

NAVIGATING THE DIGITAL MARKETPLACE: THE IMPACT OF E-COMMERCE AND SERVICE QUALITY ON ONLINE PURCHASE DECISIONS

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Abstract: This study reveals how e-commerce and service quality impact online purchase decisions among housewives. This study is motivated by the rapid growth of e-commerce, which has significantly changed purchasing dynamics and consumer behavior, especially among housewives, who play an essential role in purchasing decisions. The purpose of this study is to explore whether e-commerce and service quality have an impact on online purchasing decisions. The population in this study consisted of housewives in the Cerme sub-district in Gresik district - East Java. The population was sampled using the Cluster Random Sampling technique, so 239 respondents were used. The data analysis technique used is multiple linear regression. The results revealed that e-commerce and quality services together have a significant impact on online purchasing decisions. Further results show that consumer behavior variables also influence online purchasing decisions. Finally, this study has a significant relationship with the digital marketplace business and industry and recommendations for further research.

Keywords: *e-commerce, service quality, purchase decision, impact, online store*

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1. Introduction

The rapid development of electronic commerce, or e-commerce, in the digital age is now one of the main drivers of global economic expansion (Ahi et al., 2023). In this context, studies on the impact of e-commerce and service quality on consumer behavior are crucial as they encompass this development. This study explores the connection between e-commerce and service quality in online shopping decision-making among housewives. Housewives have a crucial role in making purchasing decisions for household needs. Research by Sohn & Kim, (2020) explored how housewives assess products, compare prices, and decide on purchases based on product quality, value, and usability.

To understand the true impact of e-commerce on consumer behavior, it is essential to consider the quality of service provided by e-commerce platforms. This research was conducted to add to the understanding of how quality service affects online purchasing decisions, especially at the local level, such as Gresik Regency. E-commerce has become an integral part of people's daily lives. The growth of e-commerce cannot be separated from the evolution of digital technology. Advances in mobile technology, digital payments, and artificial intelligence have fundamentally changed the way e-commerce operates. Ameen et al., (2021) emphasize how technological innovations such as chatbots, AI-based personalization, and

advanced recommendation systems have improved the online shopping experience, making it more efficient and enjoyable for consumers.

However, specific research on its impact on consumer behavior and purchase decisions at the local level is limited. Previous studies focus on large cities or metropolitan areas, and few consider the unique factors that influence consumer behavior in rural or semi-urban areas (Khan & Khan, 2022) such as Gresik Regency.

This research will use an empirical approach to understand how local factors, such as technological infrastructure, internet penetration rate, and demographic characteristics, affect the interaction between e-commerce, service quality, and online purchasing decisions. Empirical studies of consumer behavior at the local level can provide a deeper understanding of how consumers in Gresik Regency interact with e-commerce in their purchase decisions (Gulfraz et al., 2022). Through this empirical approach, this research aims to fill the literature gap regarding in-depth empirical studies of the effect of e-commerce on consumer behavior and online product purchasing decisions in Gresik Regency so as to provide more precise and relevant insights for businesses, communities, and policymakers (Rao et al., 2021). With a better understanding of the dynamics of the digital market, this research can be a valuable guide for businesses to improve the efficiency of marketing and sales strategies and assist policymakers in designing policies that support digital inclusion and economic progress in the area.

