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The Influence of Word-of-mouth Advertising and Technological Innovations on The Customer Experience in E-Commerce.

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ABSTRACT

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Customer Experience E-Commerce Technological Innovations Word-of-mouth Advertising E-commerce has replaced traditional retail, offering corporations financial savings and giving customers a streamlined experience enhanced by user-friendliness, customization, prompt customer support, and transaction security. Favorable consumer experiences facilitate word-of-mouth (WOM) promotion, which impacts purchasing choices and strengthens brand loyalty. Integrating advanced technologies, like artificial intelligence-powered customization and streamlined mobile applications, enhances consumer experiences, promotes brand loyalty, and facilitates efficient interactions. This research aims to examine the relationship between word-of-mouth advertising, technical innovation, and consumer experience in electronic commerce. The quantitative study methodology included a sample size of 120 individuals from the Greater Jakarta area, with data analysis conducted using SPSS. The findings demonstrate substantial beneficial effects of word-of-mouth (WOM) and technology innovation on consumer experience. The results indicate that e-commerce enterprises should allocate resources towards cutting-edge technology and promote good word-of-mouth to improve consumer experiences and sustain competition. Subsequent investigations should investigate supplementary variables such as service quality, customization, and the omnichannel experience.

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1. INTRODUCTION

By 2024, Indonesia's e-commerce industry will have significant growth. Indonesia's digital economy is projected to reach a valuation of \$110 billion by 2025, mostly driven by the development of the e-commerce sector. Indonesia's e-commerce sector will grow by 15.5% in 2024, reaching a total worth of IDR 661.9 trillion (\$43.4 billion). (Anggraeni, 2024). The expansion is propelled by the surge in internet and smartphone use, the upward trend in family earnings, and the availability of reliable online payment alternatives.

Major e-commerce businesses like Tokopedia, Shopee, Bukalapak, and Lazada often organize extensive marketing campaigns and promotions, such as Harbolnas (National Online Shopping Day) and the 11.11 and 12.12 shopping festivals (Hui Shan Tan, 2023). It stimulates customers' interest in online buying. E-commerce refers to using electronic platforms, such as computer networks and the Internet, to conduct sales, market, and purchase items and services. E-commerce, often known as electronic commerce, has supplanted traditional retail storefronts and

offline merchants as intermediaries for conducting transactions and engaging with customers (R. K. Singh, 2019). E-commerce may save prices or expenditures for companies since it eliminates the need (S. N. Singh, 2016).

Customer experience refers to the general view and impression consumers develop about a business or brand due to their interactions throughout the customer journey (Stein & Ramaseshan, 2016). It encompasses all points of contact between consumers and enterprises, ranging from the first recognition of the brand to the provision of post-sales support. There is a strong correlation between e-commerce and consumer experience. The good purchasing experience is enhanced by the ease of use, ability to customize, prompt customer support, and high level of transaction security. Prompt delivery and online tracking enhance client contentment (Safa & Von Solms, 2016). Utilizing many channels for interactions guarantees the uniformity of the purchasing experience while implementing unique promos that strengthen customer engagement. Customer input obtained via surveys and reviews facilitates ongoing improvement. (Chen et al., 2020). These components in e-commerce enhance the consumer experience, increasing customer retention, happiness, and loyalty.

Word-of-mouth (WOM) advertising and customer experience are closely interconnected. Favorable customer experiences elicit word-of-mouth (WOM) since customers communicate their positive experiences with others (Siqueira et al., 2019). Testimonials from contented consumers are deemed more trustworthy and have the potential to influence buying choices. Businesses may use word-of-mouth feedback to enhance client experience (Filieri et al., 2015). Conversely, a positive customer experience enhances a company's standing and increases word-of-mouth impact, particularly via social media. Hence, an ideal customer experience impacts customer happiness and affects the efficacy of Word-of-Mouth (WOM) advertising in fostering brand loyalty and recruiting new consumers.

Technological innovations include creating and using novel or greatly enhanced technologies that result in progress across diverse domains (Silvestre & Ţîrcă, 2019). These innovations often include the development of novel goods, procedures, or services that use technology to address current issues, enhance productivity, or provide new prospects. (Kahn, 2018). They might vary from little, gradual enhancements to innovative creations that completely transform industries and societal norms.

Technological advancements significantly improve customer experience by offering enhanced products and services, increasing convenience through efficient processes such as mobile apps and Al-driven personalization, enabling instant communication and feedback loops, fostering stronger brand loyalty through positive interactions, and continuously adapting to meet customer needs (Hoyer et al., 2020). These advancements ensure businesses can effectively meet changing needs, creating seamless, personalized, and engaging experiences that improve customer satisfaction and loyalty across various industries (Alzoubi et al., 2022). Nevertheless, the issue resides in the possible obstacles or hazards of adopting novel technology to enhance customer experience. Examples of potential challenges include the significant expenses associated with implementation, the reluctance of users to adapt to new systems, and concerns over the protection and confidentiality of data while using emerging technology.

