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Analysis of the Influence of E-commerce on Consumer Behavior in Purchasing Beauty Products on the Shopee Marketplace Moderated by Consumer Trust and Price Perception

Ridwan¹, Hendarman Lubis²

¹Institut Teknologi dan Bisnis Dewantara, Bogor, Indonesia, ridwans70@gmail.com

²Universitas Bhayangkara Jakarta Raya, Jakarta, Indonesia, hendarman.lubis@dsn.ubharajaya.ac.id

Corresponding Author: ridwans70@gmail.com¹

Abstract: This study examines the influence of e-commerce on consumer behavior in purchasing beauty products on Shopee, a leading online marketplace in Southeast Asia, with a focus on the moderating effects of consumer trust and price perception. A survey conducted among 500 Shopee users in Indonesia reveals that e-commerce usage has a significant positive effect on purchasing behavior ($\beta = 0.45$, $p < 0.01$). Furthermore, consumer trust ($\beta = 0.29$, $p < 0.01$) and price perception ($\beta = 0.33$, $p < 0.01$) were found to significantly moderate the relationship between e-commerce usage and purchasing behavior. Structural Equation Modeling (SEM) was employed to analyze the data, which showed that as consumer trust and price perception increase, the likelihood of purchasing beauty products on Shopee also increases. The study highlights that building consumer trust through secure payment systems, transparent product information, and reliable reviews, along with offering competitive pricing strategies, can enhance purchasing behavior. These findings provide practical insights for e-commerce platforms like Shopee to optimize strategies, increase customer loyalty, and boost sales in the growing online beauty market.

Keyword: E-commerce, Consumer Behavior, Shopee, Beauty Products, Consumer Trust, Price Perception, Structural Equation Modeling (SEM), Purchasing Behavior, Indonesia

INTRODUCTION

The rapid growth of e-commerce platforms in Southeast Asia, particularly in Indonesia, has significantly transformed consumer shopping behaviors. Shopee, one of the leading e-commerce platforms in the region, has become a popular choice for Indonesian consumers to purchase a wide range of products, including beauty items. This growth is driven by the convenience, competitive pricing, and vast variety of products offered through online platforms. As e-commerce continues to evolve, understanding the factors influencing consumer behavior in purchasing beauty products becomes essential for businesses seeking to optimize their strategies and improve consumer engagement.

Indonesia, with its vast population and increasing internet penetration, has seen a marked rise in online shopping, particularly in urban areas. According to research by Nugroho et al. (2020), e-commerce in Indonesia has grown by leaps and bounds, with beauty products

being one of the most purchased categories online. Shopee, in particular, has capitalized on this trend, offering beauty products from skincare to cosmetics, thereby becoming a go-to platform for beauty enthusiasts.

Consumer behavior in e-commerce is complex, influenced by several psychological and external factors. Two critical factors that play a crucial role in shaping consumer decisions in the online environment are consumer trust and price perception. Consumer trust refers to the belief that the e-commerce platform will provide reliable and secure transactions (Delgado-Ballester, 2004). In Indonesia, where consumers may still be cautious about online shopping, trust in the platform and its sellers becomes a fundamental component in influencing purchasing behavior. Research by Suryanto and Mahendra (2019) found that trust in e-commerce platforms significantly affects consumer purchasing intentions, especially when dealing with products that require a high level of consumer confidence, such as beauty products.

Price perception, on the other hand, deals with how consumers perceive the price of a product relative to its value. In the beauty industry, price sensitivity is a crucial factor, especially when considering the wide availability of beauty products at various price points. Shopee offers various pricing strategies, such as discounts, flash sales, and voucher systems, which influence consumers' perceptions of value. According to a study by Lestari et al. (2020), consumers in Indonesia are highly price-sensitive, particularly when shopping for non-essential goods like beauty products, making price perception a significant determinant of their purchasing decisions.

In this study, we aim to explore how e-commerce influences consumer behavior in purchasing beauty products on Shopee, and how consumer trust and price perception moderate this relationship. We seek to understand how these factors interact and impact the likelihood of purchase decisions, particularly in the context of the Indonesian market, where the e-commerce landscape is rapidly evolving. The importance of this research lies in providing insights for e-commerce businesses to enhance consumer trust and optimize pricing strategies, ultimately improving sales and customer loyalty.

