

**THE EFFECT OF PERSONALIZED ADVERTISING ON PURCHASE INTENTION: THE MEDIATING ROLE OF ATTITUDE TOWARD ADVERTISEMENTS -EVIDENCE FROM SHOPEE E-COMMERCE USERS**

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**ABSTRACT**

Technological advancements in mobile applications, social media, artificial intelligence, and data analytics have enabled e-commerce platforms to deliver personalized advertising that engages consumers more effectively. In Indonesia, where digital penetration is high and Shopee dominates the e-commerce market, understanding consumer responses to personalized advertising is crucial. This study investigates the influence of personalized advertising on purchase intention, with attitude toward advertising serving as a mediating variable, focusing on Shopee users in Indonesia. Data were collected from 114 Shopee users through a combination of purposive and incidental sampling. All participants had previously encountered personalized ads on the platform, and primary data were gathered via online questionnaires. The data were analyzed using SPSS v27, including descriptive statistics, regression, and hypothesis testing with Hayes' PROCESS macro. The results show that personalized advertising significantly affects purchase intention both directly and indirectly through consumers' attitudes toward advertisements. Positive attitudes toward personalized ads further enhance purchase intentions, supporting the relevance of the Privacy Calculus Theory and the Affect Transfer Hypothesis. Findings highlight that effective personalization depends not only on technological precision but also on ad relevance, credibility, and responsible data practices. This study provides empirical insights for e-commerce platforms seeking to optimize personalized advertising strategies while maintaining consumer trust and engagement. E-commerce platforms are therefore encouraged to adopt personalization strategies that balance technological accuracy with transparency and trust-building to effectively enhance purchase intentions and sustain long-term consumer loyalty.

**Key words:** *personalized advertising; purchase intention; attitude toward advertisements; Shopee; e-commerce*

**INTRODUCTION**

Technological progress in mobile applications, social media, artificial intelligence, and data analytics has substantially altered how firms communicate with consumers. These innovations have enabled firms to design more targeted and data-driven campaigns, paving the way for personalized advertising (Grewal et al., 2020). Indonesia provides a particularly relevant context for examining this phenomenon. As of early 2025, the country recorded approximately 212 million internet users, representing 74.6 percent of the population, along with more than 356 million mobile connections, which indicates extensive digital integration across society (Datareportal, 2025). Indonesia's e-commerce sector continues to grow rapidly, projected to reach USD 94.5 billion in 2025 and nearly USD 194 billion by 2030 (Mordor Intelligence, 2024). Shopee remains the market leader, outperforming Tokopedia, Lazada, and Blibli in both traffic and transaction volume (Momentum Works, 2025). Shopee's leadership underscores the strategic importance of technology-based personalization in sustaining customer engagement and loyalty. Prior research suggests that personalization can stimulate consumers across cognitive, affective, and conative dimensions, thereby strengthening brand awareness and influencing purchase behavior (Alamin et al., 2023).

Personalized advertising refers to promotional messages tailored to users' preferences, past behaviors, and demographic characteristics. Scholars have shown that such customization can enhance consumer experience and foster loyalty (Chandra et al., 2022; Tran, 2017). By leveraging AI and data analytics, e-commerce platforms can present more relevant and appealing messages, improving engagement, satisfaction, and purchase intention (Chhabria et al., 2023). Attitude toward advertisements, defined as consumers' overall evaluative responses (cognitive, affective, and conative) toward online ads, can mediate the effect of personalized advertising on purchase intentions (Ates & Odzic, 2023). Consumers' expectations for personalization are rising: according to McKinsey (2021), reports that 71 percent of consumers expect customized experiences, while 76 percent express frustration when firms fail to provide personalization. However, several studies have also highlighted privacy and psychological concerns when users feel excessively tracked or monitored (Chen et al., 2022; De Keyser et al., 2024). More recent evidence supports both perspectives: while Kim & Han, (2025) revealed that excessive personalization may backfire when privacy concerns are high. These mixed findings indicate that personalization can either increase or decrease purchase intention depending on consumers' perceptions and privacy boundaries.

To explain these mechanisms, this study employs the Privacy Calculus Theory and the Affect Transfer Hypothesis. The Privacy Calculus Theory (Culnan & Armstrong 1999) posits that consumers weigh perceived benefits against privacy risks when evaluating personalized ads, whereas the Affect Transfer Hypothesis (Lutz, 1985; MacKenzie & Lutz, 1989) explains how emotional responses toward ads influence attitudes and subsequent purchase behavior. Despite the rapid growth of Indonesia's e-commerce industry, empirical research examining how personalized advertising shapes consumer attitudes and purchase intentions, particularly within Shopee's ecosystem, remains limited.