This study investigates the correlation between word-of-mouth advertising and technical advancement in customer experience in electronic commerce. WOM Advertising enhances consumers' optimistic perceptions of items and services, bolstering trust and improving the online purchasing experience. Technological advancements, such as personalized features and improved navigation, also enhance consumer engagement and happiness. An in-depth comprehension of these connections enables e-commerce enterprises to execute appropriate tactics for enhancing consumer experience and sustaining a competitive edge in the current cutthroat digital marketplace.

2. RESEARCH METHOD

The methodology used is a quantitative approach. Quantitative research methods are systematic and empirical studies that rely on numerical data and statistical techniques to evaluate phenomena. These approaches are distinguished by their focus on quantifying variables, assessing correlations, and extrapolating findings from a sample to a population (Ahmad et al., 2019). The study lasted around two months, from March to April 2024. The sampling methodology employs a random sample method. The participants in this study consisted of 120 consumers who engage in electronic commerce in the Greater Jakarta area. This study investigation utilizes the assistance of the SPSS

program. Research Hypothesis: H1 Word-of-mouth (WOM) Advertising (X1) greatly influences the Customer Experience (Y). Technological Innovation (X2) substantially impacts the Customer Experience (Y).

3. RESULTS AND DISCUSSION

The validity test shows to what extent the accuracy and correctness of a measurement instrument in performing its measurement function (Sekaran & Bougie, 2016). The approach involves connecting the scores for each question item with the overall score of the variable. Validity tests were performed with the help of a computer using the SPSS program for Windows version 26. In this study, the validity tests of all variables met the validity. After the validity test, the reliability test is performed to determine the consistency of the measurement results when two or more measurements of the same symptoms are made with the same measurement instrument. The results are indicated by an index that shows how reliable or trustworthy the measurement instrument is.

To test the reliability of this research instrument, Cronbach Alpha (Sekaran & Bougie, 2016). In this case, the instrument is reliable if the alpha coefficient is 0.6. Respondents answered the questions consistently or not so that the sincerity of the answers could be trusted. The reliability tests were carried out with the help of a computer using the SPSS program for Windows version 26. The data processing results are the following: customer experience 0.880; word-of-mouth (WOM) advertising variable 0.722; Technological Innovation variable 0.856.

Table 1. Regression analysis test

Hipotesis	Variable	Sig	t count	Regression coefficient	Remark
H1	X1 to Y	0,004	2,897	0,212	Significant
H2	X2 to Y	0,000	7,757	0,568	Significant

Constanta = 8.060Adjusted R² = 0,453F count = 48,400Sig = 0,000

Based on Table 1. Multiple regression analysis was used to see an influence between the independent and dependent variables. From the results of the hypothesis and the variable H1 (X1 to Y), The first hypothesis tests the influence of the independent variable X1 on the dependent variable Y. H2 (X2 to Y): The second hypothesis tests the influence of the independent variable Sig = 0.004 This value indicates that the relationship between X1 and Y is statistically significant at the 0.05 (5%) significance level. Because 0.004 < 0.05, we reject the null hypothesis that there is no influence of X1 on Y. H2: Sig = 0.000. This value indicates that the relationship between X2 and Y is also very significant from a statistical point of view. Because 0.000 < 0.05, the null hypothesis is rejected, indicating a substantial influence of strong influence to reject the null hypothesis at the 0.05 significance level. H2: t-count = 7.757 This t-count value is much larger, indicating that X2 has a stronger influence on Y than X1.

Based on the regression coefficient H1: Coefficient = 0.212, This coefficient shows that each one-unit increase in X1 will increase Y by 0.212 units if other factors are held constant. H2: Coefficient = 0.568 This coefficient shows that each one-unit increase in X2 will increase Y by 0.568 units if other factors are held constant. Based on adjusted $R^2 = 0.453$, this value indicates that 45.3% of the variance in the dependent variable Y can be explained by the independent variables X1 and X2. The adjusted R^2 considers the number of variables in the model and adjusts for the sample size, thus providing a more realistic picture of the robustness of the regression model. Based on the F-count and model significance (F-test), F-count = 48,400. The F-count value shows the overall importance of the regression model. A high value like this indicates that the overall regression model is significant. Sig (F test) = 0.000 This value shows that the overall regression model is highly significant (p < 0.05), so this model is suitable for predicting the dependent variable Y based on the independent variables X1 and X2. Based on constant = 8.060, The constant or intercept value shows the value of Y when X1 and X2 are equal to zero. It is the regression intercept on the Y-axis.

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DISCUSSION

Here are some managerial implications that can be considered: Focus on technological innovations; because technological innovations have a greater influence on customer experience, companies should continue to invest in technological innovation to improve customer experience. It may include developing mobile apps, using artificial intelligence technology for personalization, or implementing new technologies that enhance customer convenience and interaction. Although the influence of word-of-mouth (WOM) advertising is minor compared to technological innovations, WOM advertising is still significant. Companies should encourage and facilitate positive WOM through customer loyalty programs, online reviews, and marketing strategies encouraging customers to share their positive experiences. Integrated marketing strategy by combining WOM advertising strategies with technological innovation can provide more optimal results. For example, social media can foster WOM, while digital platforms can be used to increase customer engagement.

