# The Influence of Information Quality, Information Quantity and Information Credibility, On Purchase Intention Through Information Usefulness As A Mediating Variable

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***Abstract.***
*The rapid growth of social media, particularly TikTok, has transformed the way consumers obtain information about cosmetic products before making purchasing decisions. This phenomenon highlights information quality, information quantity, and information credibility as key factors influencing consumers' purchase intention through their perceived information usefulness. This study aims to examine the effects of Information Quality, Information Quantity, and Information Credibility on Purchase Intention, with Information Usefulness serving as a mediating variable, in the context of OMG (Oh My Glam) cosmetic products on TikTok. Data were collected through Google Forms and analyzed using the SEM-PLS method with the assistance of SmartPLS 4. The sample consisted of 200 respondents who were Universitas Esa Unggul students, users of OMG cosmetic products, and active TikTok users. The results indicate that Information Quality, Information Quantity, and Information Credibility have positive and significant effects on both Information Usefulness and Purchase Intention. Furthermore, Information Usefulness has a positive and significant effect on Purchase Intention and is proven to mediate the effects of Information Quality, Information Quantity, and Information Credibility on Purchase Intention. This study contributes by providing insights for OMG Cosmetics to improve the quality, quantity, and credibility of information presented in social media content, particularly on TikTok, so that the information received by consumers becomes more useful and is able to enhance purchase intention. It is recommended that continuously improve the quality, quantity, and credibility of the information disseminated through social media so that consumers perceive the information as more useful, to increasing their purchase intention.*

***Keywords:*** *information credibility, information quality, information quantity, information usefulness and purchase intention.*

## I. INTRODUCTION

The Indonesian cosmetic industry has experienced significant growth in recent years. According to the Indonesian National Agency of Drug and Food Control (BPOM), the number of cosmetic manufacturers reached approximately 1,500 companies by the end of 2025. At the same time, social media, particularly TikTok, has become one of the primary sources of product information before consumers make purchasing decisions. Indonesia is the largest TikTok market worldwide, with approximately 194.37 million users in 2025 (Dataloka.id, 2025). This development indicates that consumers, particularly female university students, increasingly rely on social media to obtain information and evaluate cosmetic products before purchasing, particularly to assess their quality and suitability [1].

Thus, TikTok has evolved beyond an entertainment platform into an important channel for product information, reviews, recommendations, and promotional content. The rapid flow of information available on the platform, however, requires consumers to be selective in determining which information is relevant and useful for their decision-making process [2]. In this context, the characteristics of information available on TikTok, particularly its quality, quantity, and credibility, are important considerations for consumers when evaluating the usefulness of product-related information and forming purchase intentions [3], [4], [5].

The usefulness of information is closely related to the characteristics of the information received by consumers. Accurate, relevant, clear, and comprehensible information can help consumers evaluate product attributes and reduce uncertainty, thereby increasing perceived information usefulness [6], [7]. Likewise, a greater amount of information can provide consumers with broader references through reviews, recommendations, and user experiences [8]. However, excessive information may result in information overload, making it more difficult for consumers to process available information and potentially reducing the effectiveness of their decision-making [9], [10].

In addition, the credibility of information is essential because consumers are more likely to rely on

information from sources perceived as honest, knowledgeable, experienced, and reputable [11]. Previous studies have demonstrated that information quality, information quantity, and information credibility positively influence information usefulness [2], [12], [13], while information usefulness has been found to significantly enhance purchase intention [14], [15], [16]. These findings suggest that consumers' purchase intentions may depend not only on the availability of information but also on how useful and reliable they perceive that information to be. Despite the growing body of research on these relationships, several research gaps remain. [3] employed the Information Adoption Model (IAM) originally proposed by [17] to examine information quality, information quantity, information credibility, information usefulness, and information adoption. Although their findings demonstrated positive relationships among these variables, information usefulness was positioned as an antecedent of information adoption rather than being examined as a direct determinant of purchase intention.

Furthermore, previous studies have generally examined these information characteristics separately or in different research contexts, while limited research has simultaneously investigated the effects of information quality, information quantity, and information credibility on purchase intention through information usefulness. In addition, findings regarding the role of information quantity remain inconclusive. Although a greater amount of information may provide consumers with broader references, excessive information can lead to information overload, making it more difficult for consumers to process available information and potentially reducing the effectiveness of the decision-making process [9], [18], [19]. These gaps indicate the need for further investigation into how different information characteristics contribute to information usefulness and subsequently influence purchase intention, particularly in the context of Indonesia's local cosmetic industry. Based on these research gaps, this study extends the model proposed by [3] while maintaining the Information Adoption Model (IAM) as its theoretical foundation. Specifically, this study examines the effects of information quality, information quantity, and information credibility on purchase intention through information usefulness as a mediating variable.

