

Digital Persuasion in MSMEs: The Mediating Role of Positive e-WOM and Sales Promotion on the Link Between E-Commerce Quality and Impulse Buying

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Abstract

This research investigates the intricate interplay among e-commerce quality, positive electronic word-of-mouth (e-WOM), sales promotions, and impulse buying behavior, focusing on Micro, Small, and Medium Enterprises (MSMEs) in West Java. Employing a quantitative research design with a survey approach, the study gathered responses from 343 individuals who had previously made impulsive online purchases of MSME products. The findings reveal that e-commerce quality does not directly influence impulse buying behavior. However, it exerts a significant indirect effect when mediated by sales promotions. In contrast, positive electronic word of mouth (e-WOM) does not function as a significant mediator in the relationship between e-commerce quality and impulse buying. These findings highlight the critical role of embedding well-planned promotional strategies within robust e-commerce platforms to trigger consumers' impulse buying behavior. The study delivers actionable recommendations for MSMEs to optimize their digital marketing strategies and strengthen their position in the competitive regional e-commerce market.

Keywords: *Impulse Buying Behaviour, Sales Promotion , Positive e-WOM,, E-Commerce Quality,MSMEs*

INTRODUCTION

The rapid growth of information technology, combined with the widespread use of mobile devices for accessing e-commerce platforms, has reshaped how consumers engage in purchasing, making online transactions increasingly appealing and effortless (Aslam et al., 2023). This evolution highlights the pivotal role of website quality in influencing the online shopping experience, which is shaped by consumers' cognitive, emotional, and psychological responses (Kacprzak & Hensel, 2023). Given that these experiences can differ across e-commerce sites, businesses are compelled to continuously improve their website quality to sustain competitiveness. Enhancing website quality through intuitive design and seamless navigation not only enriches the customer journey but also fosters higher satisfaction levels and ultimately boosts business revenue (Kacprzak & Hensel, 2023). In response, companies are continuously refining their online platforms to ensure a seamless and engaging shopping experience that appeals to both new and returning customers ((Ikenga & Egbule, 2024). This evolution is particularly relevant for Micro, Small, and Medium Enterprises (MSMEs) in regions like West Java, where e-commerce plays a vital role in expanding market access and supporting regional economic development (Kinda, 2019). With rising digital competition, platform quality has become a central factor influencing consumer perceptions and behaviors, including impulse buying. High-quality websites that are visually appealing, easy to navigate, and secure can significantly enhance consumer experiences, increasing the likelihood of spontaneous purchases when appealing products and promotions are presented (Kathuria & Bakshi, 2024b; Wang et al., 2024).

Impulse buying, which involves sudden and unintentional purchasing decisions prompted by external factors, represents a significant aspect of consumer behavior in online environments (Iyer et al., 2020). In e-commerce, positive Electronic Word-of-Mouth (e-WOM) and