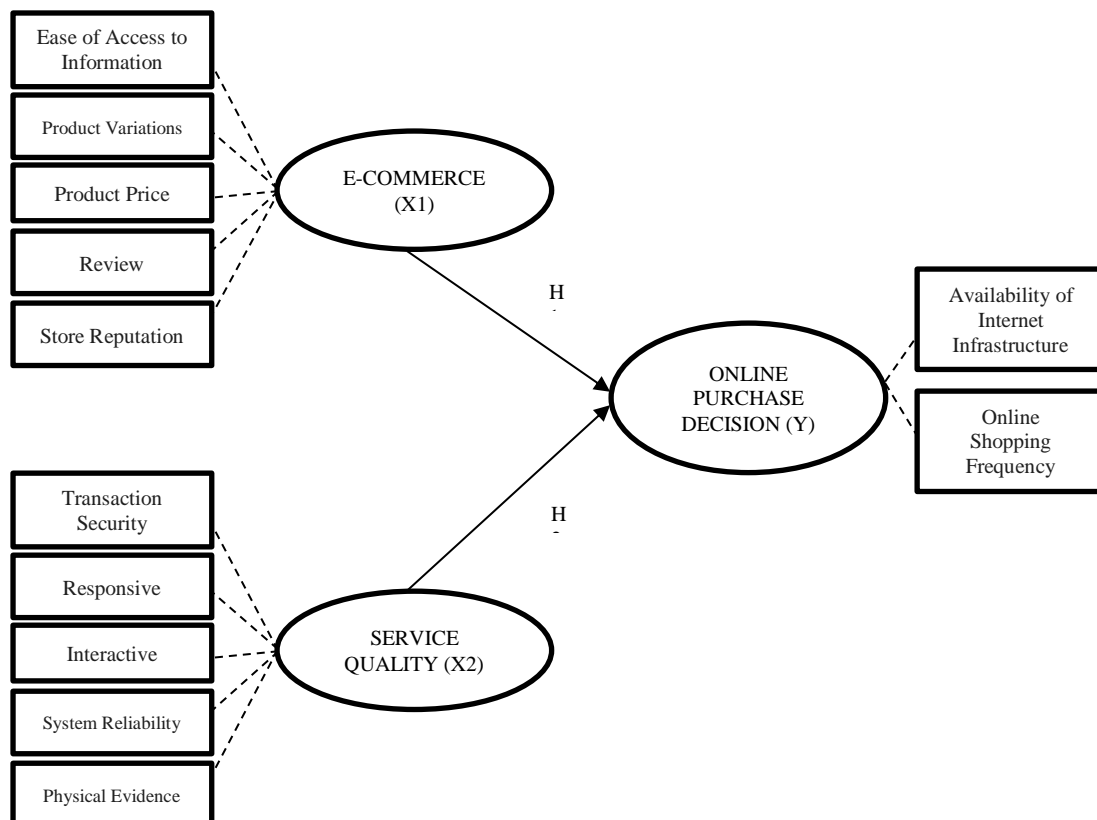


Figure 1. Conceptual Framework

Hypothesis

Researchers assume that the use of e-commerce significantly influences consumer behavior and purchasing decisions. It is supported by the theory of technology acceptance (TAM), which states that perceptions of the convenience and usefulness of technology will affect user intentions and behavior (Wandira et al., 2022). In addition, consumer behavior theory also shows that product preferences, interactions with e-commerce platforms, and consumer satisfaction can influence purchasing decisions (Gulfraz et al., 2022). Complete and quality product information is predicted to increase purchase intentions and purchase decisions. Consumers will be more confident buying a product if they have complete and quality information about it.

H1: E-commerce affects purchasing decisions.

Good service quality, such as rental, responsiveness, empathy, and assurance, can create a satisfying consumer experience. In e-commerce, high service quality on online platforms can increase consumer satisfaction with the shopping process, including ease of transaction, responsiveness to questions or problems, and transaction security. Service Quality models, such as the SERVQUAL model (AlOmari, 2021), emphasize the importance of perceived service quality in shaping consumer behavior. According to this model, consumers will make judgments about service quality based on a comparison between their expectations and their perceptions of the actual performance of the service provider. If consumers feel that service quality exceeds their expectations, satisfaction will increase, making them more likely to make positive purchasing decisions. Based on this theoretical foundation, high service quality on e-commerce platforms will increase consumer satisfaction and add significant value. This, in turn, will influence their purchasing decisions. Consumers are more likely to purchase a product or service if they are satisfied with their online shopping experience and feel that the e-commerce platform provides quality services.

H2: Service quality affects purchasing decisions.

2. Research Method

This quantitative research uses regression analysis to test the relationship between variables. The research is in 2024, and it takes place in the Cerme sub-district area, Gresik Regency, East Java. The research approach is through surveys and field observations. The survey was conducted by distributing questionnaires to respondents representing various groups in the population.

Population is a generalization area consisting of objects/subjects with specific quantities and characteristics determined to be studied and then drawn conclusions (Haryoko et al., 2020). The population in this study consisted of housewives in the Cerme sub-district area and married women who had used the internet to shop or buy products online. The age range of respondents selected is between 20 to 55 years.

The sampling technique uses cluster random sampling. Cluster random sampling is an area sampling technique to determine the sample when the object to be studied or the data source is comprehensive—for example, residents of a country or district (Haryoko et al., 2020). Cluster random sampling selected not individuals but groups or areas, which are then called clusters. By using the Krejcie and Morgan formula, it was found that the sample of this study was 239 respondents.