The study focuses on consumers of the Indonesian local cosmetic brand OMG (Oh My Glam) who obtain product information through TikTok. The findings are expected to contribute to the literature on digital consumer behavior by providing a more comprehensive understanding of how information characteristics shape consumers' perceptions of information usefulness and, ultimately, their purchase intention. In addition, the findings may provide practical insights for cosmetic companies in developing more effective social media marketing strategies.

## II. METHODS

This study employed a quantitative approach with a causal research design to examine the effects of Information Quality, Information Quantity, Information Credibility, and Information Usefulness on Purchase Intention toward OMG (Oh My Glam) cosmetic products. Data were collected through an online survey using a Google Forms questionnaire. All variables were measured using a five-point Likert scale, where 1 represented strongly disagree and 5 represented strongly agree. Before completing the questionnaire, respondents received information about the research objectives and were invited to participate voluntarily. The study population comprised students of Universitas Esa Unggul. The sampling technique employed was purposive sampling, with respondents selected based on the criteria of being Universitas Esa Unggul students who use OMG (Oh My Glam) cosmetic products and actively use social media, particularly TikTok.

The minimum sample size was determined based on the recommendation of [20], which suggests a minimum of ten times the number of indicators. Since the study employed 20 indicators, the minimum required sample size was 200 respondents. Data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS 4 software. The analysis began with data screening to ensure the completeness of responses and compliance with the sampling criteria [21]. State that *Partial Least Squares Structural Equation Modeling (PLS-SEM)* is used to estimate the relationships between latent constructs through two main components: the *outer model* (measurement model) and the *inner model* (structural model).

The measurement model (outer model) was evaluated using convergent validity through outer loadings

(>0.70) and Average Variance Extracted (AVE >0.50), discriminant validity using the Heterotrait - Monotrait Ratio (HTMT <0.90), and construct reliability using Composite Reliability and Cronbach's Alp*ha* (>0.70). The structural model (inner model) was subsequently assessed using the R-square ($R^2$) value to evaluate the model's explanatory power, where values of 0.75, 0.50, and 0.25 indicate substantial, moderate, and weak explanatory power, respectively. Hypothesis testing was performed using the bootstrapping procedure based on path coefficients, t-statistics, and p-values. A hypothesis was considered supported when the t-statistic exceeded 1.96 and the p-value was below 0.05 at the 5% significance level.

## III. RESULT AND DISCUSSION

The survey results indicate that this study obtained 200 valid responses from a total population of 16,380 active students at Esa Unggul University during the 2025/2026 academic year, representing approximately 1.22% of the population. All respondents (100%) satisfied the predefined screening criteria, namely being active Esa Unggul University students, having and actively using a TikTok account, having used OMG (Oh My Glam) cosmetic products, and having viewed or obtained information about OMG cosmetic products through TikTok.

Based on the demographic characteristics, the majority of respondents were female, accounting for 80.5% (161), while males accounted for 19.5% (39). In terms of age, most respondents were between 17 and 24 years old, accounting for 84% (168), followed by those aged 25–30 years at 11% (22) and those aged 31–35 years at 5% (10).

Based on campus location, the majority of respondents were from Esa Unggul University, Jakarta Campus, accounting for 60.5% (121), followed by Esa Unggul University, Tangerang Campus at 22% (44) and Esa Unggul University, Bekasi Campus at 17.5% (35).

In terms of faculty, the largest proportion of respondents came from the Faculty of Economics and Business 22.5% (45), followed by the Faculty of Health Sciences 14% (28), the Faculty of Law 13.5% (27), the Faculty of Engineering 12% (24), the Faculty of Communication Science and the Faculty of Psychology 9.5% (19 each), the Faculty of Design and Creative Industries 5.5% (11), the Faculty of Computer Science 5% (10), the Faculty of Physiotherapy 4.5% (9), and the Faculty of Teacher Training and Education 4% (8).

Furthermore, the convergent validity and reliability analysis indicates that all constructs meet the recommended measurement criteria. All indicators demonstrate adequate factor loadings, while the Average Variance Extracted (AVE) and Composite Reliability (CR) values exceed the recommended thresholds. These findings confirm that each construct has achieved satisfactory convergent validity and reliability. Therefore, all constructs are considered valid and reliable and are suitable for inclusion in the structural model analysis.

