

Determinants Of Product Purchasing Decisions On Batik In The City Of Tasikmalaya**R. Adjeng Mariana Febrianti¹, Ryan Kurniawan², Artarina Dewi Samudra³, Keni Kaniawati⁴, Meriza Hendri⁵**¹Widyatama University²Widyatama University³Widyatama University⁴Widyatama University⁵Widyatama University¹Adjeng.mariana@widyatama.ac.id**Article History:** Received: 10 January 2021; Revised: 12 February 2021; Accepted: 27 March 2021; Published online: 20 April 2021

Abstract: This study is intended to determine the effect of product design and service quality on consumer purchasing decisions at Batik Manonjaya Tasikmalaya. The research method used is a quantitative method and is included in descriptive verification research. The sampling technique used in this study is non-probability sampling with the incidental sampling technique with a total sample size of 110 people. While the method of analysis used in this study is multiple linear regression analysis at a significance level of 5%. The program used in analyzing data used the Statistical Package for Social Sciences (SPSS) Ver. 25. The results of this study indicate that the questionnaire is valid and reliable. The results of hypothesis testing in this study are $H_a: \beta_1 \neq 0$ if p -value < 0.05 , which means that H_0 is rejected and H_a is accepted. The results also show that the product design variable has a partial effect on the purchasing decision variable with a significant level of consideration of $0.002 < 0.05$. And the results also show that the service quality variable has a partial effect on the purchasing decision variable with a significant level of consideration of $0.000 < 0.05$. The value of F count 54.404 is greater than F table 3.08, so the variable product design and service quality simultaneously affect the purchasing decision with a coefficient of determination of 50.4%.

Keywords: Product Design, Service Quality, Purchasing Decision.

1. Introduction

Today's digital era has presented a fast-paced and practical life. The development of increasingly sophisticated technology has made the internet familiar in daily activities so that it has become one of the driving forces for the development of modern life at this time. Moreover, internet users in Indonesia continue to grow every year. This can be seen from the results of the Association's survey. Indonesian Internet Service Users (APJII) in 2019. Based on APJII, internet users are more on shopping behavior with an increasing volume of e-commerce transactions. Quality products at competitive prices are the main key in winning the competition, which in turn will be able to provide higher satisfaction values to customers (Shnurr, et al, 2017). Today's customers have a much greater and more varied demand for value because they are faced with a wide choice of goods or services that they can buy. In this case, the seller must provide quality and satisfaction to a product that is acceptable to consumers, otherwise the customer will immediately turn to competitors who present the advantages of their products to consumers.

According to Kotler (2017), product design is the totality of features that affect the appearance, taste and function of a product based on customer needs. Design offers three things, namely function, aesthetics, and attractiveness. Furthermore, according to Tao and Sui, F (2019) states that a good design for a company refers to the ease of manufacture and distribution. As for consumers, a good design is a design that is beautiful or good to look at, easy to open, install, use, repair, and throw away. Currently there are many batik products in various regions, with many different types known to the public. Batik Manonjaya, is one of the batik known by the public, especially in the city of Tasikmalaya. With its competitive values, Manonjaya batik aims to offer the most popular batik products by continuously bringing new designs and good services to all users and customers. Like its competitors, Manonjaya batik offers a wide variety of product variations such as men's long and short sleeved batik shirts, women's batik, and children's batik and accessories. According to the Tasikmalaya City Government, especially in the SME,s sector (2019) there are 10 Batik SMEs in the city of Tasikmalaya:

Table 1. List of 10 Batik SMEs in Tasikmalaya City

No	The name of E-commerce in Indonesia
1	Batik Tasik Indah
2	Batik Rengganis
3	Batik Ardi
4	Batik Semar
5	Batik Manonjaya

6	Batik Sumber Sari
7	Batik Putri Pratiwi
8	Batik Sarah
9	Batik Ryan
10	Batik H Mamad

Source: www.ayotasik.com

Based on the data above, the development of batik products, especially in the city of Tasikmalaya, has so far increased. However, in 2019 to 2020 sales of Batik products in the city of Tasikmalaya experienced a decline in sales. This shows that consumer purchasing decisions are starting to decrease towards the batik product itself. Many factors influence each purchase decision itself, among others, product quality, brand image, price, place, etc. Based on the background, this study tries to determine the effect of product design and service quality on batik purchasing decisions, especially in the city of Tasikmalaya. As for the formulation of the problem in this study are: (1) does the product design affect the consumer purchasing decisions of Manonjaya batik? (2) does the quality of service affect consumer purchasing decisions of Manonjaya batik? (3) do product design and service quality influence the purchasing decision of Manonjaya batik?