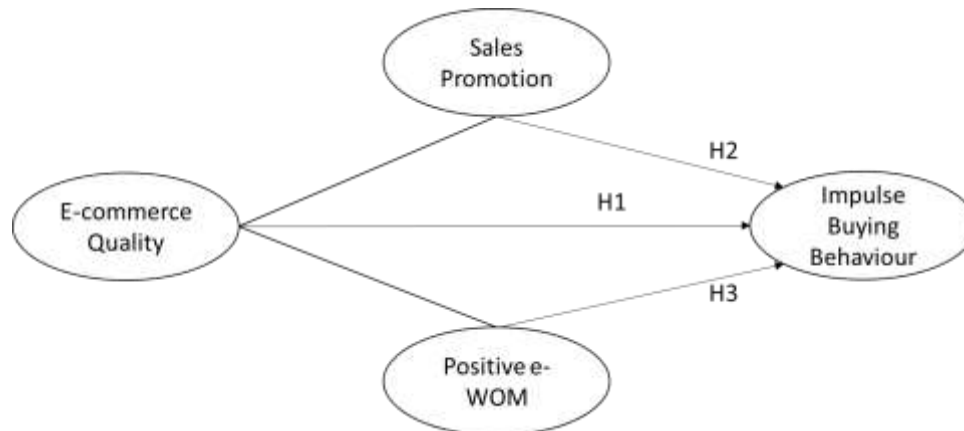
promotional strategies have been found to be strong drivers of such behavior. Positive e-WOM, which includes favorable reviews, ratings, and peer recommendations, enhances consumer trust and creates a sense of urgency, thereby encouraging impulsive buying behavior (Arissaputra et al., 2024). In parallel, promotional tactics such as time-limited discounts, coupons, and flash sales add excitement and immediacy to the shopping experience, further stimulating impulse buying (Kathuria & Bakshi, 2024a). While prior research has examined the individual impacts of e-commerce quality, e-WOM, and sales promotion on consumer behavior, few studies have investigated how these factors interact specifically in the context of MSMEs in West Java. Existing literature predominantly focuses on large-scale e-commerce platforms or general market environments, leaving a gap in understanding the unique characteristics of MSME-driven digital commerce in regional settings.

Building on this context, this study seeks to examine how e-commerce quality, positive e-WOM, and sales promotions collectively affect impulse buying behavior on MSME e-commerce platforms in West Java. This research addresses the gap by adopting a comprehensive model of consumer behavior that emphasizes how these variables collectively influence consumer spontaneity. Positive e-WOM is specifically conceptualized here as a subset of e-WOM focused on favorable consumer feedback in digital environments. The urgency and relevance of this research are grounded in the need for MSMEs in West Java to understand and utilize digital tools that improve consumer engagement and competitiveness. Insights from this study are expected to provide strategic guidance for MSMEs to amplify positive feedback, mitigate negative perceptions, and create compelling promotional campaigns that trigger impulse buying (Arissaputra et al., 2024).

The theoretical foundation of this study comprises three interrelated components. First, e-commerce quality significantly shapes brand perception and buying intentions, especially when online platforms present consumers with a variety of products, secure interfaces, and visually compelling designs (Li et al., 2024). Such features are critical in activating impulse buying, as they influence both external and internal drivers of spontaneous purchase decisions (Huang et al., 2024). Second, electronic word-of-mouth (e-WOM) enables consumers to share and access reviews, experiences, and opinions about products through digital channels, thereby influencing purchasing behavior (Babić Rosario et al., 2020). As social media and review platforms continue to thrive, e-WOM becomes a two-way communication tool, allowing companies to gather insights while providing prospective customers with socially validated information (Hamdani & Maulani, 2018). When e-WOM is positive, it enhances brand credibility and can significantly stimulate impulse purchases due to the sense of trust and immediacy it creates (Aghdaie et al., 2022; Anindita & Perdana, 2022; Arissaputra et al., 2024). Third, sales promotion as a marketing approach leverages limited-time offers, discounts, or incentives to accelerate consumer decision-making and boost brand visibility (Czinkota et al., 2021). These time-sensitive tactics generate a psychological urgency, prompting consumers to act quickly and often impulsively (Luo et al., 2021; Zamfir, 2024). Supported by digital marketing tools such as email campaigns and social

media advertisements, promotions play a pivotal role in influencing unplanned purchasing behavior (Chandrasekhar et al., 2024; Khrais & Gabori, 2023).