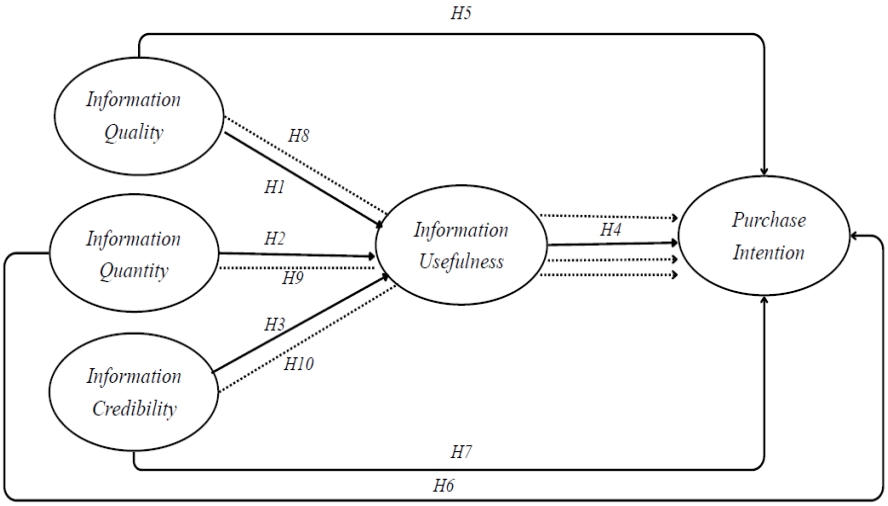



**Fig 1.** Model Modification

| Variable | Item | Loadings | Average Variance Extracted | Composite Reliability |
|---|---|---|---|---|
| Information Quality | IQ 1 | 0.941 | 0.862 | 0.961 |
| | IQ 2 | 0.934 | | |
| | IQ 3 | 0.919 | | |
| | IQ4 | 0.920 | | |
| Information Quantity | IQn 1 | 0.943 | 0.857 | 0.960 |
| | IQn 2 | 0.928 | | |
| | IQn 3 | 0.899 | | |
| | IQn 4 | 0.932 | | |
| Information Credibility | IC 1 | 0.940 | 0.858 | 0.960 |
| | IC 2 | 0.930 | | |
| | IC 3 | 0.920 | | |
| | IC 4 | 0.914 | | |
| Information Usefulness | IU 1 | 0.945 | 0.886 | 0.969 |
| | IU 2 | 0.950 | | |
| | IU 3 | 0.934 | | |
| | IU 4 | 0.934 | | |
| Purchase Intention | PI 1 | 0.930 | 0.851 | 0.958 |
| | PI 2 | 0.928 | | |
| | PI 3 | 0.933 | | |
| | PI 4 | 0.899 | | |

**Table 2.** Results of Measurement Model Evaluation

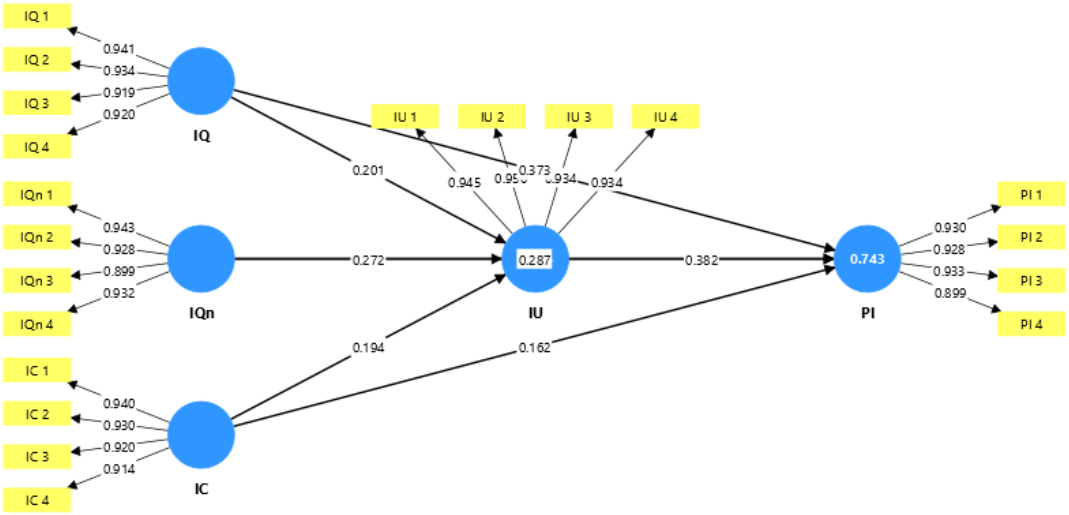



**Fig 3.** Path Diagram

The path diagram analysis produced an R-squared value of 0.287 for the Information Usefulness (IU) variable. This indicates that the combination of Information Quality (IQ), Information Quantity (IQn), and Information Credibility (IC) explains 28.7% of the variation in Information Usefulness, while the remaining 71.3% is influenced by factors outside the proposed research model.

