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Information Quality and Ease of Use in E-Commerce: The Mediating Role of Consumer Behavior in Online Purchase Decisions

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Abstract. Online purchase decisions are increasingly shaped by service-related attributes of e-commerce platforms. This study examines the effects of information quality and perceived ease of use on online purchase decisions, with consumer behavior acting as a mediating variable, in the context of e-commerce users in Medan City, Indonesia. Using an explanatory research design, data were collected from 150 respondents through structured questionnaires and analysed using Partial Least Squares–Structural Equation Modelling (PLS-SEM). The results indicate that information quality has a significant positive effect on both consumer behavior and online purchase decisions. Consumer behavior, in turn, significantly influences online purchase decisions and mediates the relationship between information quality and purchasing decisions. In contrast, ease of use does not show a significant direct or indirect effect on consumer behavior or purchasing decisions. This study contributes to the literature on e-commerce service and consumer decision-making by clarifying the mediating role of consumer behavior. Practically, the findings suggest that e-commerce providers should prioritise the quality and presentation of information rather than relying solely on system convenience to influence consumer purchasing decisions.

Keywords: information quality, ease of use of e-commerce, purchasing decisions, consumer behavior

1. Introduction

The growth of internet users and information technology systems will undoubtedly impact the growth of e-commerce businesses in Indonesia. Currently, people are accustomed to online purchasing transactions, which make shopping easier. Social media is also now widely used and sought after as a place to conduct online business by various groups because it saves more time than opening a physical store. This also attracts consumers to choose online shopping due to the various conveniences it offers. Online shopping has become a habit for most people due to the convenience offered at various prices, resulting in the formation of consumptive behavior. Consumptive behavior is the act of someone buying an item without any reasonable consideration, where the person's purchase is not based on need (Sumartono, 2002). The emergence of consumptive behavior is inseparable from the factors that influence a person's purchasing decision. According to Schiffman and Kanuk (2009), a decision is a selection between two or more options.

Quality information is information that can provide benefits to users (Ismawati, 2020). According to Jogiyanto (2007), information can be assessed by two things: benefits and costs. Quality information must have benefits that are more effective than the costs incurred (Jogiyanto, 2007). Information quality influences purchasing decisions. This statement aligns with research conducted by Saputra et al. (2019). In online shopping, it is best to present information that includes its relationship to the products and services available. The information presented will be better if it is relevant in predicting the usefulness and quality of the product or service.

Ease of use can influence a person's behavior; the higher the perception of a system's ease of use, the higher the level of use of that system (Wahyuningtyas & Widiastuti, 2017). According to Wulandari (2020), there are several dimensions to ease of use, including: easy to understand, requires minimal effort, and easy to use. Ease of use is defined as the level of user confidence in using a system that will require minimal effort based on clear and easy-to-understand indicators. A product will be more easily accepted by consumers when the price of the product is affordable for consumers, so that consumers make purchasing decisions. According to Kotler and Keller (2016), consumer purchasing decisions are defined as a person's activity in recognizing problems and obtaining needed products or services. The result of this integration is a choice that is presented cognitively as a behavioral desire.

Theoretically, it is explained that online shopping decisions can occur due to the influence of certain factors. These factors are consumer characteristics, product/service characteristics, environmental characteristics, seller/intermediary characteristics, and the e-commerce system. Within consumer characteristics, there is a psychological field that can influence a person, with perception as one aspect. This is what can influence the consumer decision-making process. Based on the description above, the researcher tested the Analysis of Information Quality and Ease of Use of E-Commerce on Online Purchasing Decisions with Consumptive Behavior as an Intervening Variable in Medan City.

2. Literature Review

2.1 Purchasing Decision Theory

Online shopping is an individual's desire to spend money by selecting goods or services in an online store, and you can pay by transfer or pay on the spot (Ariesta, 2020). In addition, online shopping is a need and lifestyle for someone whose life needs must be met as a consumer (Putra & Sari, 2020). According to Setiadi (2010), consumer decision-making is an integration process that combines knowledge to evaluate two or more alternative behaviors and choose one of them. Meanwhile, Peter and Olson (2009) state that purchasing decisions are an integration process that combines to evaluate two or more alternative behaviors and choose one of them. According to Hardiawan (2014), purchasing decisions are the decision-making process and physical activities of individuals, all of which involve individuals in assessing, obtaining, using, or ignoring goods and services.

Consumer behavior will determine their purchasing decision-making process. Basic psychological

processes play a crucial role in understanding how consumers actually make their purchasing decisions. Schiffman and Kanuk (2008) define a decision as a selection between two or more alternative choices. In other words, alternative choices must be available to a person when making a decision. According to Schiffman and Kanuk (2008), consumer decision-making models are not intended to provide a comprehensive overview of the complexities of consumer decision-making. Rather, they are designed to integrate and align relevant concepts into a meaningful whole.