Figure1. Research Model



Source: Arissaputra et.al., 2025

Based on the Figure 1, the hypothesis in this study is as follows

H1: E-commerce Quality has significant effect on Impulse Buying Behaviour

H2: E-commerce Quality has significant effect on Impulse Buying Behaviour through Sales Promotion

H3: E-commerce Quality has significant effect on Impulse Buying Behaviour through Positive e-WOM

RESEARCH METHODS

As illustrated in Figure 1, this study explores the complex interactions between e-commerce quality, sales promotions, positive electronic word-of-mouth (e-WOM), and impulse buying behavior. Using a survey-based approach, the research gathers data through a structured questionnaire focused on four primary constructs. A quantitative methodology is applied, aligning with hypothesis testing and statistical techniques. This approach is particularly suitable for analyzing defined samples or larger populations (Hair Jr et al., 2021). Data collection was carried out by distributing questionnaires to individuals who had previously made impulsive purchases of MSME products in West Java. The study employed a non-probability sampling method, specifically purposive sampling, which allows researchers to select participants based on predefined criteria to ensure the sample reflects the characteristics essential for meeting the study's objectives (Hair Jr et al., 2021). To determine the minimum sample size, the number of questionnaire items was multiplied by ten, following Hair Jr et al.'s guideline. With 27 measurement items across all variables, the minimum required sample size was set at 270 respondents. In total, 343 respondents who met the criteria were successfully recruited and their responses were used for subsequent data analysis.

RESULT AND DISCUSSION

Outer Model

In this study, assessing the outer model serves as a key step to verify that each indicator group accurately represents its latent variable, ensuring both reliability and validity of the model. The evaluation primarily involves reflective indicators, as these are intended to project the characteristics of the constructs they are associated with. The quality of the outer model is examined using three main criteria: convergent validity, discriminant validity, and composite reliability. Convergent validity focuses on the degree to which indicators of the same latent variable are strongly correlated, confirming that they capture a unified construct. Discriminant validity, meanwhile, ensures that each latent variable is clearly distinguishable from the others. Composite reliability assesses the overall internal consistency of the indicators, confirming that they reliably measure the targeted construct. To test convergent validity, two main aspects are considered: factor loadings and the Average Variance Extracted (AVE). Factor loadings reflect the strength of the association between indicators and their constructs, with values above 0.6 deemed strong for confirmatory studies and 0.6–0.7 considered acceptable in exploratory research. (Hair Jr et al., 2021).

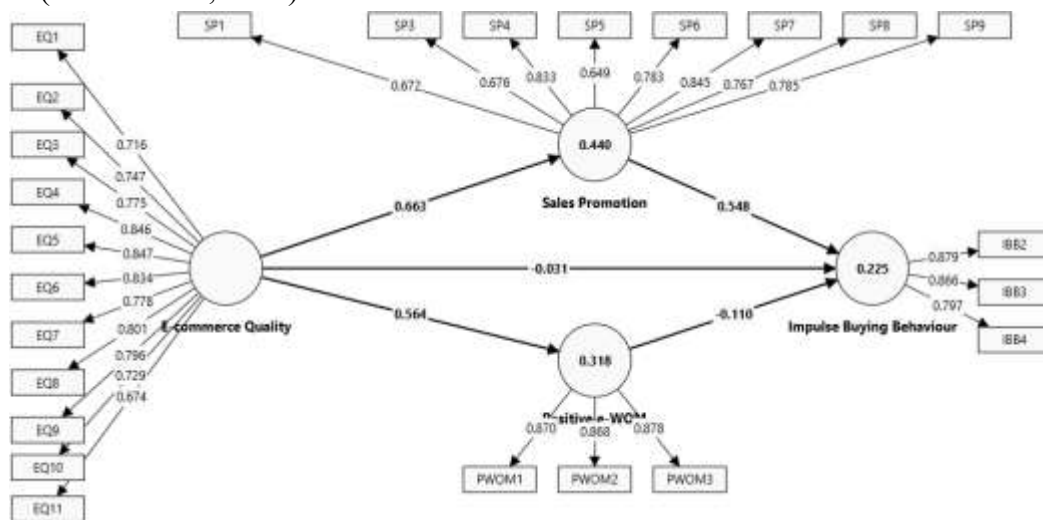


Figure 2. Outer Model

Source: Processed Data (2025)