2. Literature Review

Product Design

Producing products according to consumer wants and needs is what the design process wants to achieve (Jeswani, H and Azapagic, 2020). One way is to design oriented towards consumer wants and needs. The ability to identify consumer needs, then precisely create products that can meet these needs at low cost is the key to the success of a company in maintaining its existence (Bernado and Saravia, 2015). Product design is the most important part in designing a product so that it has value and usefulness to fulfill consumer desires in accordance with the changing times and times. The value contained in product design produces a product appearance that is its own characteristic and differentiator from many competing products and can attract consumer purchasing decisions. According to Kotler (2017), product design is the totality of features that affect the appearance, taste and function of a product based on customer needs. Adinugraha and Nadhifah's research (2020) states that product design affects consumer purchasing decisions. That is, consumer decisions can generally be influenced by the quality and design of the product itself.

H1. Product design affects consumer buying decisions

Quality of Service

Service quality is very important for companies to provide the best service to consumers. Good service quality will have a positive impact on consumers so that they are interested in buying products produced by these companies (Malinovski, T and Trajkovik, 2018). Service quality is a model that describes the condition of customers in forming expectations of service from past experiences, word of mouth promotion, and advertisements by comparing the service they expect with what they receive / feel. Talking about the definition of quality can mean different things for everyone, because quality has many criteria and is very dependent on the context. Many experts in the field of quality try to define quality based on their own perspective. According to Kotler, P (2017) Quality is the totality of features and characteristics of products and services that depend on their ability to satisfy stated or implied needs. There are several important things in service quality that need to be understood because service quality is a form of consumer assessment of the perceived service level with the expected service level covering all aspects of the organization. The dimensions of service quality according to Kotler (2017) are Tangible, Emphaty (Empathy), Realibility (reliability), Responsiveness (responsiveness), Assurance (Guarantee). According to Dehganpouri, H (2020) in his research, said that service quality affects consumer purchasing decisions

H2. Service quality affects consumer purchasing decisions

Buying decision

A marketer needs to understand how the process is in purchasing decisions. The decisions taken by consumers are closely related to what they buy (products and services), the quantity purchased, the place where they buy, the time they buy, and the method or way they buy. A decision is defined as the selection of available options (Zachary et al, 2017). Purchasing decisions are studies of the processes involved when individuals or groups choose, buy, use, or discard products, services, ideas, and experiences to meet their needs and wants (Augustine, 2010). Consumer purchase is a response to a perceived problem. Prior to the decision stage, consumers usually collect and process information, evaluate and choose the best option to solve problems or make purchase choices (Krishnakumar, 2018). The decision to buy can lead to how the decision making process is carried out (Schiffman & Kanuk, 2004). Meanwhile (Kotler & Keller, 2017) states that purchasing decisions are a problem-solving process consisting of analysis of needs and desires, information retrieval, resource assessment, selection of

purchasing alternatives, purchasing decisions, and post-purchase behavior. Research Amron (2018) states that purchasing decisions can be influenced by the product design and quality offered by the company.

H3. Product design and service quality influence purchasing decisions

3. Research methods

This study uses a quantitative analysis approach by adopting multiple regression analysis techniques. The sample in this study was 110 respondents. The sampling technique in this study is non-probability sampling with incidental sampling. According to Sekaran (2016) incidental sampling is a sampling technique based on chance at that time which is sampled if there is a match as the sample. The data sources and data methods used in this study are observation, interviews, and questionnaires. Meanwhile, secondary and primary data used a Likert scale

4. Results and Discussion

Characteristics of respondents in this study can be seen in table 2 below:

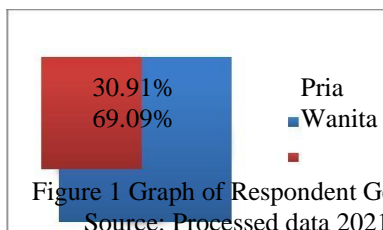
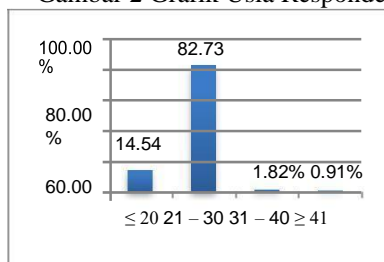


Figure 1 Graph of Respondent Gender
Source: Processed data 2021

Figure 1 above shows that a number of 76 people or 30.91% are women and the remaining 34 people, namely 69.09% are men.

Gambar 2 Grafik Usia Responden



Source: Results of processed data in 2021

Figure 2 above shows that most of the respondents, as many as 91 people or 82.73%, were between 21-30 years old, while the least number of respondents was 1 person or 0.91% were over 40 years old.

