

THE EFFECT OF LIQUIDITY (LOAN TO DEPOSIT RATIO) AND PROFITABILITY (RETURN ON ASSETS) ON COMPANY VALUE (PRICE TO BOOK VALUE): A STUDY OF BANK KBMI IV, LISTED ON THE INDONESIA STOCK EXCHANGE (IDX), 2020–2025**Dhita Febriyanti**

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Abstract: The rise of e-commerce in Indonesia has changed how consumers make decisions about what to buy online. Aerostreet footwear purchases are influenced by Shopee's use of online user evaluations and tailored recommendations. The purpose of this study is to partially and concurrently examine the circumstances and impacts of both factors on purchasing decisions. Purposive sampling was used to pick 100 respondents for the quantitative, descriptive, and verificative procedures. Path analysis and MSI were used to analyze the data. Purchase decisions fall into the fairly excellent group, whereas personalized recommendations and online customer reviews fall into the good category, according to descriptive data. Personalized recommendations (path coefficient = 0.298; $t = 3.273$; contribution = 11.1%) and online customer reviews (path coefficient = 0.327; $t = 3.594$; contribution = 13%) have a beneficial impact on purchasing decisions, according to verifiable results. Purchase decisions are strongly influenced by both variables at the same time ($F = 15.390$; total contribution = 24.1%), with other factors accounting for the remaining 75.9%.

Keywords: Personalized Recommendations, Online Customer Reviews, Purchase Decisions

INTRODUCTION

Information and communication technology has fundamentally transformed the commercial sector. According to the Indonesian Internet Service Providers Association (APJII), internet penetration in Indonesia is projected to reach 80.66% of the total population by 2025, with 229,428,417 of the total population of 284,438,900 having internet access. This increased penetration has driven the growth of e-commerce in Indonesia, particularly through marketplace platforms like Shopee.

Shopee is one of the most popular online marketplaces in Indonesia, with a market share of 53.22%. According to Katadata, TikTok Shop has a market share of 27.37%, Tokopedia 9.57%, and Lazada 9.09%. Shopee not only leads in user base but also demonstrates strong capabilities in analyzing consumer behavior using digital technology. The best-selling product categories on Shopee are fashion and accessories, which account for 49% of total sales, followed by beauty and personal care products at 41%, and gadgets and electronics at 35%.

In the fashion sector, Aerostreet is known as a local shoe brand that has established a strong presence in the Indonesian market. Aerostreet is a local shoe brand owned by PT ADCO Pakis Mas, based in Klaten, Central Java, and operates with the slogan, "Good shoes for everyone." The brand's marketing strategy primarily relies on e-commerce platforms, particularly Shopee, rather than physical stores. Based on sales trend data from 2019 to 2026, Aerostreet experienced significant revenue growth until 2022. However, sales began to decline between 2023 and 2024. This trend indicates challenges related to consumer purchasing decisions.

A preliminary survey of 30 respondents who had previously purchased Aerostreet shoes revealed that personalized recommendations and online customer reviews, key factors in their purchasing decisions, were generally positive. However, respondents indicated that the recommendations displayed did not always align with their preferences, and that the available reviews were not always sufficiently relevant or reliable.

These results suggest that these two factors are not functioning optimally and may be influencing consumers' purchasing decisions.

Several previous studies have examined the factors that influence consumer purchasing decisions in e-commerce. Christina et al., (2023) Bukalapak found that personalized product recommendations had a significant impact on customer purchasing decisions. According to Yeni et al., (2025), Personalized recommendations refer to a feature where online marketplace systems suggest products tailored to individual users by leveraging data on consumer preferences and past behavior patterns. This increases the relevance of the recommendations displayed and has the potential to influence consumer purchasing decisions.