Figure 2 highlights that the outer model aligns well with the established evaluation standards, reflecting both reliability and robustness. The in-depth examination of the outer model reinforces its consistency and credibility. Based on the results shown in Figure 2, nearly all reflective indicators for the latent variables achieve factor loadings exceeding the recommended 0.6 threshold, which signifies strong and valid relationships with their respective constructs. The only exceptions are indicators SP2 and IBB1, which fall below this standard. Overall, these results demonstrate that most indicators contribute meaningfully to their latent variables, thereby enhancing the model's validity and confirming its effectiveness in representing the relationships investigated in this study.

Table 1. Average Variance Extracted (AVE)

	AVE
E-commerce Quality	0.606
Sales Promotion	0.569
Positive E-WOM	0.760
Impulse Buying Behaviour	0.719

Source: Data Processing, 2025

The Average Variance Extracted (AVE) values for each variable E-commerce Quality (0.606), Sales Promotion (0.569), Positive E-WOM (0.760), and Impulse Buying Behavior (0.719) are above 0.5. This threshold is a benchmark in structural equation modeling, used to assess construct validity. An AVE value over 0.5 means that more than half of the variance in the variable's indicators is due to the underlying construct rather than measurement error. This result indicates that each construct is capturing a significant portion of the information in its indicators, showing that the items or questions used to measure these constructs (e.g., survey items) are reliable and accurately represent the intended theoretical concepts. Thus, the variables in this study (E-commerce Quality, Sales Promotion, Positive E-WOM, and Impulse Buying Behavior) are considered well-defined and properly measured, which strengthens the study's measurement model.

Inner Model

Evaluating the R-square values of endogenous latent variables is essential to determine the extent to which exogenous constructs explain the variance in the dependent variables. This step clarifies the model's overall explanatory power and illustrates the strength of the relationships among constructs. After assessing R-square, path coefficients are calculated using the bootstrapping technique. A path is deemed statistically significant when its t-statistic is greater than 1.96, which corresponds to a 5% significance level. Exceeding this threshold indicates that one variable exerts a meaningful influence on another. Through this process, the model's explanatory ability can be thoroughly assessed while also identifying which variable relationships are statistically supported within the structural equation modeling (SEM) framework, thereby highlighting the key interactions captured in the study.

Table 2. Hypothesis Testing

Variabel	T Statistic (>1.96)	P Value (<0.05)	Result	Hypothesis
H1 : E-Commerce Quality → Impulse Buying Behaviour	0.469	0.639	Not Significant	Rejected
H2 : E-Commerce Quality → Sales Promotion → Impulse Buying Behaviour	7.964	0.000	Significant	Supported
H2 : E-Commerce Quality → Positive e-WOM → Impulse Buying Behaviour	1.633	0.102	Not Significant	Rejected

Source: Data Processing, 2025

H1: E-Commerce Quality → Impulse Buying Behaviour

The table shows that the t-statistic for the relationship between e-commerce quality and impulse buying behavior is 0.469, with a p-value of 0.639. This result does not meet the criteria for significance, which requires a t-statistic greater than 1.96 and a p-value less than 0.05. Therefore, this hypothesis is considered not significant and rejected. It indicates that e-commerce quality does not have a direct significant influence on impulse buying behavior in this study. These findings suggest that while high-quality e-commerce platforms can enhance the shopping experience, this alone is not sufficient to trigger impulsive buying behavior. The results of this study contradict previous research which highlights that the direct effect of platform quality may be overshadowed by other factors such as the emotional appeal of promotions or direct price incentives which are more directly related to impulse purchase decisions (Hayu et al., 2020).