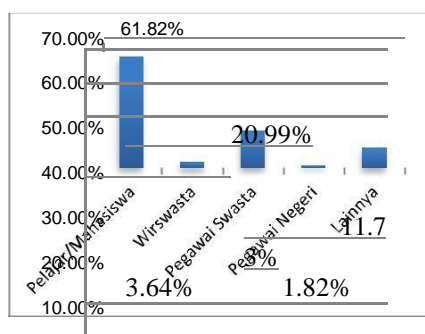


Figure 3 Respondent Occupation Graph

Source: Processed data in 2021

Figure 3 above shows that the highest number of consumers, namely 61.82% or as many as 68 people, were students.

Validity test

Table 2 Validity Test of Product Design Variables, Service Quality, and Purchasing Decisions

Variable	No. Item	r hitung	r tabel	Keterangan
	1	0,604	0,187	Valid

Product design			4	
	2	0,679	0,187	Valid
	3	0,748	0,187	Valid
	4	0,675	0,187	Valid
	5	0,725	0,187	Valid
Quality of service	1	0,716	0,187	Valid
	2	0,699	0,187	Valid
	3	0,737	0,187	Valid
	4	0,763	0,187	Valid
	5	0,674	0,187	Valid
Buying decision	1	0,564	0,187	Valid
	2	0,562	0,187	Valid
	3	0,508	0,187	Valid
	4	0,709	0,187	Valid
	5	0,792	0,187	Valid

Source: Results of processed data in 2021

The results of the validity test in table 4.1 show that all the calculated r values are greater than the r table values which are 0.1874. So it can be said that all items of the respondent's answer are valid.

Reliability Test

Table 3. Reliability test

Variabel	Cronbach Alpha (>0,70)	Information
Product Design	0,736	Reliabel
Quality of Service	0,873	Reliabel
Buying decision	0,845	Reliabel

Source: Results of processed data in 2021

Based on table 4.8. above, it can be seen that the Cronbach Alpha value of all tested variables is above 0.70, it can be concluded that all variables in this study are declared reliable.

Analysis of the coefficient of determination

Table 4 Model Summary Table

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.710 ^a	.504	.495	2.18972	1.972

a. Predictors: (Constant), Service_Quality, Product_Design

b. Dependent Variable: Purchase_Decision

Source: SPSS Output Results

From the results of Table 4 above, the coefficient of determination is 0.504, which means that the effect of the independent variable on the dependent variable is 50.4%. Meanwhile, 49.6% or the rest is influenced by other variables which are not researched.

5. Research Hypothesis Testing

Table 5 ANOVA table

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	521.723	2	260.861	54.404	.000
Residual	513.050	107	4.795		
Total	1034.773	109			

- a. Dependent Variable: Purchase_Decision
 - b. Predictors: (Constant), Service_Quality, Product_Design
- Source: SPSS Output Results

It is known that the F table value is 3.08. Because the calculated F value of 54.404 is greater than F table 3.08, it can be concluded that the Product Design and Service Quality variables simultaneously affect the Purchasing Decision.

Table 6 Coefficients Table

Coefficients ^a										
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error				Beta	Zero-order	Partial	Part	Tolerance
(Constant)	5.374	1.337		4.020	.000					
1 Desain_Produk	.184	.059	.320	3.130	.002	.647	.290	.213	.445	2.248
Kualitas_Pelayana	.254	.059	.439	4.304	.000	.677	.384	.293	.445	2.248

- a. Dependent Variable: Purchase_Decision
- Source: SPSS Output Results

Based on Table 6, it can be seen that the sig. Product design is 0.002 < 0.05. Besides that, it can be seen that the sig. Service Quality is 0.000 < 0.05, meaning that partially, Product Design and Service Quality both have a significant effect on Purchasing Decisions.

Multiple Linear Regression Analysis

Based on Table 6 above, it can be seen that purchasing decisions have a relationship and can be influenced by product design and service quality because both have a sig value. < 0.05.

Multicollinearity Test

From the results of Table 4.10, two independent variables are obtained, namely product design and service quality with a tolerance value of 0.445 and a VIF value of 2.248. This result means that there is no multicollinearity between the independent variables and meets the requirements of the classic multicollinearity assumption because the tolerance is greater than 0.1, while the VIF is smaller than 10.