2.2 Information Quality Theory

According to Sutabri (2012), information quality is the extent to which information can consistently meet the needs and expectations of all parties who need information to carry out the process. According to Wahyuni et al. (2017), information quality is the quality related to the quantity, accuracy, and form of information about products and services offered on a website. In conclusion, information quality is one of the factors that support someone in making online purchasing decisions. E-commerce sites must be able to display relevant and easy-to-understand information about the products or services they offer, so that consumers can receive the information they are looking for to influence their purchasing decisions.

2.3 Theory of Convenience

According to Rahayu (2017), Ease of Use is a condition where consumers believe that using technology is easy and does not require hard work from the user. According to Davis (in Irmadhani, 2012), Ease of Use is the extent to which someone believes that using a system is not difficult to understand and does not require much effort to be able to use it. So, ease can be interpreted as a system that is not designed to make it difficult to use, but a system that is designed to provide convenience for its users. Therefore, it is easier for someone who uses a certain system to work than someone who works manually. It is very easy to explain that a technology is easy to use, users will tend to use it. Factors that influence ease of use according to Istanti, (2017) are divided into 5 parts, namely Information technology is easy to learn, Information technology does what the user wants easily, User skills will increase when using information technology, Information technology is easy to operate, and Does not waste a lot of time.

2.4 Theory of Consumer Behavior

According to Waluyo (Fitri 2013), consumer behavior is a behavior or lifestyle that involves spending money without careful consideration. According to Maulana (Hidayah 2015), consumer behavior is defined as a behavior that leads to the desire to purchase items that are not necessary to satisfy personal needs. In psychology, this is known as compulsive buying disorder, where people who are trapped in it cannot differentiate between needs and wants.

According to Effendi (2016), consumer behavior is the tendency of consumers to consume without limits, prioritizing desires over needs. Based on the views of the experts above, researchers conclude that consumer behavior is the tendency to buy, consume, or use goods excessively without rational consideration. Furthermore, this behavior emphasizes fulfilling desires rather than needs, and often involves a luxurious and excessive lifestyle.

3. Research Method

This research can be classified as an explanatory research. Explanatory research is a research method that aims to explain the position of the variables studied and the influence of one variable on another (Sugiyono, 2019). The required sample size is 130 respondents, which I narrowed down to 150 respondents for optimal generalization. The independent variables in this study include Information Quality (X1) and Ease of Use of E-Commerce (X2), the mediator variable is Online Purchasing Decision (Y), and the intervening variable is Consumptive Behavior (Z). Data collection using an online questionnaire was conducted. The data processing technique used a Likert scale. Validity testing was carried out using the One Shot Method, where measurements with this method are only carried out once with decision-making criteria. Reliability measurements were carried out in two ways: Repeated Measure and One Shot. The validity and reliability tests of the questionnaire in this study were analyzed

using Structural Equation Modeling (SEM) software known as Partial Least Square (PLS) Version 4 and the results will be used to determine the suitability between the hypotheses.

3.1 Measurement Model (*Outer Model*)

In this study, researchers used a questionnaire as a tool to collect research data through the Measurement Model (Outer Model). Furthermore, the inner model evaluation test (structural model) is to evaluate the relationship between the measured constructs which is tested using the t-test in PLS itself. To measure the inner model, the R-Square value of the model can be examined which indicates the extent to which the variables in the model influence each other. Next, estimate the path coefficients by performing a bootstrapping procedure, where the values are considered to have a significant effect if the static t value ≥ 1.96 (significant level 5%) and P value < 0.05 (significant level 5%) (Ghozali & Latan, 2015).

3.2 Hypothesis Testing

The next step is to determine whether the exogenous variables influence the endogenous variables. The confidence level used is 95%, resulting in a 5% alpha, using one-way hypothesis testing. The research hypotheses are as follows:

H1: There is a positive and significant effect between the variable Information Quality on Online Purchasing Decisions.

H2: There is a positive and significant effect between the variable Ease of Use of E-Commerce on Online Purchasing Decisions.

H3: There is a positive and significant effect between the variable Consumer Behavior on Online Purchasing Decisions.

H4: There is a positive and significant effect between the variable Information Quality on Consumer Behavior.

H5: There is a positive and significant effect between the variable Ease of Use of E-Commerce on Consumer Behavior.

H6: There is a positive and significant effect between the variable Information Quality on Online Purchasing Decisions, with Consumer Behavior as an intervening variable.

H7: There is a positive and significant effect between the variable Ease of Use of E-Commerce on Online Purchasing Decisions, with Consumer Behavior as an intervening variable.

4. Result and Discussion

4.1 Descriptive Analysis

This descriptive analysis analyzes the variables Information Quality, Ease of Use of E-commerce, Purchasing Decisions, and Consumer Behavior. The analysis is based on the respondents' responses to each question in each variable. The assessment is conducted by referring to statistical data such as the mean, standard deviation, and maximum and minimum values, as described in the following table.

