image that resembles a bell. The distribu variable data displayed shows statistical test results tha not violate assumptions, which means they show v results.

Source: Data processed (2023)

Image of Normality Test Plot

Based on the picture below, it can be seen that the variat distribution shows normal results. This can be shown by t data not deviating to the left or right, while in the pictu you can also see points following the data besides t diagonal line, this means the data is normally distributed.

Source: Data processed (2023)



Multicollinearity Test Table

Coefficientsa			
Model		**Collinearity Statistics**	
		Tolerance	**Tolerance**
	(Constant)		
	X1	,592	1,688
	X2	,592	1,688
a. Dependent Variable: Y			

Source: Data processed (2023)

In the table above it can be seen that the Variance Inflator Factor (VIF) values are 0.001 and 0.000 <10 and Tolerance 592 and 1,688 > 0.10, so it can be concluded that there were no multicollinearity problems found in this research.

Multiple Linear Regression Table

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9,419	2,909		3,238	,002
	X1	,885	.104	,922	8,489	,000
	X2	-.173	.106	-.178	-1,637	.108
a. Dependent Variable: Y						

Source: Data processed (2023)

The results of the table above describe the multiple regression analysis equation, namely:

Y = a + b1X1 + b2X2 + e =>Y = 9.419 + 0.885 – 173

From the coefficient equation, the author can interpret it as follows:

1. The constant value shows a regression coefficient of 9,419, which means that if the product quality and product design remain the same or do not experience additions or reductions, then the purchasing decision constant value is 9,419.
2. The product quality coefficient value for variable X1 is 0.885 and has a positive sign. This shows that for every 1% increase in the product quality value, the performance variable will increase by 0.885 assuming the other independent variables from the regression model remain constant.
3. The product design coefficient value for variable X2 is-0.173 and has a negative sign. This shows that for every 1% increase in the stress value, the product design variable will decrease by 0.173 assuming the other independent variables from the regression model are constant.

Partial Test Table (T-Test)

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9,419	2,909		3,238	,002
	X1	,885	.104	,922	8,489	,000
	X2	-.13	.106	-.178	-1,637	.108
a. Dependent Variable: Y						

Source: Data processed (2023)

From the table above, it can be seen that:

1. Product quality shows a tcount of 8,498 with a significance value of 0.00. At df = n – 2 or 50 – 2 = 48 data α= 5% so ttable = 1.678. Thus tcount > ttable (8,489 > 1,678). Ha is accepted and H0 is rejected so it can be concluded that the product quality variable partially has a positive and significant effect on consumer purchasing decisions.
2. Product design shows a value of -1.637 with a significance value of 0.108. At df = n – 2 or 50 – 2 = 48 data α= 5% so ttable = 1.678. Thus tcount < ttable (-1.637 < 1.678). So Ha is rejected and Ho is accepted so it can be concluded that partial product design has no effect and is not significant with a negative value on consumer purchasing decisions.

Simultaneous Test (F-Test)

ANOVAa						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	451.231	2	225,616	48.115	,000b
	Residual	220,389	47	4,689		
	Total	671,620	49			
a. Dependent Variable: Y						
b. Predictors: (Constant), X2,						

Source: Data processed (2023)

Based on the table data above, the F-count is 48.115 and sig 0.000. F-table at the level α= 0.05, df 1 = (number of independent variables = 2) and df2 (n – k – 1 = 50 – 2 – 1 = 47), then the F table value = 3.20. This means that Fcount > Ftable (48.115 > 3.20) and sig < 0.05 (0.000 < 0.05), then the hypothesis can be accepted. In this case it can be said that the product quality and product design variables together have a real influence on purchasing decisions. so that these two independent variables can be used to estimate or predict purchasing decision variables on CV. Thanks to Jaya Baru Medan.

Coefficient of Determination Test Table (R2)

Model Summary b

Model	R	R Square	*Adjusted R Square*	Std. Error
1	.672a	,496	,463	,458

a. Predictor: (Constant), Remuneration and career development

b. Dependent variable: employee performance

Based on the results of the determination identification test in the table above, it shows that:

1. R = 0.672 means the relationship between product quality and product design on consumer purchasing decisions is 67.2%, which means there is a very close relationship. The larger R means the closer the relationship.

2. Adjusted R Square of 0.463 means that 46.3% of consumer purchasing decision factors can be influenced by product quality and product design. Meanwhile, the remaining 53.7% can be explained by other factors not examined by this study.
3. *Standard Error*it means measuring the variation from the predicted value. Standard error can also be called standard deviation. From the table above, the standard error is 0.458. The smaller the standard deviation, the better the model.

The Influence of Product Quality on Purchasing Decisions at CV. Thanks to Jaya Baru Medan
Based on the tests that have been carried out, the results show that product quality has a positive and significant effect on purchasing decisions. This is in line with research conducted by N.Sahara, M.Asnawi, A.Firah (2023) Dharmawangsa University whereproduct quality showsthat tcount is 8,498 with a significance value of 0.00. At df = n – 2 or 50 – 2 = 48 data α= 5% so ttable = 1.678. Thus tcount > ttable (8,489 > 1,678)in a positive direction then Ha is acceptedAndH0 is rejected.

The Influence of Product Design on Purchasing Decisions on CV. Thanks to Jaya Baru Medan
Based on the tests that have been carried out, the results show that product design influences purchasing decisions. These results contradict research conducted by A.Fazira, At.Harahap, A.Firah (2023) at Dharmawangsa University where the product design showed a value of -1.637 with a significance value of 0.108 so that ttable = 1.678, thus tcount < ttable (-1.637 < 1.678) then Ha is rejected and Ho is accepted.

The Influence of Product Quality and Product Design on Consumer Purchasing Decisions at CV. Thanks to Jaya Baru Medan
Based on the results of the F-test calculation, it was found that Fcount was 48.115 with a sig of 0.000, if consulted with Ftable at α = 0.05 df1 = 2, and df2 = 47, the F-table was obtained at 3.20. This means that F-count > F-table and sig < 0.000 (48.115 > 3.20) and sig (0.000 < 0.05) which indicates that the authors' third hypothesis is accepted.
Thus product quality and product design are very important for CV. Thanks to Jaya Baru Medan, because the more attractive the quality and design of the product on the cupboard, the more it becomes a decision when making a purchase. This means that there is a real and significant influence between product quality and product design together on consumer purchasing decisions at CV. Thanks to Jaya Baru Medan.

V. CONCLUSION

1. Product quality shows that the tcount value of 8,489 is greater than ttable 1,678 (8,489 > 1,678). Then Ha is accepted and H0 is rejected so it can be concluded that kProduct quality partially has a positive and significant effect on consumer purchasing decisions.
2. The product design shows that the tcount value -1.637 is smaller than ttable 1.678 (1.637 < 1.678). So Ha is rejected and Ho is accepted so it can be concluded that partial product design has no effect and is not significant with a negative value on consumer purchasing decisions.
3. Product Quality and Work Product Design simultaneously have a positive and significant effect on consumer purchasing decisions at CV. Thanks to Jaya Baru Medan. and the R Square test result of 0.672 means that 67.2% of product quality and product design factors can be influenced by consumer purchasing decisions. Meanwhile, the remaining 32.8% can be explained by other factors not examined by this research.

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