Building on these theoretical foundations and empirical gaps, this study analyzes the relationship between personalized advertising and purchase intention, with attitude toward advertisements acting as a mediating variable. The study proposes the following hypotheses:

**H1:** Personalized advertising positively influences attitude toward advertisements.

**H2:** Attitude toward advertisements positively influences purchase intention.

**H3:** Personalized advertising positively influences purchase intention.

**H4:** Attitude toward advertisements mediates the relationship between personalized advertising and purchase intention.

## METHOD

This study employed a quantitative explanatory design to test the proposed relationships among personalized advertising, attitude toward advertisements, and purchase intention. A quantitative approach allows statistical testing of relationships among variables and facilitates generalization of findings (Creswell, 2014; Sekaran & Bougie, 2016). The study surveyed 114 Shopee users in Indonesia using purposive sampling to ensure that respondents had previously used Shopee and completed at least one purchase. The researchers distributed an online questionnaire through social media platforms. The instrument included screening questions, measurement items for personalized advertising, attitude toward advertisements, and purchase intention, as well as demographic information. All constructs were measured using Likert-scale items adapted from prior studies, and reliability testing indicated Cronbach's Alpha values above 0.70 (Hair et al., 2019). The analysis used SPSS version 26 and included descriptive statistics, validity and reliability tests, multiple regression analysis, and mediation testing with Hayes' PROCESS Macro Model 4 to assess both direct and indirect effects.

## RESULTS AND DISCUSSION

Data obtained from 114 valid Shopee users were analyzed using SPSS 26 and Hayes' PROCESS Macro (Model 4). The respondents' demographic characteristics are summarized in Table 1. Most participants were male (54.4%) and aged 18–34 years (87.8%), indicating that the sample largely consisted of young adult Shopee users. More than half were students (54.4%), followed by employees (26.3%) and self-employed or other occupations (19.3%). In addition, most respondents used Shopee frequently (63.2%), suggesting that the participants were active users familiar with the platform's personalized advertising features..

**Table 1. Respondents' Demographic Characteristics (n = 114)**

Demographic Variable	Category	Frequency	Percentage (%)
<b>Gender</b>	Female	52	45.6 %
	Male	62	54.4 %
<b>Age</b>	18–24 years	50	43.9 %
	25–34 years	50	43.9 %
	>35 years	14	12.3 %
<b>Occupation</b>	Student	62	54.4 %
	Employee	30	26.3 %
	Self-employed & others	22	19.3 %
<b>Shopee Usage Frequency</b>	Often ( $\geq 3$ times/month)	72	63.2 %
	Occasionally (<3 times/month)	42	36.8 %

Source: Processed primary data, 2025.

After identifying respondent characteristics, validity and reliability analyses were performed to ensure data accuracy. All measurement items met the required standards, with correlation coefficients exceeding 0.184 and Cronbach's Alpha values above 0.7, confirming that each construct was both valid and reliable. Figure 1 illustrates the tested research framework and the relationships between personalized advertising, attitude toward

advertisements, and purchase intention, along with the respective R-square values..

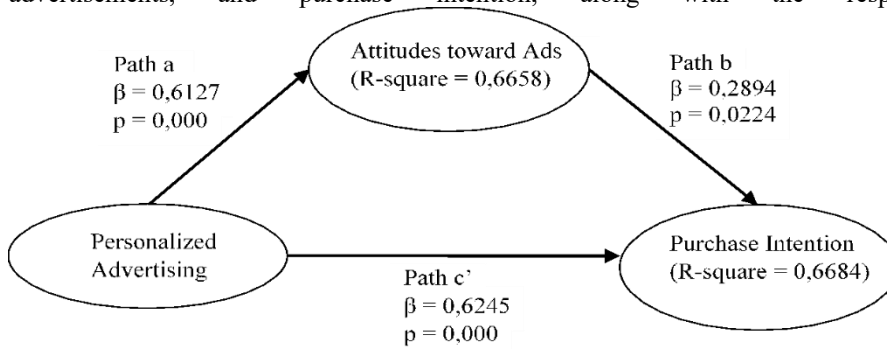


Figure 1 illustrates that personalized advertising exerts a significant positive influence on both attitudes toward advertisements and purchase intention. In addition, attitudes toward advertisements partially mediate the relationship between personalized advertising and purchase intention. The R-square values indicate that the model accounts for 66.6% of the variance in attitudes toward advertisements and 66.8% of the variance in purchase intention, demonstrating substantial explanatory power. Collectively, these results provide strong empirical support for the proposed conceptual framework and confirm the hypothesized relationships among the studied variables.