4. CONCLUSION

This research reveals that word-of-mouth (WOM) advertising and technological innovations significantly influence customer experience. The regression results show that these two independent variables contribute positively to improving the customer experience, with Technological Innovations having a stronger influence than WOM Advertising. Overall, this regression model explained 45.3% of the variance in customer experience, indicating that other factors also influence customer experience. Future research could investigate other factors such as service quality, price, personalization, and omnichannel experience to provide a more complete picture of the determinants of customer experience. Additionally, longitudinal studies that track changes in customer experience over time can provide deeper insight into how advertising and technological innovations impact WOM in the long term. Mediation and moderation analysis: Additional research could explore the role of mediators and moderators, such as customer satisfaction or loyalty, in the relationship between WOM advertising, technological innovations, and customer experience. A limitation of this research may not be that it can be generalized to all contexts or industries because the sample used may be limited to certain sectors or locations. Apart from that, this regression model only considers two independent variables (WOM Advertising and Technological Innovations). Many other factors that influence customer experience are probably not included in this model. The results of this research suggest that companies should invest in innovative technologies to improve customer experiences, including the development of mobile applications, the use of artificial intelligence (AI) for personalization, and the application of augmented reality (AR) or virtual reality (VR) for immersive experiences. Additionally, businesses should encourage positive word of mouth by inviting customers to share their good experiences through online reviews, testimonials, and social media. Loyalty programs and incentives can be offered to customers who refer friends or family, thus increasing the reach and reputation of the company.

REFERENCES

- Ahmad, S., Wasim, S., Irfan, S., Gogoi, S., Srivastava, A., & Farheen, Z. (2019). Qualitative v/s. Quantitative Research- A Summarized Review. *Journal of Evidence-Based Medicine and Healthcare*, *6*(43). https://doi.org/10.18410/jebmh/2019/587
- Alzoubi, H., Alshurideh, M., Kurdi, B. Al, Akour, I., & Aziz, R. (2022). Does BLE technology contribute towards improving marketing strategies, customer satisfaction, and loyalty? The role of open innovation. *International Journal of Data and Network Science*, 6(2). https://doi.org/10.5267/j.ijdns.2021.12.009
- Anggraeni, S. (2024, February). *E-commerce Growth, Digital Business Expectations for 2024, and Related Issues.* Https://Www.Moores-Rowland.Com/.
- Chen, J. S., Tsou, H. T., Chou, C. Y., & Ciou, C. H. (2020). Effect of multichannel service delivery quality on customers' continued engagement intention: A customer experience perspective. Asia Pacific Journal of Marketing and Logistics, 32(2). https://doi.org/10.1108/APJML-12-2018-0508
- Filieri, R., Alguezaui, S., & McLeay, F. (2015). Why do travelers trust TripAdvisor? Antecedents of trust towards consumer-generated media and its influence on recommendation adoption and word of mouth. *Tourism Management*, *51*. https://doi.org/10.1016/j.tourman.2015.05.007
- Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the Customer Experience Through New Technologies. *Journal of Interactive Marketing*, *51*. https://doi.org/10.1016/j.intmar.2020.04.001
- Hui Shan Tan. (2023). Overview of Indonesia's Online Consumer Behaviour in Q4.
- Kahn, K. B. (2018). Understanding innovation. *Business Horizons*, *61*(3). https://doi.org/10.1016/j.bushor.2018.01.011

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Safa, N. S., & Von Solms, R. (2016). Customers repurchase intention formation in e-commerce. SA Journal of Information Management, 18(1). https://doi.org/10.4102/sajim.v18i1.712

- Sekaran, U., & Bougie, R. J. (2016). Research Methods For Business: A Skill Building Approach Seventh Edition WileyPLUS Learning Space Card. In *Internation Labour Office*. https://doi.org/10.13140/RG.2.1.1419.3126
- Silvestre, B. S., & Ţîrcă, D. M. (2019). Innovations for sustainable development: Moving toward a sustainable future. In *Journal of Cleaner Production* (Vol. 208). https://doi.org/10.1016/j.jclepro.2018.09.244
- Singh, R. K. (2019). E-Commerce in India: Opportunities and Challenges. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3315048
- Singh, S. N. (2016). E-commerce: Role of E-commerce in Today's Business. *Computing Trendz The Journal of Emerging Trends in Information Technology*, *6*(1). https://doi.org/10.21844/cttjetit.v6i1.6699
- Siqueira, J. R., Peña, N. G., ter Horst, E., & Molina, G. (2019). Spreading the Word: How Customer Experience in a Traditional Retail Setting Influences Consumer Traditional and Electronic Word-of-mouth Intention. *Electronic Commerce Research and Applications*, *37*. https://doi.org/10.1016/j.elerap.2019.100870
- Stein, A., & Ramaseshan, B. (2016). Towards the identification of customer experience touch point elements. *Journal of Retailing and Consumer Services*, 30. https://doi.org/10.1016/j.jretconser.2015.12.001