According to Komariyah (2022), Online customer reviews are an important source of information for consumers to gain a better understanding of the products offered in the market before making a purchase. Fitri & Dewi (2025) Online customer reviews have been shown to have a positive and significant influence on purchasing decisions on Shopee. (Sihaloho et al., 2023), Shopee has demonstrated that online customer reviews have a significant impact on apparel purchasing decisions. However, there is currently little research that combines personal recommendations and online customer reviews in a single research model, particularly regarding the Shopee marketplace and domestic footwear products. In the digital environment, online customer reviews are a type of user-generated content that encompasses experiences, opinions, and ratings of products and services shared online by consumers. This content serves as a valuable guide for other consumers when making purchasing decisions (Ellis-Chadwick, 2022). Moreover, from a modern marketing perspective, customer attitudes are heavily influenced by online interactions, and online reviews have become an important source of information that shapes the consumer decision-making process (Philip Kotler, 2021).

According to Djuuna (2024), Consumer purchasing decisions are influenced by a variety of factors, including economic, technological, political, and cultural aspects, product features, price, location, advertising, physical cues, people, and process-related factors. These factors shape consumers' perceptions as they evaluate available information and draw conclusions that ultimately influence their product purchasing decisions. Furthermore, according to Zusrony (2021), Purchasing decision is the process by which consumers decide whether to purchase a product or not, and includes selecting the specific product to purchase.

Based on the above, this study aims to investigate the following three aspects: (1) the impact of personalized recommendations on purchasing decisions, (2) the impact of online customer reviews on purchasing decisions, and (3) the combined impact of personalized recommendations and online customer reviews on consumer purchasing decisions related to Aerostreet brand footwear products on the Shopee marketplace.

RESEARCH METHODS

This study uses a quantitative research approach with descriptive and exploratory methods. The descriptive approach is used to describe the state of each research variable, while the exploratory approach is used to test hypotheses and investigate the relationships between variables (Sugiyono, 2024).

Participants in this study were consumers who had previously purchased Aerostreet brand shoes through the Shopee marketplace. Since the target population was unknown, the sample size was determined using the Lemeshow formula with a 95% confidence level ($z = 1.96$), maximum variance estimate ($p = 0.5$), and a 10% margin of error ($d = 0.10$). This calculation resulted in a minimum sample size of 96.04 people, which was then rounded to 100.

This study used a subject selection method for sampling. Participation criteria included being 18 years of age or older, having purchased Aerostreet shoes from Shopee, and agreeing to participate in this study. Data collection was conducted using a questionnaire distributed through Google Forms. The questionnaire used a 5-point Likert scale with answer options ranging from "strongly agree" (value = 5) to "strongly disagree" (value = 1). This study used two independent variables: personal recommendations (X1) and online customer reviews (X2). Personalized recommendations (X1) are measured using 15 metrics based on aspects such as recommendation approach, information presentation, recommendation accuracy, timeliness, and interactivity (Yun & Chun, 2024), Online customer reviews (X2) are measured using 12 metrics

derived from aspects such as helpfulness, review expertise, review timeliness, and coverage (Sihaloho et al., 2023). Purchase decision (Y) is used as the dependent variable and is measured using 18 indicators. These indicators cover aspects such as product choice, brand choice, retailer choice, purchase timing, purchase quantity, and payment method (Wardhana, 2024).

Instrumen tersebut diuji menggunakan koefisien alpha Cronbach untuk menilai reliabilitas dan validitas (nilai r kritis = 0,6). Sebelum analisis lebih lanjut, data kuesioner ordinal dikonversi menjadi data interval menggunakan Metode Interval Berurutan (MSI). Analisis jalur dilakukan menggunakan IBM SPSS Statistics untuk menentukan efek langsung, tidak langsung, dan keseluruhan dari setiap variabel.

RESULTS AND DISCUSSION

Respondent Characteristics

To verify the reliability and validity of the measurement instrument, Cronbach's alpha coefficient (threshold 0.60) was used for instrument validation. Furthermore, before further analysis, the ordinal scale data obtained from the questionnaire were converted to interval scale data using the continuous interval method (SIM). Then, path analysis was conducted using IBM SPSS Statistics software to examine the direct, indirect, and total effects of each variable.