Data analysis techniques are used to determine how e-commerce variables and service quality affect online purchasing decisions using a Likert Scale. The Likert scale measures the

attitudes, opinions, and perceptions of a person or group of people about social phenomena (Haryoko et al., 2020). Furthermore, the data is obtained using a questionnaire, where the analysis results will be presented in tabular form. After calculating the results of the quantitative data processing questionnaire, the validity test, reliability test, multiple linear regression, and hypothesis testing are carried out.

3. Results and Discussion

3.1. Results

The results of this study go through the stages of testing assumptions or feasibility tests to determine the feasibility of the data used so that it can be used in multiple linear regression analysis techniques.

Table 1. Validity Test Results

| Indikator | r hitung | r tabel | Validitas |
|------------------|-----------------|----------------|------------------|
| X1.1 | 0,608 | 0,138 | Valid |
| X1.2 | 0,649 | 0,138 | Valid |
| X1.3 | 0,714 | 0,138 | Valid |
| X1.4 | 0,724 | 0,138 | Valid |
| X1.5 | 0,600 | 0,138 | Valid |
| X1.6 | 0,438 | 0,138 | Valid |
| X1.7 | 0,423 | 0,138 | Valid |
| X1.8 | 0,556 | 0,138 | Valid |
| X1.9 | 0,805 | 0,138 | Valid |
| X1.10 | 0,763 | 0,138 | Valid |
| X2.1 | 0,817 | 0,138 | Valid |
| X2.2 | 0,611 | 0,138 | Valid |
| X2.3 | 0,652 | 0,138 | Valid |
| X2.4 | 0,759 | 0,138 | Valid |
| X2.5 | 0,742 | 0,138 | Valid |
| Y1.1 | 0,485 | 0,138 | Valid |
| Y1.2 | 0,432 | 0,138 | Valid |

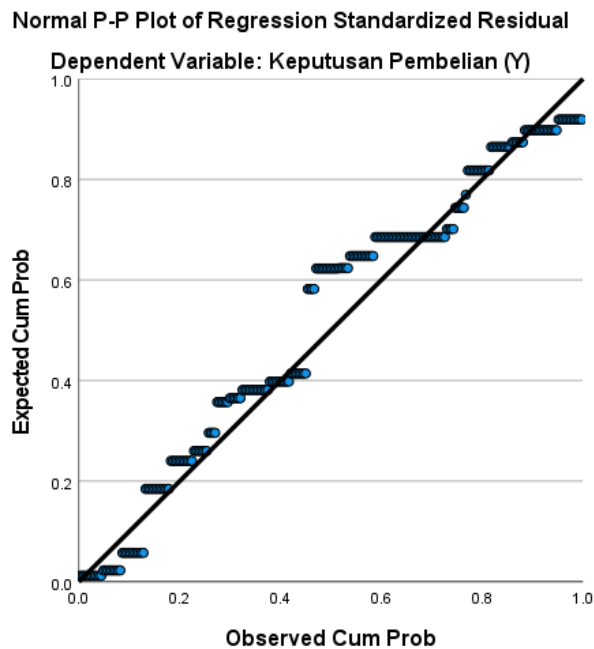
The validity test results based on Table 1 show that all variable instruments have a calculated r value more significant than the r table value ($r_{count} > 0.138$). Therefore, all question items from e-commerce variables, service quality, and purchasing decisions are considered valid.

Table 2. Reliability Test Results

| Cronbach's Alpha | Number of Questions | Description |
|-------------------------|----------------------------|--------------------|
| 0,901 | 17 | RELIABEL |

The reliability test results based on Table 2 show that all instruments used in this study have proven to be reliable. This is evident from the Alpha coefficient, which is quite large, above 0.901, indicating that each concept measuring each variable in the questionnaire can be considered reliable. Therefore, the questionnaire used in this study can be considered a reliable questionnaire instrument.

Table 3. Normality test



The results of the normality test based on table 3 show that the points are scattered around the line and follow the diagonal pattern, indicating that the residual values are in normal distribution.