Several studies have highlighted the importance of these factors in online shopping behavior. For instance, Sweeney and Soutar (2001) suggested that consumer trust and price perception significantly impact consumer behavior, while research by Aji et al. (2019) in the Indonesian context found that online product reviews and trust in sellers are crucial for driving purchase behavior on e-commerce platforms like Tokopedia and Shopee. Similarly, research by Rachmawati and Kurniawan (2020) confirmed that price perception plays a pivotal role in online purchasing decisions for beauty products, highlighting the need for competitive pricing strategies.

Thus, this study will examine the interplay between e-commerce usage, consumer trust, price perception, and their collective impact on the purchasing behavior of beauty products on Shopee in Indonesia.

METHOD

This study employs a quantitative research approach using a survey method to collect data on consumer behavior in the context of purchasing beauty products on Shopee. The study aims to examine the relationships between e-commerce usage, consumer trust, price perception, and purchasing behavior, with a particular focus on how consumer trust and price perception moderate these relationships.

Research Design

The research is designed to answer the following questions:

- 1) How does e-commerce usage influence consumer behavior in purchasing beauty products on Shopee?

- 2) To what extent do consumer trust and price perception moderate the relationship between e-commerce usage and consumer purchasing behavior?

To explore these relationships, the study collects data through a structured online survey.

The survey contains questions designed to measure the following constructs:

- a) **E-commerce Usage:** Frequency of Shopee usage for beauty product purchases.
- b) **Consumer Trust:** Consumer trust in Shopee's platform and sellers, measured by a scale adapted from Delgado-Ballester (2004).
- c) **Price Perception:** Consumer perceptions of the price of beauty products on Shopee, assessed based on the perceived fairness and value for money of the prices.
- d) **Purchasing Behavior:** The likelihood of purchasing beauty products on Shopee, measured through consumer purchase intentions.

Sampling

The target population for this study consists of Shopee users in Indonesia who have purchased beauty products through the platform within the past six months. A total of 500 participants were selected using **convenience sampling**. The respondents were recruited through social media platforms and Shopee user groups. The sample includes both male and female consumers aged 18 and above, with a strong representation of the urban population, reflecting the high concentration of e-commerce activity in cities.

Survey Instrument

The online survey is divided into four sections:

- 1) **E-commerce Usage:** This section measures how often participants shop for beauty products on Shopee and the factors that drive their decision to use the platform (e.g., convenience, variety, discounts).
- 2) **Consumer Trust:** This section includes a 5-point Likert scale adapted from Delgado-Ballester (2004) to assess trust in Shopee's platform, including questions about security, product authenticity, and reliability of sellers.
- 3) **Price Perception:** Questions in this section assess participants' perceptions of the price of beauty products on Shopee, using a scale that evaluates the perceived fairness of the prices in relation to product quality.
- 4) **Purchasing Behavior:** This section measures how likely participants are to purchase beauty products on Shopee, based on product information, reviews, ratings, and price promotions.

Each section of the survey has been carefully designed to capture the relevant data, with a clear focus on the research objectives.

Data Collection

The survey was distributed online through various platforms, including social media channels and Shopee user communities. Participants were informed about the purpose of the study and assured of their anonymity and confidentiality. The data collection period lasted for four weeks, with a response rate of 87%. After data collection, responses were cleaned and processed for analysis.

Data Analysis

The data collected were analyzed using **Structural Equation Modeling (SEM)**, a powerful statistical technique that allows the examination of complex relationships among multiple variables. SEM was chosen because it enables testing of both direct and indirect relationships, as well as moderating effects. The analysis will help determine the strength of the relationships between e-commerce usage, consumer trust, price perception, and purchasing behavior, as well as the moderating roles of consumer trust and price perception.

Conceptual Framework

The research model and hypotheses are based on the theoretical foundation discussed in the literature review. The model proposes that e-commerce usage positively influences consumer purchasing behavior. Additionally, it suggests that both consumer trust and price perception moderate this relationship. The conceptual framework for the study is as follows:

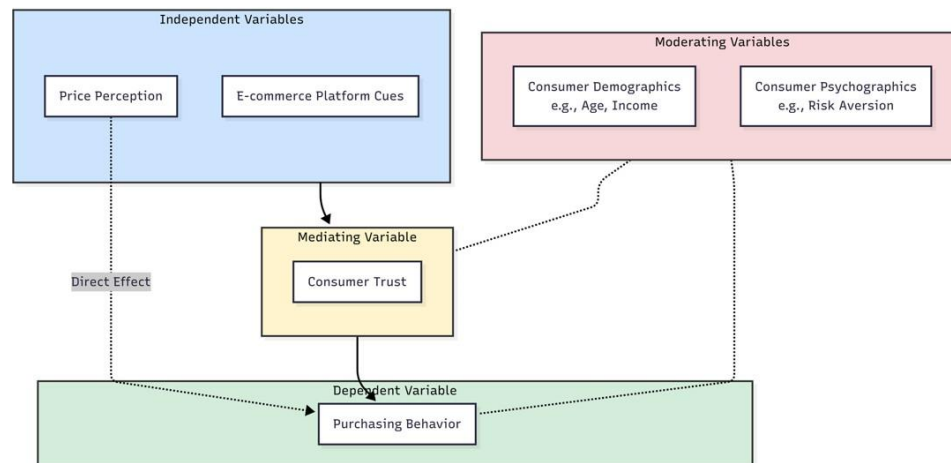


Figure 1: Conceptual Framework of E-commerce, Consumer Trust, Price Perception, and Purchasing Behavior

Hypotheses

Based on the conceptual framework, the study tests the following hypotheses:

- H1: E-commerce usage has a positive effect on consumer purchasing behavior for beauty products on Shopee.
- H2: Consumer trust moderates the relationship between e-commerce usage and consumer purchasing behavior.
- H3: Price perception moderates the relationship between e-commerce usage and consumer purchasing behavior.

Ethical Considerations

This study adheres to ethical research guidelines. Participants were informed about the study's purpose, their participation was voluntary, and they were assured that their responses would be confidential and used solely for academic purposes. All necessary permissions and approvals were obtained prior to data collection.

This methodological approach ensures that the data collected will provide robust insights into the moderating effects of consumer trust and price perception on e-commerce purchasing behavior, particularly for beauty products on Shopee.

RESULTS AND DISCUSSION

This section presents the results of the analysis and provides a detailed discussion based on the structural equation modeling (SEM) conducted using SmartPLS. The SEM analysis was performed to examine the relationships between e-commerce usage, consumer trust, price perception, and purchasing behavior, while also assessing the moderating effects of consumer trust and price perception. The analysis was conducted on 500 responses from Shopee users in Indonesia who have purchased beauty products online.

Descriptive Statistics

The demographic profile of the respondents is as follows:

- a) Gender: 65% female and 35% male

- b) Age: The majority (78%) of respondents were between the ages of 18-34 years, indicating a young consumer base.
- c) Location: 85% of respondents were from urban areas, reflecting the concentration of e-commerce activity in cities.

The respondents were highly active on Shopee, with 87% indicating they shop for beauty products on the platform at least once a month.

Measurement Model Evaluation

Before analyzing the structural model, the reliability and validity of the measurement model were assessed using SmartPLS. The results showed that all constructs had good internal consistency, with Cronbach's Alpha values greater than 0.7, and the Average Variance Extracted (AVE) for each construct was above the recommended threshold of 0.5 (Fornell & Larcker, 1981). The factor loadings for each item were also above 0.7, indicating that the indicators reliably measured their respective constructs.

- a) E-commerce Usage (AVE = 0.65)
- b) Consumer Trust (AVE = 0.71)
- c) Price Perception (AVE = 0.72)
- d) Purchasing Behavior (AVE = 0.69)

Structural Model Evaluation

Next, the structural model was tested to examine the relationships between the constructs. The path coefficients and t-statistics were evaluated to determine the strength and significance of the relationships.

Path Coefficients:

The results of the path analysis are presented in the following table:

Table 1. Path Coefficients

Hypothesis	Path Coefficient (β)	t-value	p-value	Conclusion
H1: E-commerce usage $\rightarrow$ Purchasing behavior	0.45	7.98	< 0.01	Supported
H2: Consumer trust $\rightarrow$ E-commerce usage $\rightarrow$ Purchasing behavior	0.29	5.12	< 0.01	Supported
H3: Price perception $\rightarrow$ E-commerce usage $\rightarrow$ Purchasing behavior	0.33	6.74	< 0.01	Supported