Data Normality Test

Table 7 One-Sample Kolmogorov-Smirnov Test Table
One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			110
Normal Parameters ^{a,b}	Mean		.0000000
	Std. Deviation		2.16953419
Most Extreme Differences	Absolute Positive		.075
	Negative		.062
			-.075
Kolmogorov-Smirnov Z			.784
Asymp. Sig. (2-tailed)			.571

a. Test distribution is Normal.

b. Calculated from data.

Source: SPSS Output Results

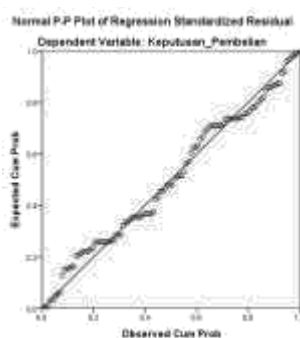


Figure 4 Normal P-P Plot of Regression Standardized Residual Graph

Source: SPSS Output Results

Based on the results of Table 4.11 above, the normality test with the Kolmogorov-Smirnov Test obtained the Asymp.sig value. amounting to $0.571 > 0.05$ and the results in Figure 4.5 P-P Plot is spread fairly evenly around the estimate line (diagonal line). So it can be concluded that the normal distribution data and this research model have met the normality test.

6. Conclusion

Based on the results of data analysis and discussion that has been done, it can be concluded as follows:

1. Product design in Batik Manonjaya for consumer purchasing decisions can be said to be good. However, there are several factors that need to be considered, such as variance in terms of size. And based on partial hypothesis testing, product quality has a significant effect on purchasing decisions.
2. Service Quality at Manonjaya Batik for consumer purchasing decisions can be said to be good, and based on partial hypothesis testing, service quality has a significant effect on purchasing decisions. Even though it is good, service quality can still be improved because service quality is very important in shaping consumer purchasing decisions.
3. Product design and service quality together have a significant effect on consumer purchasing decisions. This can be seen from the results of the analysis of the detemination coefficient which obtained results of 50.4%. Thus, product design and service quality can be further considered simultaneously in helping to improve consumer purchasing decisions.

Reference

1. Amron, A. (2018). The Influence of Brand Image, Brand Trust, Product Quality, and Price on the Consumer’s Buying Decision of MPV Cars. *European Scientific Journal, ESJ*, 14(13), 228.
2. Augustine Primananda (2010) Factors affecting Consumer buying house (a case study in the Housing Bukit Baru Semarang.
3. Adinugraha, H. H., & Nadhifah, H. H. (2020). Analysis of Factors influencing the Purchasing Decision of Facial Foam labeled Halal. *Journal of Digital Marketing and Halal Industry*, 2(1), 65.

4. Bernardo, F. P., & Saraiva, P. M. (2015). A conceptual model for chemical product design. *AIChE Journal*, 61(3), 802–815.
5. Dehghanpouri, H., Soltani, Z., & Rostamzadeh, R. (2020). The impact of trust, privacy and quality of service on the success of E-CRM: the mediating role of customer satisfaction. *Journal of Business and Industrial Marketing*.
6. Jeswani, H. K., & Azapagic, A. (2020). Environmental impacts of healthcare and pharmaceutical products: Influence of product design and consumer behaviour. *Journal of Cleaner Production*, 253.
7. Kotler, P (2017) *Marketing: An Introduction*. Pearson Ltd.
8. Krishnakumar. M. (2018). Future apparel buying intention: Mediating Effect of past apparel buying behavior and past apparel buying experience. International management institute New Delhi. Global business review. Sage journals
9. Malinovski, T., Trajkovik, V., & Vasileva-Stojanovska, T. (2018). Impact of different quality of service mechanisms on students' quality of experience in videoconferencing learning environment. *Turkish Online Journal of Distance Education*, 19(3), 24–37.
10. Schnurr, B., Brunner-Sperdin, A., & Stokburger-Sauer, N. E. (2017). The effect of context attractiveness on product attractiveness and product quality: the moderating role of product familiarity. *Marketing Letters*, 28(2), 241–253.
11. Schiffman, L. G., & Kanuk, L. L. (2004). *Consumer Behavior* (8th Editio). Upper Saddle River: Pearson Prentice Hall.
12. Sekaran. U (2016) *Research Methods for Business: A Skill Building Approach*. John Wiley.
13. Tao, F., Sui, F., Liu, A., Qi, Q., Zhang, M., Song, B., ... Nee, A. Y. C. (2019). Digital twin-driven product design framework. *International Journal of Production Research*, 57(12), 3935–3953.
14. Zachary R. Hall, Ryan R, and Jeffrey P. Boichuk. (2017) Generating and sharing of market intelligence in sales teams: an economic social network perspective. *Journal of Personal Selling and Sales Management*. Vol. 37, No. 4, 298–312.