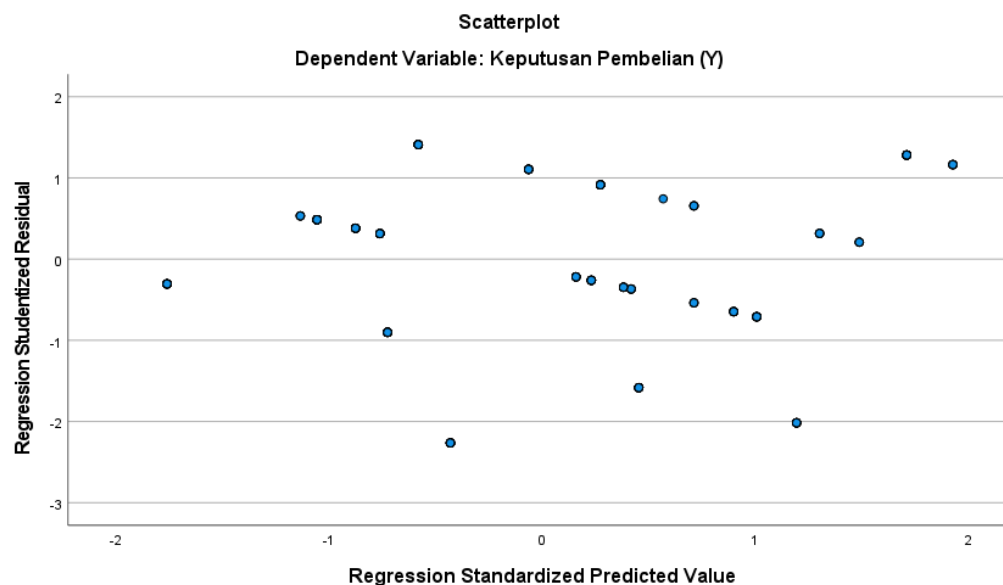
Table 4. Multicollinearity Test

| Coefficients ^a | | Collinearity Statistics | |
|---------------------------|-----------------------|-------------------------|-------|
| | | Tolerance | VIF |
| 1 | E-commerce (X1) | .517 | 1.933 |
| | Kualitas Layanan (X2) | .517 | 1.933 |

a. Dependent Variable: Buying decision (Y)

The multicollinearity test results based on Table 4 show that the independent variables' Variance Inflation Factor (VIF) value is below 10, and the Tolerance value is more significant than 0.100. This indicates that no multicollinearity problem occurs.

Table 5. Heteroscedasticity Test



The results of the heteroscedasticity test, based on Table 5, show that the dots do not clearly define a pattern. They are scattered above and below the value of 0 on the Y-axis. Therefore, there is no indication of a heteroscedasticity problem.

Table 6. Autocorrelation Test
Runs Test

| | Unstandardized Residual |
|-------------------------|----------------------------|
| Test Value ^a | .26308 |
| Cases < Test Value | 112 |
| Cases ≥ Test Value | 127 |
| Total Cases | 239 |
| Number of Runs | 129 |
| Z | 1.168 |
| Asymp. Sig. (2-tailed) | .243 |

a. Median

The autocorrelation test results based on Table 6 can be seen in Asymp. Sig. (2-tailed) 0.243 is more significant than 0.05, so it concludes that there are no autocorrelation symptoms.

Table 7. Multiple Regression
Coefficients^a

| Model | | Unstandardized Coefficients B | Std. Error | Standardized Coefficients Beta | t | Sig. |
|-------|-----------------------|----------------------------------|------------|-----------------------------------|-------|------|
| 1 | (Constant) | 2.237 | .666 | | 3.357 | .001 |
| | E-commerce (X1) | .143 | .021 | .536 | 6.841 | .000 |
| | Kualitas Layanan (X2) | -.017 | .026 | -.052 | -.670 | .504 |

a. Dependent Variable: Buying decision (Y)

The coefficient results based on Table 7 can be obtained through multiple regression equations as follows: $Y = 2.237 + 0.143X_1 - 0.017X_2 + e$

The constant value obtained is 2.237, which indicates that when the independent variable has a value of 0 (constant), the dependent variable will have a value of 2.237.

The regression coefficient for variable X_1 is positive (+) of 0.143, indicating that when variable X_1 increases, variable Y also increases, and vice versa.

The regression coefficient for variable X_2 is negative (-) of -0.017, indicating that when variable X_2 increases, variable Y will decrease, and vice versa.

The regression coefficient value for each variable in Table 7 suggests that the variable that has the greatest influence on purchasing decisions is the e-commerce variable because it has a higher regression value than the service quality variable.

Table 8. R Square coefficient of determination test

| Model Summary | | | | |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | .501 ^a | .251 | .244 | .840 |

a. Predictors: (Constant), Kualitas Layanan (X_2), E-commerce (X_1)

The results of the R Square coefficient of the determination test in Table 8 show that the Adjusted R Square value is 0.244, which indicates that simultaneously (together), the Independent Variable contributes 24% to the Dependent Variable.