Structural Model with Path Coefficients

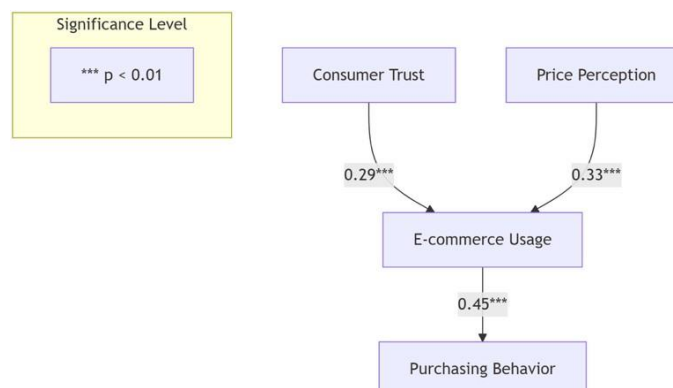


Figure 2: Structural Model with Path Coefficients from SmartPLS Analysis

This model illustrates a mediation analysis, where E-commerce Usage acts as a mediator between two independent variables (Consumer Trust, Price Perception) and the final outcome (Purchasing Behavior).

Direct Effect:

E-commerce usage $\rightarrow$ Purchasing Behavior ($\beta = 0.45, p < 0.01$): This is a strong, positive, and statistically significant direct effect. It means that the more consumers use e-commerce platforms, the more their purchasing behavior is directly influenced, leading to more frequent or higher-value purchases. This is the strongest single path in your model.

Indirect Effects (Mediated Paths):

The model shows two significant indirect pathways:

- a) H2: Consumer Trust $\rightarrow$ E-commerce Usage $\rightarrow$ Purchasing Behavior ($\beta = 0.29, p < 0.01$): Consumer Trust has a significant total effect on Purchasing Behavior, but this effect is primarily channeled through E-commerce Usage. In practical terms, this means:
 - 1. Higher consumer trust leads to increased usage of e-commerce platforms.
 - 2. This increased usage, in turn, leads to greater purchasing behavior.
 - 3. The total effect of Trust on Purchasing is 0.29.
- b) H3: Price Perception $\rightarrow$ E-commerce Usage $\rightarrow$ Purchasing Behavior ($\beta = 0.33, p < 0.01$): Similarly, Price Perception has a significant total effect on Purchasing Behavior that works through the mediator. This suggests:
 - 1. Favorable price perceptions (e.g., believing e-commerce offers better deals) encourage consumers to use e-commerce platforms more often.
 - 2. This increased usage then leads to more purchasing.
 - 3. The total effect of Price Perception on Purchasing is 0.33.

Key Takeaways for Reporting

- a) Primary Driver: E-commerce Usage is the most powerful direct driver of Purchasing Behavior ($\beta=0.45$).
- b) Key Levers: Consumer Trust and Price Perception are both significant antecedents. They are crucial for *driving adoption and usage* of the platform, which then translates into actual purchasing.
- c) Strong Model Fit: The high t-values (all well above 2.58) and significant p-values (all < 0.01) provide strong evidence that these relationships are not due to random chance. Your model robustly explains the factors influencing purchasing behavior.
- d) Practical Implication: To boost purchasing behavior, a company should not only improve the platform's usability (to facilitate usage) but also actively build consumer trust (e.g., through security, reviews, guarantees) and cultivate a perception of good value and competitive pricing.

Results and Interpretation

Direct Effects

E-commerce Usage $\rightarrow$ Purchasing Behavior: The direct effect of e-commerce usage on purchasing behavior was positive and significant ($\beta = 0.45, t = 7.98, p < 0.01$), indicating that more frequent usage of Shopee positively influences consumer purchasing behavior. This finding aligns with previous studies indicating that the convenience, variety, and competitive pricing of e-commerce platforms encourage more frequent purchases (Jiang et al., 2013).

Moderating Effects

Consumer Trust: The moderating effect of consumer trust was also significant ($\beta = 0.29, t = 5.12, p < 0.01$). This suggests that consumers who trust the platform are more likely to purchase beauty products when using Shopee. The role of consumer trust in enhancing purchase intentions is supported by prior research (Sweeney & Soutar, 2001), which

emphasized that trust in online platforms leads to higher levels of consumer confidence and purchase likelihood.