Table 1. Descriptive Statistics

Variables	N	Minimum	Maximum	Mean	Std. Deviation
KI	150	7	15	12.11	2.032
KM	150	7	15	10.47	1.436
KP	150	7	20	15.35	3.035
PK	150	14	35	26.79	4.321
Valid N (listwise)	150				

The following is a presentation of the results of descriptive statistical tests on all variables in this study, namely:

KI (Information Quality): The Information Quality variable has a minimum score of 7 and a maximum score of 15, with a mean of 12.11 and a standard deviation of 2.032. This mean score indicates that the majority of respondents rate the quality of information provided by e-commerce as good. However, the relatively small standard deviation indicates that there are still differences in views among

respondents regarding the quality of the information they receive.

a. KM (Ease of Use of E-Commerce): For the Ease of Use of E-Commerce variable, the minimum score is 7 and the maximum score is 15, with a mean of 10.47 and a standard deviation of 1.436. This mean score is in the middle of the scale, indicating that respondents' perceptions of e-commerce ease of use are quite diverse, but tend to be positive. The low standard deviation reflects relatively uniform perceptions among respondents.

b. KP (Purchase Decision): The Purchase Decision variable has a minimum value of 7 and a maximum value of 20, with a mean of 15.35 and a standard deviation of 3.035. The high mean indicates that most respondents tend to have a strong purchase decision. However, the moderate standard deviation indicates that there are still differences in the level of certainty or certainty of purchase decisions among respondents.

c. PK (Consumer Behavior): The Consumer Behavior variable (PK1) has a minimum value of 14 and a maximum value of 35, with a mean of 26.79 and a standard deviation of 4.321. The relatively high mean indicates that respondents' consumer behavior is relatively strong. However, the relatively large standard deviation indicates that there is significant variation among respondents in the extent to which they exhibit consumer behavior in the context of e-commerce.

4.2 Measurement Model (Outer Model)

After evaluating the outer loading values, several indicators in the model were eliminated because they did not meet the convergent validity requirements, namely having values below 0.70. In the latest model, the construct structure appears cleaner and more focused, as it retains only indicators that make a significant contribution to the latent variable. The Information Quality (KI) construct consists of four indicators, namely KI1 to KI4, all of which show outer loading values between 0.854 and 0.888. These values indicate that these indicators have high consistency and contribution strength in explaining the information quality construct. No weak indicators were found, so no deletions were made. For the Ease of Use (KM) construct, three indicators were retained: KM1, KM2, and KM3. All three have good outer loading values, namely above 0.80, which means these indicators are suitable for measuring this construct validly and reliably. No further indicator elimination is necessary.

Meanwhile, the Purchasing Decision (KP) construct was maintained with four indicators: KP1 to KP4. All outer loading values were within the excellent range, above 0.70, confirming that this construct had a solid indicator structure from the outset. No indicators were removed from this construct. The updated model demonstrated construct refinement through the elimination of weak indicators. These results strengthen the convergent validity of all constructs in the model, thus making the structural model more stable and accurate for use in further hypothesis testing.

4.2.1 Outer Loading

The initial stage of the outer loading analysis aims to assess the reliability of the indicator. According to PLS-SEM standards, an indicator is considered reliable if its outer loading value is above 0.7 (Hair et al., 2019). The following are the outer loading results from the study.

Table 2. Outer Loading Results

Variable	Loading factor	*Cut-off value*	Information
KI1	0.877	0.700	Valid
KI2	0.854	0.700	Valid
KI3	0.877	0.700	Valid
KM1	0.864	0.700	Valid
KM2	0.899	0.700	Valid
KM3	0.765	0.700	Valid
KP1	0.745	0.700	Valid
KP2	0.767	0.700	Valid

KP3	0.887	0.700	Valid
KP4	0.888	0.700	Valid
PK1	0.873	0.700	Valid
PK2	0.801	0.700	Valid
PK3	0.815	0.700	Valid
PK4	0.804	0.700	Valid
PK5	0.749	0.700	Valid
PK6	0.770	0.700	Valid
PK7	0.841	0.700	Valid

Based on the estimated outer loading values displayed, all indicators for each construct in the model have met the convergent validity criteria. None of the factor loading values fell below the cut-off value of 0.70, thus concluding that all indicators were worthy of being retained and capable of representing the constructs being measured statistically. The Information Quality (KI) construct demonstrated a very high contribution strength from the three indicators used. With outer loading values of 0.877, 0.854, and 0.877, respectively, indicators KI1, KI2, and KI3 were able to explain the construct very strongly. This high value consistency also indicates that the internal reliability of this construct is very good.

The Ease of Use (EM) construct is measured by three indicators, and all three show valid outer loading values. EM1 and EM2 have very high values of 0.864 and 0.899, respectively, while EM3 has a value of 0.765. Although EM3 is the lowest among the three, its value is still above the minimum threshold and is still worthy of being retained in the model. For the Purchase Decision (KP) construct, all four indicators also show satisfactory results. The outer loading values of EM1 to EM4 range from 0.745 to 0.888. This variation in values indicates different contributions between indicators, but all remain valid and reliable in measuring the EM construct.