Hypothesis Test

The parameter coefficients of the independent variables can be interpreted using standardized coefficients. Analysis of the coefficient table can provide an understanding of the effect of the independent variable partially on the dependent variable as follows:

Table 9. t Test Results Coefficients^a

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|----------------------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 2.237 | .666 | | 3.357 | .001 |
| | E-commerce (X_1) | .143 | .021 | .536 | 6.841 | .000 |
| | Kualitas Layanan (X_2) | -.017 | .026 | -.052 | -.670 | .504 |

a. Dependent Variable: Keputusan Pembelian (Y)

The results of the individual parameter significance test or t-test in Table 9 show:

1. The t_{count} value is 6,841 > t_{table} 1,651 and the significance value (Sig.) of Variable X_1 is 0.000, which is lower than (<0.05), this indicates that the e-commerce variable has a significant influence on online purchasing decisions.
2. The t_{count} value is -0.670 < t_{table} 1,651 and the significance value (Sig.) of Variable X_2 is 0.504, which is higher than (<0.05), concluding that the service quality variable does not have a significant influence on online purchasing decisions.

3.2. Discussion

The Effect of E-Commerce on Purchasing Decisions

As a business model, E-Commerce has dramatically evolved since its inception. According to a study by Bai & Li, (2022) e-commerce emerged from the need to simplify transactions in the digital age. Initially, it was limited to B2B (Business-to-Business) transactions but later evolved into a platform that involved direct consumers (B2C, Business-to-Consumer). It is evident from the research that has been conducted that there is currently a proliferation of various e-commerce platforms that consumers can access directly (B2C). It is undeniable that e-commerce has changed the attitude and shopping style of consumers from all walks of life; online shopping has become something done regularly around the world.

The position of housewives as the primary decision-makers in purchasing household goods plays a vital role in the success of e-commerce (Zheng & Lu, 2021). Housewives' technology and digital media utilization in e-commerce is an important topic. Ariansyah et al., (2021) explored how housewives use mobile devices and e-commerce applications in selecting products. E-commerce has led to significant changes in housewives' shopping behavior. Biancolin & Rotaris, (2024) examined how ease of access and the availability of diverse online options affect traditional shopping habits. This is evidenced by the results of surveys and research that housewives aged 20-55 years in Gresik Regency have shopped or bought products online. Some shop online regularly and then resell offline.

The Effect of Service Quality on Purchasing Decisions

Service quality is the quality the company provides, including convenience, reliability, trust, and responsibility. Service quality is a consumer assessment of the level of service perceived by consumer expectations and factors that affect other service quality (Malik et al., 2020). Service quality in e-commerce is essential because it is a significant factor in determining the level of public trust in using the platform so that people become loyal to the e-commerce platform. This is in line with the results of research conducted in Gresik Regency, which shows that good service quality significantly affects purchasing decisions. Good service quality can lead to customer satisfaction, providing an excellent opportunity for consumers to shop again.

Consumer behavior in the context of e-commerce is influenced not only by external factors such as product availability or ease of access but also by internal factors related to buyer psychology. Studies by Mofokeng, (2021) and Molinillo et al., (2021) explore how perceived value, trust in the platform, and user experience influence consumers' purchase decisions online. Consumer satisfaction and loyalty, which result from positive interactions with E-Commerce platforms, are also crucial in determining the frequency and volume of online purchases. Reviews and recommendations in the digital age are vital in shaping consumer purchasing decisions. Filieri et al., (2021) and Guo et al., (2020) state that online reviews, both positive and negative, as well as recommendations from other users, have a significant impact on perceptions and purchasing decisions. This phenomenon shows how e-commerce is a marketplace and a community where opinions and shared experiences influence shopping behavior. This is very influential on online product purchasing decisions in order to get the product according to what is expected. Because online product purchases can only see and choose products virtually or online. Reviews or evaluations after buying products online are among the main influences for consumers to buy these products.

4. Conclusion

E-commerce affects purchasing decisions. This shows that e-commerce with indicators of easy access to information, product variety, product prices, customer reviews, and online store reputation can strengthen consumer interest in making online purchases. When consumers already feel the existence of these indicators on an e-commerce platform, it can be predicted that consumers will become regular customers and make regular purchases on the e-commerce platform.

Service quality affects purchasing decisions. This shows that service quality with indicators of transaction security, responsiveness, interactivity, system reliability, and physical evidence can provide an excellent experience for consumers when deciding to purchase. Good service quality can gain consumers' trust, leading to consumer satisfaction and the ability to make repeat purchases (repeat orders) at the store.

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