To further validate these findings, several statistical tests were conducted to ensure that the regression model met the required assumptions. Classical-assumption tests confirmed data normality, absence of multicollinearity ( $VIF < 10$ ), and homoscedasticity, indicating that the regression models met statistical requirements. The detailed results of the regression and mediation analyses are presented in Table 3. Personalized advertising significantly influenced both attitude toward advertisements ( $\beta = 0.6127, p < 0.001$ ) and purchase intention ( $\beta = 0.6245, p < 0.001$ ). Attitude toward advertisements also had a significant positive effect on purchase intention ( $\beta = 0.2894, p = 0.044$ ). The mediation analysis (BootLLCI = 0.0038; BootULCI = 0.3433) confirmed a partial mediating effect of attitude toward advertisements on the relationship between personalized advertising and purchase intention.

**Table 3. Regression and Mediation Analysis Results**

Hypothesis	Relationship Tested	$\beta$	p-value	Result
H1	Personalized Advertising $\rightarrow$ Attitude Toward Advertisements	0.6127	0.000	Supported
H2	Attitude Toward Advertisements $\rightarrow$ Purchase Intention	0.2894	0.044	Supported
H3	Personalized Advertising $\rightarrow$ Purchase Intention	0.6245	0.000	Supported
H4	Mediation (Attitude Toward Ads)	BootLLCI = 0.0038; BootULCI = 0.3433	-	Supported

Source: PROCESS Macro (Model 4), SPSS 26.

Based on these statistical findings, further interpretation was conducted to explain their theoretical and practical implications. The following discussion elaborates on how personalized advertising influences attitudes and purchase intentions in light of prior empirical evidence and established consumer behavior theories.

The significant positive relationship between personalized advertising and attitude toward advertisements (H1) aligns with findings by Ates & Odzic (2023) and Nurhidayah & Dirgantara (2025), who demonstrated that tailoring advertisements to users' preferences and behaviors enhances perceived relevance, trustworthiness, and consumer attitudes. These results highlight that effective personalization strengthens positive attitudes toward advertisements, ultimately supporting engagement and purchase intention.

The significant effect of attitude toward advertisements on purchase intention (H2) supports prior findings by Sallam and Algammash (2016), Ho Nguyen et al. (2022), and Pappas et al. (2017), who demonstrated that cognitive, affective, and emotional responses generated by personalized or engaging ads strengthen consumers' motivation to purchase. These results reaffirm that positive emotional and evaluative responses toward ads are crucial precursors to behavioral intention in online shopping contexts.

The direct influence of personalized advertising on purchase intention (H3) is consistent with Tran (2017), Ates and Odzic (2023), and Lina (2021), who found that tailoring advertisements to users' preferences and past behaviors enhances perceived relevance, satisfaction, and purchase likelihood. However, Lina (2021) also

cautioned that privacy concerns can weaken this relationship, underscoring the need for a balanced personalization strategy that maintains consumer trust.

Finally, the mediating role of attitude toward advertisements (H4) is supported by Ates and Odzic (2023), Zhu & Kanjanamekanant (2021), and Nguyen et al. (2022), all of whom found that positive attitudes act as a psychological bridge linking personalized content to purchase intention. This suggests that favorable attitudes toward advertisements facilitate the translation of personalized marketing efforts into actual purchase intentions, highlighting the critical role of consumer evaluation in online advertising.

Overall, these findings confirm both the Privacy Calculus Theory (Culnan & Armstrong, 1999) and the Affect Transfer Hypothesis (Lutz, 1985; MacKenzie & Lutz, 1989), illustrating that personalization effectiveness depends not only on technological precision but also on consumers' emotional and cognitive evaluations. In practical terms, e-commerce platforms like Shopee can enhance user engagement and loyalty by designing personalized ads that are relevant, credible, and respectful of privacy boundaries.

## CONCLUSION

This study confirms that personalized advertising significantly influences consumers' purchase intentions, both directly and indirectly, through their attitudes toward advertisements. The results indicate that the success of personalized marketing relies not only on technological capabilities but also on consumers' emotional and cognitive evaluations. When personalized advertisements are perceived as relevant, trustworthy, and privacy-conscious, they elicit positive attitudes that translate into stronger purchase intentions. These findings support the Privacy Calculus Theory and Affect Transfer Hypothesis by emphasizing the balance between perceived benefits and privacy considerations in shaping consumer behavior. E-commerce platforms like Shopee should develop personalization strategies that prioritize relevance, transparency, and responsible data use to build consumer trust and long-term loyalty. Future studies may further explore additional factors influencing consumer responses to personalized advertising.

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