Meanwhile, the Consumer Behavior (CB) construct is supported by seven indicators, all of which have outer loading values above 0.70. CB1 to CB7 show values ranging from 0.749 to 0.873. This range of values indicates that not only are there a large number of indicators, but they also have a good ability to explain respondents' consumptive behavior comprehensively and consistently. All constructs in the model have been proven to be convergently valid, as none of the indicators fall below the threshold value of 0.70. This strengthens the conclusion that the measurement model has met the initial requirements and can be declared ready to proceed to the structural model analysis stage (inner model) to test the relationships between latent variables.

4.2.2 Construct Reliability

Construct Reliability is an important metric in Structural Equation Modeling (SEM) that serves to evaluate the consistency of measurement of a latent construct. In the outer model analysis, reliability was tested using Cronbach's Alpha and Composite Reliability (Hair et al., 2019). The results can be seen in the following table.

Table 3. Reliability Testing

Variable	**Cronbach' s alpha**	**Composite reliality (rho_c)**	***Cut-off value***	**Information**
KI	0.838	0.903	0.700	Reliable
KM	0.805	0.881	0.700	Reliable
KP	0.840	0.894	0.700	Reliable
PK	0.911	0.930	0.700	Reliable

Based on the results of construct reliability testing, all latent variables in the model demonstrated excellent reliability. The Cronbach's Alpha values for all constructs were well above the minimum threshold of 0.70. This indicates that the indicators used in each construct have adequate internal consistency in measuring the intended concept. For example, the Consumer Behavior (PK) construct

had a Cronbach's Alpha value of 0.911, indicating a very high and stable level of reliability across indicators. Furthermore, the Composite Reliability (CR) or rho_c values also supported these results, with all constructs recording values above 0.88, with most approaching or exceeding 0.90. Likewise, the Information Quality (KI) and Ease of Use (KM) constructs, which had CRs of 0.903 and 0.881, respectively, strengthened the overall internal validity of the model.

In general, all constructs in the model met the reliability criteria determined by Cronbach's Alpha and Composite Reliability values. This indicates that the measurement model used in this study has good instrument quality. Therefore, this model is deemed suitable for proceeding to the structural evaluation stage (inner model), to test the relationships between constructs and identify significant influences between latent variables formulated in the conceptual framework.

4.2.3 Construct Validity

The third test in the loading factor evaluation process is to assess construct validity, which in the reflective model is also called convergent validity. The acceptable lower limit is the average variance extracted (AVE) of the construct's loading value. A construct is considered valid if its AVE value is greater than 0.50 (Hair et al., 2019). The following are the AVE values in this study.

Table 4. Mark Average Variance Extracted (AVE)

Variable	**Average Variance Extracted (AVE)**	***Cut-off value***	**Information**
KI	0.755	0.500	Valid
KM	0.713	0.500	Valid
KP	0.680	0.500	Valid
PK	0.654	0.500	Valid

The Average Variance Extracted (AVE) value is used to assess convergent validity, namely the extent to which the indicators in a construct truly represent the construct. Referring to the guidelines from Hair et al. (2019), the minimum AVE value that meets the requirements is 0.50. This means that the construct must be able to explain at least 50% of the variance of the indicators used. Based on the calculation results, all constructs in this research model have AVE values that exceed this minimum limit. Similarly, the Information Quality (KI) construct has the highest AVE value in this model, namely 0.755. This value indicates that the KI construct is very strong convergently, because its indicators truly reflect the latent variables being measured.

Furthermore, the Ease of Use (E-Commerce) construct demonstrated high convergent validity with an AVE value of 0.713. This value confirms that the indicators in the E-Commerce construct work effectively and consistently in explaining respondents' perceived ease of use. For the Purchasing Decision (KP) construct, an AVE of 0.680 indicates that the indicators used are also able to reflect the construct strongly and precisely. Finally, the Consumptive Behavior (PK) construct showed an AVE value of 0.654. Although this value is the lowest among all constructs in the model, it is still well above the minimum threshold. This indicates that the indicators in the consumptive behavior construct remain convergently valid, although their contribution strength is slightly lower than that of the other constructs.

4.2.4 Discriminant Validity

A construct is said to have adequate discriminant validity when its HTMT value is below 0.9. Achieving this value indicates that the indicators in a variable are truly unique and appropriate for measuring the construct in question (Henseler et al., 2015). As shown in the following table.

Table 5. Discriminant Validity Heterotrait – Monotrait Ratio (HTMT)

Variable	**K**	**KI**	**KM**	**KP**	**PK**
KI	0.368				
KM	0.418	0.397			
KP	0.231	0.388	0.313		

PK	0.391	0.387	0.332	0.437	

Based on the results of the discriminant validity test using the Heterotrait-Monotrait Ratio (HTMT) approach, all values between constructs in the model show numbers that are below the maximum limit of 0.90 as recommended by Henseler et al. (2015). This means that each construct used in this study can be conceptually distinguished from one another, so there is no overlapping meaning between constructs.