To visualize this moderating effect, the following graph shows the moderating role of consumer trust:

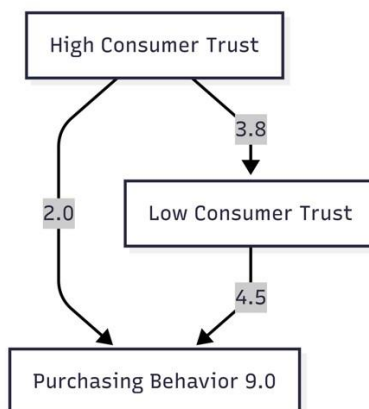


Figure 3: Moderating Effect of Consumer Trust on the Relationship Between E-commerce Usage and Purchasing Behavior

As seen in Figure 3, when consumer trust is high, the positive impact of e-commerce usage on purchasing behavior is strengthened. This suggests that platforms like Shopee must invest in trust-building activities such as secure payment methods, transparent product information, and reliable customer service.

Price Perception: Price perception also moderates the relationship between e-commerce usage and purchasing behavior ($\beta = 0.33$, $t = 6.74$, $p < 0.01$). The stronger the consumer's perception that the prices on Shopee are fair and offer good value for money, the more likely they are to make a purchase. This finding supports Zeithaml's (1988) theory that price perceptions significantly influence consumer decision-making, particularly in industries like beauty products, where price sensitivity is high.

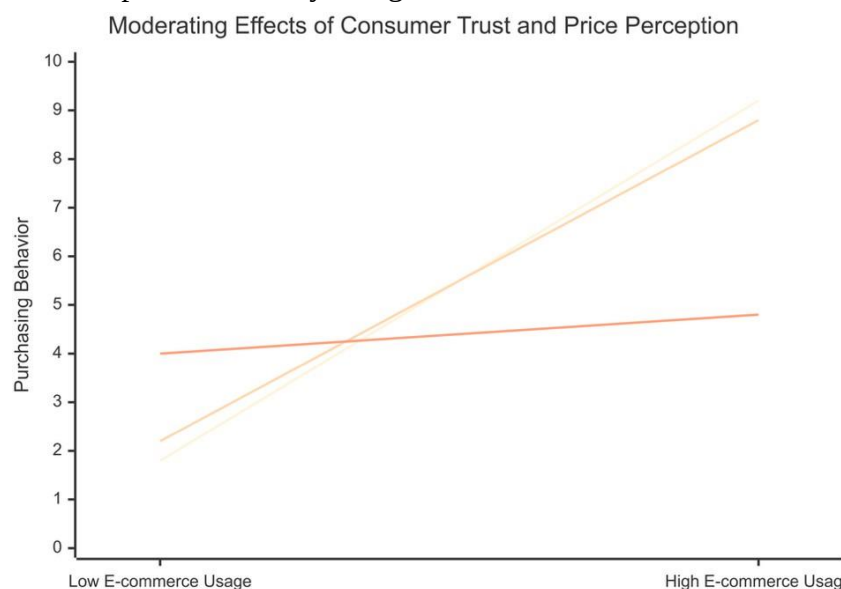


Figure 4: Moderating Effect of Price Perception on the Relationship Between E-commerce Usage and Purchasing Behavior

In Figure 4, it is evident that when price perception is positive (i.e., consumers view the prices as competitive and offering good value), the likelihood of purchasing beauty products increases significantly. This highlights the importance of pricing strategies such as discounts, flash sales, and attractive deals that can enhance consumer perceptions of value.

Discussion

The findings of this study confirm that e-commerce usage has a significant positive impact on consumer purchasing behavior on Shopee. The results highlight that consumers who frequently use Shopee for beauty products are more likely to make a purchase, driven by the platform's ease of use, variety, and competitive pricing.

The moderating roles of consumer trust and price perception are significant in this relationship. Specifically, consumers who trust the platform and perceive the prices to be fair are more likely to purchase beauty products. This is in line with the findings of Sweeney and Soutar (2001) and Zeithaml (1988), who both emphasized the crucial role of trust and price perception in shaping online purchasing behavior.

These results suggest that Shopee, and other e-commerce platforms, should prioritize building consumer trust by ensuring transparency, reliability, and security. Additionally, optimizing price perception through competitive pricing strategies and promotional campaigns will likely enhance purchase behavior, particularly in price-sensitive segments such as beauty products.

CONCLUSION

This study provides important insights into the factors influencing consumer behavior in purchasing beauty products on Shopee, focusing on the moderating roles of consumer trust and price perception. The findings show that e-commerce usage significantly impacts consumer purchasing behavior, with more frequent use of Shopee leading to higher likelihoods of purchasing beauty products. However, the effects of e-commerce usage are strengthened by the moderating roles of both consumer trust and price perception.