Validity and Reliability Test Results

Validity tests indicate that all descriptions for the three survey variables are valid, with the calculated correlation coefficients (r values) exceeding the critical r value of 0.196. The calculated r values for the variable "personal recommendations" ranged from 0.640 to 0.805, for "online customer reviews" from 0.626 to 0.750, and for "purchase decisions" from 0.608 to 0.758. Reliability tests indicate that all variables are quite reliable, with Cronbach's alpha coefficients exceeding the critical threshold of 0.60. The Cronbach's alpha value for "personal recommendations" was 0.933, for "online customer reviews" 0.903, and for "purchase decisions" 0.929.

Table 3.1 Reliability Test Results
Source: SPSS Data Processing Results, 2026

Variable	Cronbach's Alpha	Critical Value	Conclusion
Personalized Recommendation (X1)	0,933	0,6	Reliabel
Online Customer Review (X2)	0,903	0,6	Reliabel
Purchase Decision (Y)	0,929	0,6	Reliabel

Descriptive Analysis

Descriptive analysis using a continuous line based on a percentage scale from 20% to 100% shows that the "personal recommendation" variable is in the "good" category, namely between 69% and 84%. This indicates that Shopee's recommendation system is quite successful in displaying Aerostreet shoe products that suit users' preferences, especially in terms of design, price, and the latest trends. However, several respondents said that the recommendations provided do not always match their preferences and the types of products recommended are not optimal. These results indicate that although the recommendation system generally performs quite well, there are still several areas for improvement related to the accuracy of recommendations and the accuracy in adapting to user needs.

The "online customer reviews" variable also falls into the "good" category, indicating that respondents gave reviews a positive rating because they were considered helpful in providing information about product quality, compliance with requested specifications, and previous customer experiences. However, some respondents stated that the reviews were inadequate and unclear, thus reducing their usefulness in assisting purchasing decisions.

On the other hand, the "purchase decision" variable received a fairly positive rating. This indicates that, in general, buyers exhibited positive patterns in selecting products, brands, sellers, purchase timing, purchase amount, and payment method. However, several factors still influence the decision-making process, and product price and the availability of other products, in particular, can influence how consumers evaluate and choose Aerostreet shoes on the Shopee marketplace.

Verification Analysis

Before analyzing the paths, ordinal scale data taken from the questionnaire was converted to interval scale data using the continuous interval method (SIM). Next, the correlation coefficients between the variables in the study were calculated using the Pearson method, namely the product-moment correlation coefficient, with the help of IBM SPSS Statistics software.

Correlation Coefficient Analysis

The analysis of the relationship between research variables was conducted using the Pearson correlation coefficient method in the form of product moments. The results showed a correlation of 0.233 between personalized recommendations (X1) and online customer reviews (X2). The correlation coefficient between personalized recommendations (X1) and purchasing decisions (Y) was 0.374, while the correlation coefficient between online customer reviews (X2) and purchasing decisions (Y) was 0.396. Based on the correlation coefficient interpretation guidelines proposed by (Sugiyono, 2024), all coefficients fall into the "weak to moderate correlation" category. While these results indicate that personalized recommendations and online customer reviews have a positive relationship with purchasing decisions, this relationship is still considered weak.

Table 3. 2 Correlations Among Research Variables

Source: SPSS Data Processing Results, 2026

Variabel	X1	X2	Y
Personalized Recommendation (X1)	1,000	0,233*	0,374***
Online Customer Review (X2)	0,233*	1,000	0,396***
Purchase Decision (Y)	0,374***	0,396***	1,000

Note: * Significant at the 0.05 level; *** Significant at the 0.001 level.

Path Coefficient and Coefficient of Determination Analysis

By using IBM SPSS Statistics to analyze the path, it was found that the path coefficient (β) from personalized recommendations (X1) to purchasing decisions (Y) was 0.298, while the path coefficient from online customer reviews (X2) to purchasing decisions (Y) was 0.327. Both variables significantly influence purchasing decisions, with a level of insignificance less than 0.05 ($p < 0.001$).