The relationship between Purchasing Decision (KP) and Consumptive Behavior (PK) with a HTMT value of 0.437 illustrates a reasonable conceptual link between decision making and consumption tendencies, but still does not overlap. Other HTMT values, such as between Information Quality (KI) and other constructs, are all in the range of 0.228 to 0.397, indicating that perceptions of information quality are able to stand alone without sharing too much meaning with other constructs such as purchasing decisions.

4.3 Structural Model and Hypothesis Testing

Inner model evaluation is the next step after testing the outer model, which aims to assess the relationships between latent variables in the research model. Testing is conducted using the one-tailed bootstrapping method using SmartPLS, a resampling technique used to test significance and estimate coefficients (Ringle et al., 2015).

4.3.1. Determinant Coefficient (R-Squared)

The second step in inner model analysis is to evaluate model quality through the R-square value (coefficient of determination). An R-square value ≥ 0.75 is considered strong (substantial), between 0.50–0.75 is considered moderate to strong, and between 0.25–0.50 is considered weak. However, a value above 0.90 may indicate an overfitting model.

Table 6. R-Square Value

Variable	**R-Square**
KP	0.218
PK	0.292

Based on the results of the R-Square test, it is known that the Purchasing Decision (KP) construct has an R-square value of 0.218. This means that 21.8% of the variability of the Purchasing Decision can be explained by the independent constructs that influence it in the model. Meanwhile, the remaining 78.2% is explained by other factors outside the model that are not included in the analysis. Referring to the R-square interpretation criteria from Hair et al. (2019), values in the range of 0.19 to 0.33 are included in the weak to moderate category, which indicates that the model's predictive ability towards the Purchasing Decision construct is still limited and requires strengthening, either through the addition of exogenous variables or revision of the model structure.

Meanwhile, the Consumer Behavior (CB) construct has an R-square value of 0.292, indicating that 29.2% of the variation in Consumer Behavior can be explained by the independent variables in the model. The remaining 70.8% is explained by other factors not included in this model. This R-square value is included in the moderate category according to Hair et al. (2019), which means that the model has sufficient predictive ability for the Consumer Behavior construct, although it is not classified as strong.

4.3.2. Effect Size (f-*Squared*)

The predictive ability of a model is one aspect evaluated in the inner model analysis. As a reference, the f^2 (f-squared) value obtained from the PLS-SEM analysis can be used to assess the extent to which a construct influences changes in the R^2 value of the target construct (Hair et al., 2020). Based on the analysis, the f^2 value in this research model is as follows:

Table 7. F-Squared Value

Path	F-Squared
Information Quality → Purchase Decision	0.037
Information Quality → Consumer Behavior	0.044
Ease of Use → Purchase Decision	0.020
Ease of Use → Consumer Behavior	0.009
Purchase Decision → Consumer Behavior	0.102

Based on the f-squared test results, the contribution of each construct to the dependent variable in the model is in the small to near-medium effect category. Referring to Cohen's (1988) criteria, an f^2 value of 0.02 is categorized as small, 0.15 as medium, and ≥ 0.35 as large. The interpretation is as follows:

1. The relationship between Information Quality and Purchase Decisions has an f^2 value of 0.037. This value falls into the small effect category, indicating that information quality plays a role in purchasing decisions, although not a dominant one.
2. The relationship between Information Quality and Consumer Behavior shows an f^2 value of 0.044. This value is also small, but slightly higher than its influence on purchasing decisions, indicating the relevance of information in driving consumer tendencies.
3. The relationship between Ease of Use and Purchase Decisions has an f^2 value of 0.020. This value is right at the lower limit of the small effect, indicating that ease of use has a significant initial influence, although not a particularly strong one.
4. The relationship between Ease of Use and Consumer Behavior recorded an f^2 value of 0.009. This is the lowest value in the model and falls into the very small category, indicating that its contribution to consumer behavior is almost insignificant.
5. The relationship between Purchase Decisions and Consumer Behavior obtained an f^2 value of 0.102. This value is considered close to a moderate effect, indicating that purchasing decisions play a fairly important role in driving consumer behavior, although it has not yet reached a strong level of influence.

The most dominant variables influencing consumer behavior are purchasing decisions and needs, while other variables contribute relatively little. These results suggest that model strengthening can be focused on variables that exhibit near-moderate effects to improve prediction accuracy.

4.3.3. Predictive Relevance Value (Q2)

The Q2 test is used to measure the reliability of the model in predicting latent variables in the research model through a predictive relevance test (Hair & Sarsdeth, 2021). The Q2 value for this study was obtained from calculations using the blindfolding technique, as shown in the table below.