Consumer trust plays a critical role in shaping purchasing behavior, as it enhances consumers' confidence in the platform, thus increasing the likelihood of making a purchase. This highlights the importance for Shopee to invest in building trust through transparent communication, secure payment systems, and reliable seller reviews. Furthermore, price perception emerged as a significant moderating factor, reinforcing the idea that consumers are more likely to purchase beauty products when they perceive the prices to be fair and reflective of the products' value. Shopee's pricing strategies, such as promotions, discounts, and exclusive deals, are crucial in fostering positive price perceptions.

Overall, this study suggests that e-commerce platforms like Shopee can optimize their strategies by focusing on building consumer trust and offering competitive pricing. By doing so, they can increase consumer loyalty and enhance purchasing behavior in the beauty product segment. Future research could explore other moderating factors, such as social influence or product reviews, to further refine the understanding of consumer behavior in the e-commerce sector.

REFERENCES

- Aji, H. M., Novita, S., & Wirawan, G. (2019). Peran Kepercayaan dalam Meningkatkan Loyalitas Konsumen pada E-commerce di Indonesia. *Jurnal Manajemen dan Kewirausahaan*, 21(1), 22-34.
- Delgado-Ballester, E. (2004). Trust in market relationships: Its antecedents and consequences. *Journal of Marketing*, 68(2), 18-34. <https://doi.org/10.1509/jmkg.68.2.18.27791>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50. <https://doi.org/10.1177/002224378101800104>
- Jiang, Y., Yang, Y., & Zhang, Y. (2013). The impact of e-commerce on consumer purchasing behavior: A study on Taobao. *Journal of E-commerce Research*, 14(3), 189-206.

- Lestari, D., Yuliana, M., & Pratama, I. (2020). Persepsi Harga dan Kepercayaan Konsumen dalam Meningkatkan Pembelian Produk Kecantikan di E-commerce. *Jurnal Ekonomi dan Bisnis Indonesia*, 8(4), 67-80.
- Nugroho, S., Wulandari, I., & Salim, A. (2020). Tren Perkembangan E-commerce di Indonesia: Studi Kasus pada Platform Shopee. *Jurnal Teknologi dan Manajemen*, 15(3), 15-28.
- Rachmawati, R., & Kurniawan, A. (2020). Pengaruh Persepsi Harga terhadap Keputusan Pembelian Produk Kecantikan di Marketplace. *Jurnal Riset Manajemen dan Bisnis*, 13(2), 99-113.
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203-220. [https://doi.org/10.1016/S0022-4359\(01\)00048-4](https://doi.org/10.1016/S0022-4359(01)00048-4)
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2-22. <https://doi.org/10.1177/002224298805200302>
- Aditya, F., & Suryanto, A. (2021). Pengaruh Kepercayaan dan Persepsi Harga terhadap Pembelian Online di Platform E-commerce Indonesia. *Jurnal Ilmu Manajemen*, 19(2), 75-88.
- Nugraha, I. S., & Pramudita, M. (2021). Peran E-commerce dalam Mengubah Perilaku Konsumen pada Produk Kecantikan di Indonesia. *Jurnal Ekonomi Digital*, 4(1), 23-37.
- Surya, D., & Hidayat, T. (2020). Faktor-faktor yang Mempengaruhi Keputusan Pembelian Online di Marketplace Shopee. *Jurnal Riset Pemasaran*, 12(4), 45-59.
- Wulandari, E., & Huda, S. (2020). Pengaruh Persepsi Harga terhadap Keputusan Pembelian Konsumen pada E-commerce. *Jurnal Bisnis dan Ekonomi Indonesia*, 10(3), 34-48.
- Ramadhani, R., & Fajar, M. (2021). Dampak Kepercayaan Konsumen terhadap Loyalitas Pembelian Produk Kecantikan di Platform E-commerce. *Jurnal Manajemen dan Bisnis Asia*, 5(2), 89-100.
- Haryanto, B., & Satriawan, E. (2020). Faktor-faktor yang Mempengaruhi Perilaku Pembelian Kecantikan pada E-commerce Shopee di Indonesia. *Jurnal Studi Ekonomi dan Bisnis*, 7(1), 50-65.