H2: E-Commerce Quality → Sales Promotion → Impulse Buying Behaviour

For the second hypothesis, which examines the effect of e-commerce quality on impulse buying behavior through sales promotion, the results show a t-statistic of 7.964 and a p-value of 0.000. Since the t-statistic is well above 1.96 and the p-value is below 0.05, this relationship is considered significant and the hypothesis is supported. This result indicates that e-commerce

quality significantly affects impulse buying behavior when mediated by sales promotions. This finding suggests that while a well-designed and high-quality e-commerce platform may not directly lead to impulsive purchases, its impact becomes more pronounced when combined with attractive sales promotions. It supports previous studies that emphasize the role of promotional strategies as a catalyst that leverages the strengths of a quality online shopping environment to drive impulsive buying decisions (Prasetio & Muchnita, 2022). This implies that e-commerce platforms should focus on integrating effective promotional campaigns to enhance the impulsive purchase likelihood among customers.

H3: E-Commerce Quality → Positive e-WOM → Impulse Buying Behaviour

The third hypothesis tests the effect of e-commerce quality on impulse buying behavior through positive electronic word of mouth (e-WOM). The results indicate a t-statistic of 1.633 and a p-value of 0.102, which do not meet the criteria for significance (t-statistic > 1.96 and p-value < 0.05). Therefore, this hypothesis is deemed not significant and rejected. This means that although e-commerce quality may generate positive e-WOM, it does not directly contribute to an increase in impulse buying behavior. This outcome suggests that while positive e-WOM can enhance the reputation and attractiveness of an e-commerce platform, it may not be a strong driver of impulsive purchases. This finding supports previous studies that not found a link between positive customer feedback and impulse buying (Arissaputra et al., 2024), indicating that in this particular context, factors like immediate promotional offers may have a more direct influence on impulsive buying behavior than positive word-of-mouth. It highlights the complexity of consumer behavior and suggests that marketers may need to focus more on immediate incentives to drive impulse purchases rather than relying solely on the indirect benefits of positive reviews.

CONCLUSION

This research investigated the interplay among e-commerce quality, sales promotion, positive e-WOM, and impulse buying behavior. The results indicate that e-commerce quality alone does not have a direct effect on impulse buying behavior; however, its influence becomes notable when channeled through sales promotions, emphasizing the critical role of promotional activities in driving spontaneous purchases. Meanwhile, positive e-WOM contributes to enhancing the overall image of e-commerce platforms but does not serve as a significant mediator in triggering impulse buying behavior, did not show a significant influence on impulse buying in this context. These results underscore the need for e-commerce platforms to strategically combine quality services with effective promotional activities to drive impulsive buying decisions among consumers.

From a theoretical standpoint, this study enriches the understanding of consumer behavior in digital commerce by clarifying that the impact of platform quality is not always straightforward but can be amplified when mediated by promotional strategies. Practically, the findings suggest that e-commerce managers should not only focus on improving platform quality but also ensure that such improvements are coupled with attractive and well-targeted promotions to maximize their effectiveness in stimulating impulse purchases. Future research may explore additional mediating or moderating factors, such as consumer emotions, trust, or personal shopping traits, to provide deeper insights into the mechanisms that drive impulsive buying behavior in online environments.