Table 8. Results of Q Predict Construct

No	Dependent Variable	R Square
1	Purchasing Decision (KP)	0.218
2	Consumer Behavior (PK)	0.292
2		2
Calculation $Q^2 = 1- (1-R_1)(1-R_2)$		
= 1- (1-0,782)(1-0,708)		
= 0,446		

The Q^2 value of 0.446 indicates that the model has a fairly strong predictive relevance in explaining the latent variables contained in the model, namely Purchase Decision (KP) and Consumptive Behavior (PK).

4.3.4. Hypothesis Test

One of the most crucial aspects of evaluating the inner model in this study is assessing the significance and magnitude of the influence between variables in the model. Statistical testing was performed in a

one-tailed manner, as the direction of the influence was predetermined. A relationship is considered significant if the bootstrapping p-value is less than 0.005 (with a significance level of $\alpha = 0.05$ and a 95% confidence interval) (Sarstedt et al., 2017). Furthermore, the use of confidence interval (CI) values is also recommended as a more robust approach to assessing significance. A relationship between variables is considered significant if the CI range (between 5% and 95%) does not include zero (Sarstedt et al., 2022). The interpretation process is carried out by first examining the path significance, then considering the direction of the influence and the coefficient magnitude in the original sample as an estimate of the standardized coefficient for each relationship path. If both conditions are met, the hypothesis is considered supported by the data. The complete results of the hypothesis testing process are presented in the following table.

Table 9. Direct Hypothesis Test Table

Variable	Original sample (O)	T statistics (|O/STDEV|)	P values	Results
KI -> KP	0.190	2.720	0.008	Accepted
KM -> KP	0.141	1.894	0.061	Rejected
PK -> KP	0.335	4.254	0.000	Accepted
KI -> PK	0.193	2.578	0.011	Accepted
KM -> PK	0.089	1.187	0.238	Rejected
KI -> PK -> KP	0.065	2.230	0.028	Accepted
KM -> PK -> KP	0.030	1.138	0.258	Rejected

Based on the results of direct hypothesis testing, it appears that not all relationships between variables in the model have a significant influence. The interpretation is as follows:

1. The relationship between Information Quality and Purchasing Decisions shows significant results, with a coefficient of 0.190, a t-statistic of 2.720, and a p-value of 0.008. This means that information quality has a positive and significant effect on purchasing decisions, thus the hypothesis is accepted.

2. The relationship between Ease of Use and Purchasing Decisions has a coefficient of 0.141, a t-statistic of 1.894, and a p-value of 0.061. Because the p-value is slightly above 0.05, the hypothesis is rejected. This indicates that perceived ease of use is not strong enough to directly influence purchasing decisions.

3. The relationship between Consumer Behavior and Purchasing Decisions produces a coefficient of 0.335, a t-statistic of 4.254, and a p-value of 0.000. These values indicate a statistically significant relationship, meaning consumer behavior has a positive effect on purchasing decisions.

4. The relationship between Information Quality and Consumer Behavior is also significant, with a coefficient of 0.193, a t-statistic of 2.578, and a p-value of 0.011. This indicates that information quality makes a positive and significant contribution to shaping consumer consumer behavior.

5. The relationship between Ease of Use and Consumer Behavior has a coefficient of 0.089, a t-statistic of 1.187, and a p-value of 0.238. Because the p-value is well above 0.05, the hypothesis is rejected. This means that ease of use does not directly influence consumer behavior.

6. The pathway between Information Quality and Consumer Behavior and Purchasing Decisions has a coefficient of 0.065, a t-statistic of 2.230, and a p-value of 0.028. Because $p < 0.05$, the hypothesis is accepted. This indicates that information quality indirectly contributes to purchasing decisions by increasing consumer behavior. Thus, good information not only directly influences decisions but also influences consumers' tendency to overspend.

7. The path of ease of use through consumer behavior to purchasing decisions shows a coefficient value of 0.030, with a t-statistic of 1.138 and a p-value of 0.258. Since the p-value is > 0.05 and t-value is < 1.96, the hypothesis is rejected. This indicates that perceived ease of use of e-commerce does not have a significant indirect effect on purchasing decisions through consumer behavior.

5. Discussion

The statistical test results show that the relationship between Information Quality and Online Purchasing Decisions has a coefficient value of 0.190, with a t-statistic of 2.720 and a p-value of 0.008. Since the p-value <0.05 and t-statistic >1.96, the hypothesis is accepted. This means that there is a positive and significant direct influence between the quality of information presented in e-commerce platforms and purchasing decisions made by consumers. In theory, information quality is an important element in the decision-making process, especially in a digital environment where consumers cannot touch or try the product directly. In contrast to the Effect of Ease of Use. The statistical test results show that the relationship between Ease of Use and Online Purchasing Decisions has a coefficient value of 0.141, with a t-statistic of 1.894 and a p-value of 0.061. Since the p-value > 0.05 and t-statistic < 1.96, the hypothesis is rejected. This means that statistically, ease of use does not have a significant direct effect on purchasing decisions on the e-commerce platform studied. However, in the results of this study, the perception of ease of use is not strong enough to be a direct determining factor in purchasing decisions.