Table 3. 3 Path Coefficient Test Results

Source: SPSS Data Processing Results, 2026

Struktur	Path Coefficient (β)	t-value	t-critical	Sig.
X1 → Y	0,298	3,273	1,985	< 0,001
X2 → Y	0,327	3,594	1,985	< 0,001

Table 3. 4 Effects of Research Variables on Purchase Decision

Source: Data Processing Results, 2026

Model	Path Coefficient (β)	Direct Effect	Indirect Effect	Total Effect
X1 terhadap Y	0,298	8,8%	2,3%	11,1%
X2 terhadap Y	0,327	10,7%	2,3%	13,0%
Total Pengaruh X1 dan X2 terhadap Y				24,1%
Pengaruh Faktor Lain (ϵ)				75,9%

Based on the results shown in the table, the path equation can be written as follows: $Y = 0.298X_1 + 0.327X_2 + \epsilon$. The R-squared value is 0.241, meaning that the personal recommendation (X_1) and online customer reviews (X_2) variables together are able to explain how much change in purchasing decisions (Y), which is 24.1%. This means that these two variables influence 24.1% of consumer decisions in purchasing

Aerostreet footwear products on the Shopee marketplace. The remaining 75.9% of the variance is caused by other factors not included in the survey model, which is expressed by the error term (ϵ).

Hypothesis Testing

Partial Hypothesis Testing (t-Test)

Based on the t-test study conducted at a significance level of $\alpha = 5\%$ with a critical t-value of 1.985, the following findings were obtained. First, the t-value calculated for personalized recommendations (X1) is 3.273, which exceeds the critical t-value of 1.985 and indicates a p-value below 0.001. Thus, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. This finding indicates that personalized recommendations have a statistically significant positive influence on consumer purchasing decisions related to Aerostreet footwear products on the Shopee platform. Furthermore, the t-value obtained for online customer reviews (X2) is 3.594, which also exceeds the critical t-value of 1.985 and has a p-value less than 0.001. Therefore, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. This finding indicates that online customer reviews have a statistically significant positive influence on consumer purchasing decisions related to Aerostreet footwear products on the Shopee platform.

Simultaneous Hypothesis Testing (F-Test)

The F-test results show an F-value of 15.390, which is higher than the critical F-value of 3.09 at a 5% significance level. Furthermore, the p-value is recorded as less than 0.001. Thus, the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_1) is accepted. This indicates that personal recommendations and online reviews from consumers have a statistically significant positive impact on purchasing decisions for Aerostreet shoes on the Shopee marketplace platform.

Table 3. 5 Results of the Simultaneous Significance Test (F-Test)

Source: SPSS Data Processing Results, 2026

Model	Sum of Squares	df	Mean Square	F-value	Sig.
Regression	2939,290	2	1469,645	15,390	< 0,001
Residual	9262,710	97	95,492		
Total	12202,000	99			

Discussion

The Effect of Personalized Recommendations on Purchase Decisions

The results of this study indicate that Personalized Recommendations have a positive and statistically significant effect on consumers' Purchase Decisions regarding Aerostreet footwear products on the Shopee marketplace, with a path coefficient of 0.298 and a total contribution of 11.1%. This finding is consistent with the study conducted by Christina et al., (2023), which reported that Personalized Recommendations significantly influence purchase intention. Similarly (Rolando, 2025) argued that the greater the accuracy of AI-based recommendations, the higher the likelihood that consumers will make a purchase. Other studies have also demonstrated that Personalized Recommendations enhance the user experience by providing relevant information tailored to consumers' needs and preferences, thereby facilitating the purchase decision-making process D & Mujianti (2025). By leveraging Shopee's recommendation features, consumers can more efficiently identify Aerostreet products that match their interests, preferences, and purchasing needs. Consequently, the availability of relevant and personalized product recommendations simplifies the evaluation process and increases the likelihood of consumers making a purchase decision.

The Effect of Online Customer Reviews on Purchase Decisions

This study shows that user feedback on the internet has a significant positive influence on purchasing decisions, with a path coefficient of 0.327 and a total contribution of 13.0%. This result is consistent with the findings of Fitri & Dewi (2025), Sihaloho et al., (2023), and Sampe & Tandiyayu (2025), all of which indicate that online customer reviews have a significant influence on purchasing decisions for various types of products on the Shopee platform. Furthermore, Sari et al., (2022), explained that customer reviews can be a way for consumers to see others' assessments of a company's products, services, and performance. The greater contribution of online reviews compared to specific recommendations in this study suggests that

Aerostreet customers prioritize information derived from the real experiences of previous users when making purchasing decisions. This finding is particularly relevant to footwear products, as factors such as quality, comfort, and fit cannot be directly evaluated when shopping online.