REFERENCES

- Aghdaie, S. F. A., Ansari, A., & Telgerdi, J. (2022). Analysing the impact of gamification dynamics and e-WOM on impulsive buying. *International Journal of Procurement Management*, 15(1), 40–61.
- Anindita, R., & Perdana, D. P. (2022). Website Aesthetic in Millennial's Customer Experience on Satisfaction and Impulse Buying: EWOM as Moderator. *Media Ekonomi Dan Manajemen*, 37(2), 210–225.
- Arissaputra, R., Sultan, M. A., Hurriyati, R., Gaffar, V., Asmara, M. A., & Sentika, S. (2024). Positive vs. Negative E-WOM: Understanding the More Significant Role in Mediating E-Commerce Quality on Online Impulse Buying. *Jurnal Aplikasi Manajemen*, 22(2), 444–458.
- Aslam, E., Ashraf, M. S., & Iqbal, A. (2023). Impact of corporate image on customer loyalty of Islamic banks: the role of religiosity, collectivism, sight cues and CSR. *Journal of Islamic Marketing*, 14(5), 1310–1324. <https://doi.org/10.1108/JIMA-09-2021-0314>
- Babić Rosario, A., De Valck, K., & Sotgiu, F. (2020). Conceptualizing the electronic word-of-mouth process: What we know and need to know about eWOM creation, exposure, and evaluation. *Journal of the Academy of Marketing Science*, 48, 422–448.
- Chandrasekhar, K., Das, S., Gupta, N., & Jena, S. K. (2024). *Comparative analysis of impulse buying behaviour across retail channels: a study of physical stores, e-commerce websites and mobile shopping apps*.
- Czinkota, M. R., Kotabe, M., Vrontis, D., & Shams, S. M. R. (2021). Direct marketing, sales promotion, and public relations. In *Marketing Management: Past, Present and Future* (pp. 607–647). Springer.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) using R: A workbook*. Springer Nature.
- Hayu, R., Surachman, S., Rofiq, A., & Rahayu, M. (2020). The effect of website quality and government regulations on online impulse buying behavior. *Management Science Letters*, 10(5), 961–968.
- Huang, S.-C., Silalahi, A. D. K., Eunike, I. J., & Riantama, D. (2024). Understanding impulse buying in E-commerce: The Big Five traits perspective and moderating effect of time pressure and emotions. *Telematics and Informatics Reports*, 15, 100157.
- Ikenga, U. G., & Egbule, C. N. (2024). Strategic model for effective digital entrepreneurship for small business. In *New Strategy Models in Digital Entrepreneurship* (pp. 53–70). IGI Global.
- Iyer, G. R., Blut, M., Xiao, S. H., & Grewal, D. (2020). Impulse buying: a meta-analytic review. *Journal of the Academy of Marketing Science*, 48(3), 384–404.
- Kacprzak, A., & Hensel, P. (2023). Exploring online customer experience: A systematic literature review and research agenda. *International Journal of Consumer Studies*, 47(6), 2583–2608.
- Kathuria, A., & Bakshi, A. (2024a). Influence of promotional factors on online impulse buying: Exploring the mediating role of impulse buying tendency. *Current Psychology*, 43(44), 34035–34051.
- Kathuria, A., & Bakshi, A. (2024b). Influence of website quality on online impulse buying behaviour: a systematic review of literature. *Marketing Intelligence & Planning*.
- Khrais, L. T., & Gabori, D. (2023). The effects of social media digital channels on marketing and expanding the industry of e-commerce within digital world. *Periodicals of Engineering and Natural Sciences*, 11(5), 64–75.
- Kinda, M. T. (2019). *E-commerce as a Potential New Engine for Growth in Asia*. International

Monetary Fund.

- Li, S., Zhu, B., & Yu, Z. (2024). The impact of cue-interaction stimulation on impulse buying intention on virtual reality tourism E-commerce platforms. *Journal of Travel Research*, 63(5), 1256–1279.
- Luo, H., Cheng, S., Zhou, W., Song, W., Yu, S., & Lin, X. (2021). Research on the impact of online promotions on consumers' impulsive online shopping intentions. *Journal of Theoretical and Applied Electronic Commerce Research*, 16(6), 2386–2404.
- Prasetio, A., & Muchnita, A. (2022). The Role Website Quality, Credit Card, Sales Promotion On Online Impulse Buying Behavior. *Jurnal Manajemen*, 26(3), 424–448.
- Wang, L., Zhang, G., & Jiang, D. (2024). Encountering Product Information: How Flashes of Insight Improve Your Decisions on E-Commerce Platforms. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(3), 2180–2197.
- Zamfir, M. D. (2024). Scarcity Effect and Consumer Decision Biases: How Urgency Influences the Perceived Value of Products. *Journal of World Economy*, 3(4), 27–34.