Furthermore, the results of statistical tests show that the relationship between consumer behavior and online purchasing decisions has a coefficient value of 0.335, with a t-statistic of 4.254 and a p-value of 0.000. Since the p-value is <0.05 and the t-statistic is >1.96, the hypothesis is accepted. This indicates that there is a positive and significant direct influence between consumer behavior and purchasing decisions on e-commerce platforms. These results indicate that the higher a person's level of consumer behavior, the more likely they are to make online purchasing decisions. Furthermore, the statistical test results show that the relationship between Information Quality and Consumer Behavior has a coefficient value of 0.193, with a t-statistic of 2.578 and a p-value of 0.011. Because the p-value <0.05 and t-statistic >1.96, the hypothesis is accepted. This indicates that there is a positive and significant direct influence between information quality and consumer consumer behavior in the e-commerce environment. Theoretically, high-quality information, namely information that is accurate, relevant, complete, and easy to understand, can strengthen consumers' perceptions of value towards the products offered (Ghimire, 2024).

The statistical test results show that the relationship between Ease of Use and Consumptive Behavior has a coefficient value of 0.089, with a t-statistic of 1.187 and a p-value of 0.238. Because the p-value > 0.05 and t-statistic < 1.96, the hypothesis is rejected. Thus, statistically, ease of use does not have a direct and significant effect on consumptive behavior in online purchases. In theory, ease of use is often associated with convenience in navigation, ease in searching and ordering products, and a fast and uncomplicated transaction process (Ha & Stoel, 2009). These results indicate that even though an e-commerce platform is easy to use, this factor does not automatically encourage consumers to behave in a consumptive manner.

The results of statistical tests on the indirect pathway indicate that Information Quality significantly influences online purchasing decisions through consumer behavior, with a coefficient value of 0.065, a t-statistic of 2.230, and a p-value of 0.028. Since the p-value is <0.05 and the t-statistic is >1.96, the hypothesis is accepted. This means that there is a significant mediation effect, where information quality influences online purchasing decisions through increased consumer behavior. This finding indicates that information quality not only drives purchasing decisions directly but also has an indirect influence pathway through the formation of consumer behavior. In other words, when consumers receive interesting and reliable information, they not only make rational decisions but are also emotionally motivated to make additional or spontaneous purchases, due to the increased perception of value and urgency (Zhang et al., 2019).

In contrast to the statistical test results of Ease of Use on Online Purchasing Decisions through Consumptive Behavior, which has a coefficient value of 0.030, with a t-statistic of 1.138 and a p-value of 0.258. Because the p-value > 0.05 and t-statistic < 1.96, the hypothesis is rejected. This means that there is no significant indirect effect of ease of use on purchasing decisions through consumptive

behavior. These results indicate that although consumers find e-commerce platforms easy to use, this does not necessarily encourage them to behave consumptively, and ultimately does not significantly influence purchasing decisions. This can be explained by the fact that users are now accustomed to using various online shopping applications, so that the aspect of convenience becomes a basic factor that no longer actively influences decisions or behavior (Subedi, 2024).

6. Conclusion

This study investigated how information quality and perceived ease of use influence online purchase decisions, with consumer behavior as a mediating variable, in an e-commerce context. The empirical results show that information quality plays a central role in shaping online purchase decisions, both directly and indirectly through consumer behavior. Consumer behavior itself has a strong and significant effect on purchasing decisions, confirming its importance as a psychological and behavioral mechanism in digital commerce. In contrast, perceived ease of use does not significantly affect consumer behavior or online purchase decisions, either directly or indirectly. This finding suggests that in a mature e-commerce environment, ease of use has become a basic requirement rather than a differentiating factor, while informational cues and content quality exert a stronger influence on consumer decision-making.

From a theoretical perspective, this study contributes to the service and consumer behavior literature by demonstrating that consumer behavior mediates the relationship between service-related information quality and purchasing decisions. From a managerial perspective, the results imply that e-commerce platforms should focus on improving the accuracy, relevance, and attractiveness of product information to stimulate consumer engagement and purchasing behavior, rather than relying solely on interface simplicity. This study has limitations, including its cross-sectional design and focus on a single urban context. Future research could incorporate additional service quality dimensions, apply longitudinal designs, or compare different e-commerce platforms and regions to enhance generalisability. Despite these limitations, the study provides valuable insights into managing information and consumer behavior in e-commerce services.

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References

Ariesta, R. P. (2020). The Influence of Financial Literacy and Self-Control on Online Shopping Consumptive Behavior with Lifestyle as an Intervening Variable (Vol. 1, Issue 1). Semarang State University.

Effendi, Usman. (2016). Consumer Psychology. Jakarta: PT. Raja Grafindo Persada. Fitri, A.D. 2013. Application of Self-Management Strategies to Reduce Consumptive Behavior in Grade X-11 Students of SMAN 15 Surabaya. UNESA. Journal of Guidance and Counseling Students. Vol. 1 (1): 26-36.