Previous research conducted by (Fitri & Dewi, 2025), also concluded that Online Customer Reviews have a positive and significant effect on Purchase Decisions. These findings support the argument that Online Customer Reviews and Purchase Decisions are closely interconnected and reinforce one another within the consumer decision-making process. Online Customer Reviews represent consumers' evaluations of products or services they have previously purchased through online platforms. These evaluations may take the form of opinions, recommendations, feedback, or descriptions of personal experiences. As such, Online Customer Reviews assist prospective buyers in assessing the quality and suitability of products before making a purchase. This is because reviews provide information that is often perceived as accurate, credible, and trustworthy, thereby reducing uncertainty and increasing consumer confidence in the purchasing process (Toji et al., 2024).

The Simultaneous Effect of Personalized Recommendations and Online Customer Reviews on Purchase Decisions

Collectively, the two independent variables accounted for 24.1% of the variance in Purchase Decisions, while the remaining 75.9% was explained by factors outside the scope of the research model. These findings indicate that Personalized Recommendations function as an internal source of information provided by the platform to help consumers identify products that are relevant to their needs and preferences. In contrast, Online Customer Reviews serve as an external source of information that strengthens consumers' confidence when evaluating product quality and suitability. The combined influence of these two factors contributes to reducing consumer uncertainty prior to making a purchase decision for Aerostreet footwear products on the Shopee marketplace. Personalized Recommendations facilitate product discovery by presenting items that align with consumers' interests and browsing behavior, whereas Online Customer Reviews provide experiential information and social validation from previous buyers. Together, these mechanisms support consumers in making more informed and confident purchasing decisions (Rolando, 2025).

CONCLUSIONS

From the results and analysis of this study, several conclusions can be drawn. First, the personalized recommendations for Aerostreet shoe consumers on the Shopee platform are considered satisfactory, demonstrating Shopee's ability to suggest products that match users' needs and preferences. Second, the quality of online customer reviews is also perceived as positive, supported by favorable responses from respondents who stated that the reviews are useful in providing information regarding product quality. Third, the conditions for purchasing decision-making are considered adequate.

Fourth, personalized advice shows a statistically significant positive impact on purchase choice, with a path coefficient of 0.298, a t-value of 3.273, and a total contribution of 11.1%. Fifth, online customer testimonials also have a statistically significant positive effect on purchase choice, with a path coefficient of 0.327, a t-value of 3.594, and a total contribution of 13.0%, which is higher than the contribution of personalized advice. Sixth, personalized advice and online customer testimonials together have a significant impact on purchase decisions, as seen from the F-value of 15.390 and a total contribution of 24.1%.

Based on the findings of this study, several recommendations can be proposed. First, Shopee should continue to enhance the accuracy and relevance of its product recommendation system to ensure that the products displayed are more closely aligned with consumers' preferences and purchasing needs. In addition, Shopee is encouraged to strengthen its review verification mechanisms to improve the credibility and reliability of information available on the platform. The platform should also encourage consumers to provide more comprehensive, detailed, and objective reviews, thereby increasing the informational value of customer feedback for prospective buyers.

Furthermore, Aerostreet is expected to actively respond to consumer feedback expressed through online reviews. Such engagement may help strengthen consumer trust, improve customer satisfaction, and ultimately enhance purchase decisions. By demonstrating responsiveness to customer concerns and suggestions, Aerostreet can foster stronger relationships with consumers and reinforce its brand reputation

within the competitive e-commerce marketplace. For future research, it is recommended that additional variables be incorporated into the research model, such as price, brand image, consumer trust, and electronic word-of-mouth (e-WOM). Including these variables may provide a more comprehensive understanding of the factors influencing consumer purchase decisions and contribute to the development of a broader conceptual framework for studying consumer behavior in e-commerce settings.