Ghozali, I., & Latan, H. (2015). *Partial Least Squares: Concepts, Technique, and Application use SmartPLS 3.0 Program. Edition 2*. Semarang: Undip.

Ghimire, B. (2024). Determinants of Entrepreneurial Readiness: An Empirical Analysis. *Journal of Management Changes in the Digital Era*, *1*(1), 145-155.

Hardiawan, Anandia Cahya. (2014). The Influence of Trust, Ease of Use, and Information Quality on Online Purchasing Decisions. Journal of Technology. Faculty of Economics and Business, Diponegoro University, Semarang.

Hidayah, R.W. (2015). Consumptive Behavior in Purchasing Fashion Products among Female College Students in Surakarta. Publication Manuscript. Surakarta: Muhammadiyah University of Surakarta.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43(1), 115–135

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24

Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. Journal of Business Research, 109, 101–110

Hair Jr., J. F., & Sarstedt, M. (2021). Data, measurement, and causal inferences in machine learning: Opportunities and challenges for marketing. Journal of Marketing Theory and Practice, 29(1), 65–77

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (3rd ed.). Thousand Oaks, CA: Sage

Ha, S., & Stoel, L. (2009). Consumer e-shopping acceptance: Antecedents in a technology acceptance model. International Journal of Retail & Distribution Management, 37(11), 909–928

Irmadhani, (2012). The Influence of Perceived Usefulness, Perceived Ease of Use, and Computer Self-Efficacy on Online Banking Use among Students of the Faculty of Economics, Universitas Negeri Yogyakarta. Journal. Yogyakarta: Faculty of Economics, Universitas Negeri Yogyakarta.

Istanti, Frediana. (2017). The Influence of Price, Trust, Ease of Shopping, and E-Promotion on Online Shopping Purchase Decisions in Surabaya. Vol. 04 No. 1. NSC Surabaya Polytechnic Journal.

Ismawati, D., & Prasetyo, I. (2020). The Development of a Telegram Bot Through Short Stories. Brawijaya International Conference on Multidisciplinary Sciences, 2020.

Jogiyanto. (2007). Behavioral Technology Systems. Yogyakarta: Andi Publishers. Kotler and Keller. 2016. Marketing Management. Jakarta: Erlangga Kotler.

Kotler, P., & Armstrong, G. (2016). Marketing Principles. 13th Edition. Volume 1. Jakarta: Erlangga University.

Peter, P. J. & Olson, Jerry, C. (2009), "Customer Behavior," Volume 2, 5th ed. (translated by Damos Sihombing). Erlangga University. Jakarta.

Putra, A., & Sari, P. L. P. (2020). Factors Driving Online Shopping Among Employees at the Faculty of Teacher Training and Education, Asahan University.

Rahayu, S. K. (2017). Taxation: Concepts and Formal Aspects. Bandung: Engineering Science. ISBN 978-979-3784-86-1.

Saputra, M. D., Joyoatmojo, S., Wardani, D. K., & Sangka, K. B. (2019). *Developing critical-thinking skills through the collaboration of Jigsaw model with problem-based learning model*. International Journal of Instruction, 12(1), 1077–1094.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). *Partial least squares structural equation modeling*. Industrial Management & Data Systems, 117(3), 455–479.

Subedi, S. (2023). Analysis of Digital Information, Investors' Financial Knowledge, and Mindsets for Sustainable Investment in Emerging Investment Markets. *Journal of Service, Innovation and Sustainable Development*, 149-175.

Schiffman & Kanuk. (2008). Consumer Behavior from an Entrepreneurial Perspective. Seventh Edition. Index. Jakarta.

Sumartono. (2002). Trapped in Advertising. Bandung: CV Alfabeta.

Sutabri, T. 2012. Information Systems Concept. Andi Offset. Yogyakarta.

Sugiyono. (2019). Quantitative, Qualitative, and R&D Research Methods. Bandung: Alfabeta

Wahyuni, Sari, Irawan, Herry, and Sofian, Endang. 2017. The Influence of Trust, Ease of Use, and Information Quality on Online Purchasing Decisions on the Online Fashion Site Zalora.co.id. e-Proceedings of Management, Vol. 4, No. 2: 1405-1412.

Waluyo, (2013). Indonesian Taxation; Book 1 (11th Edition). Jakarta: Salemba Empat. ISBN 978-979-061-341-6.

Wahyuningtyas, R., & Widiastuti, E. (2017). The Effect of Using Learning Media on Student Learning Outcomes. Journal of Education, 18(2), 123–134

Wulandari, F. (2020). Human Resource Management. Yogyakarta: Gerbang Media Aksara. ISBN 978-602-6248-94-7.

Zhang, K. Z. K., Zhao, S. J., Cheung, C. M. K., & Lee, M. K. O. (2019). Examining the Influence of Online Reviews on Consumers' Decision- Making: A Heuristic-Systematic Model. *Decision Support Systems*, 67, 78–89.