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REFERENCE

- Christina, A., Setiawan, A., & Prasetya, B. (2023). *Influence of Personalized Product Recommendation, Online Review Stimuli, and Customer Brand Identification on Purchase Intention (Case Study on Bukalapak Consumers in Semarang)*. *Journal of Business Studies*, 9(1), 2467–8790. <https://jurnal.polines.ac.id/index.php/jobs>
- D, L. E. S., & Mujianti, S. A. (2025). *The Role of Personalization and Online Store Trust on Purchase Intention Mediated by Customer Satisfaction*. 4(3), 93–100.
- Djuuna, M. (2024). *Keputusan Pembelian Pengaruh Website Quality, Sales Promotion, Price Through Consumer Trust*.
- Ellis-Chadwick, C. &. (2022). *Digital Marketing Strategy, Implementation And Practice*.
- Fitri, A., & Dewi, A. F. (2025). *Pengaruh Kualitas Layanan, Online Customer Review dan Online Customer Rating Terhadap Keputusan Pembelian Produk Korset Di Shopee*. *RIGGS: Journal of Artificial Intelligence and Digital Business*, 4(3), 7351–7365. <https://doi.org/10.31004/riggs.v4i3.3090>
- Komariyah, D. I. (2022). *Pengaruh Online Customer Riview dan Rating Terhadap Minat Pembelian Online Shopee (Studi Kasus Pada Santri Putri Pondok Pesantren Salafiyah Syafi ' iyah Seblak Jombang) Pesatnya perkembangan internet memberikan dampak yang besar bagi aspek s*. *Journal of Business and Innovation Management*, 4, 343–358.
- Philip Kotler, G. A. (2021). *Principles of Marketing 18E*.
- Rolando, B. (2025). *The Impact Of Artificial Intelligence-Based Recommendation System On Consumer Purchase Decision In E-Commerce*. 4(2), 1–25.
- Sampe, F., & Tandiyu, B. (2025). *Pengaruh Online Customer Review terhadap Keputusan Pembelian Sepatu Merek Adidas di Toko Online Shopee untuk Gen Z di Kota Makassar*. 1, 138–152.
- Sari, I., Rinawati, T., Rizkiana, C., Ekonomi, F., Semarang, U., Ekonomi, F., Semarang, U., Ekonomi, F., Semarang, U., & Review, O. C. (2022). *Pengaruh Electronic Word Of Mouth (E-WOM) Dan Online Customer Review (OCR) Terhadap Keputusan Pembelian*. 20(2), 160–169.
- Sihaloho, E. M., Petra, D., & Sitorus, M. (2023). *Pengaruh Online Customer Rating Dan Online Customer Review Terhadap Keputusan Pembelian Produk Pakaian Di Aplikasi Shopee Pada Mahasiswa Pendidikan Ekonomi Universitas Hkbp Nommensen Pematang Siantar*. 1(2), 380–390.
- Sugiyono, P. D. (2024). *Metode Penelitian Kuantitatif dan Kualitatif* (M. Dr.Ir.Sutopo.S.Pd (ed.); Cetakan ke). ALFABETA,.
- Toji, E. M., Sukati, I., & Batam, U. P. (2024). *Pengaruh Online Customer Review , Brand Image , Dan Kepercayaan Konsumen Terhadap Keputusan Pembelian Skintific Di Tiktok Shop*. 5(2), 675–688.
- Wardhana, A. (2024). *Consumer Behavior In The Digital*.
- Yeni, Y., Koli, D. Y., Irwansyah, R., & Sjoen, A. E. (2025). *Strategi Pemasaran Personalized Recommendation Dalam Meningkatkan Retensi Pelanggan*. *Jurnal Lentera Bisnis*, 14(2), 1722–1735. <https://doi.org/10.34127/jrlab.v14i2.1527>
- Yun, X., & Chun, M. H. (2024). *The impact of personalized recommendation on purchase intention under the background of big data*. *Big Data and Information Analytics*, 8(0), 80–108. <https://doi.org/10.3934/bdia.2024005>
- Zusrony, E. (2021). *Perilaku Konsumen*.