Meanwhile, the Purchase Intention (PI) variable obtained an R-squared value of 0.743, indicating that 74.3% of the variation in Purchase Intention is explained by Information Quality (IQ), Information Quantity (IQn), Information Credibility (IC), and Information Usefulness (IU), whereas the remaining 25.7% is explained by other variables not included in this study.

Based on the path diagram, all relationships among the variables indicate positive effects. In the hypothesis testing stage, a hypothesis is considered accepted if the T-statistic is greater than 1.96 and the p-value is less than 0.05.

The results of the study indicate that all hypotheses are significantly accepted, as each relationship has a p-value below 0.05 and a T-statistic greater than 1.96. However, the magnitude of the relationships varies across the proposed hypotheses.

The relationship between Information Quantity and Purchase Intention represents the strongest path,

with a T-statistic of 7.568, indicating that a greater amount of information encourages higher consumer purchase intention. In contrast, the indirect effect of Information Quality on Purchase Intention through Information Usefulness is the weakest relationship, with a T-statistic of 2.114.

This finding suggests that although information quality enhances purchase intention through perceived information usefulness, the mediating effect is relatively weaker than the other relationships included in the research model.

| Hypothesis | Hypothesis Statement | P-Value | T-Statistic | Description | Conclusion |
|---|---|---|---|---|---|
| H1 | The Effect of Information Quality on Information Usefulness | 0.024 | 2.261 | The data support the hypothesis | Accepted |
| H2 | The Effect of Information Quantity on Information Usefulness | 0.001 | 3.298 | The data support the hypothesis | Accepted |
| H3 | The Effect of Information Credibility on Information Usefulness | 0.023 | 2.270 | The data support the hypothesis | Accepted |
| H4 | The Effect of Information Quality on Purchase Intention | 0.000 | 7.308 | The data support the hypothesis | Accepted |
| H5 | The Effect of Information Quantity on Purchase Intention | 0.000 | 7.568 | The data support the hypothesis | Accepted |
| H6 | The Effect of Information Credibility on Purchase Intention | 0.000 | 5.486 | The data support the hypothesis | Accepted |
| H7 | The Effect of Information Usefulness on Purchase Intention | 0.000 | 3.520 | The data support the hypothesis | Accepted |
| H8 | The Effect of Information Quality on Purchase Intention through Information Usefulness as a Mediating Variable | 0.035 | 2.114 | The data support the hypothesis | Accepted |
| H9 | The Effect of Information Quantity on Purchase Intention through Information Usefulness as a Mediating Variable | 0.002 | 3.063 | The data support the hypothesis | Accepted |
| H10 | The Effect of Information Credibility on Purchase Intention through Information Usefulness as a Mediating Variable | 0.032 | 2.149 | The data support the hypothesis | Accepted |

**Table 4.** Research Model Hypothesis Testing

| | *R-square* | *R-square adjusted* |
|---|---|---|
| **IU** | 0.236 | 0.224 |
| **PI** | 0.743 | 0.738 |

**Table 5.** R-Square

Based on the R-square test results, the R-square value for Information Usefulness (IU) is 0.236 with an adjusted R-square value of 0.224. This indicates that Information Quality, Information Quantity, and Information Credibility jointly explain 23.6% of the variation in Information Usefulness, while the remaining 76.4% is explained by other factors outside the research model. Furthermore, the R-square value for Purchase Intention (PI) is 0.743 with an adjusted R-square value of 0.738.

This indicates that Information Quality, Information Quantity, Information Credibility, and Information Usefulness together explain 74.3% of the variation in Purchase Intention, while the remaining

25.7% is influenced by other factors outside the research model.

| | IC | IQ | IQn | *IU* | *PI* |
|---|---|---|---|---|---|
| IC | | | | 0.044 | 0.088 |
| IQ | | | | 0.045 | 0.440 |
| IQn | | | | 0.084 | 0.256 |
| IU | | | | | 0.433 |
| PI | | | | | |

**Table 6.** F-Square

Based on the f-square test results, Information Quality on Purchase Intention has the highest value of 0.440 (strong category), indicating that Information Quality is the most dominant factor influencing Purchase Intention. Information Usefulness on Purchase Intention has a value of 0.433 (strong category), showing that Information Usefulness also has a strong influence on Purchase Intention. Meanwhile, Information Quantity on Purchase Intention obtained a value of 0.256 (moderate category), indicating that Information Quantity has a moderate effect on Purchase Intention.

In contrast, Information Quantity on Information Usefulness has a value of 0.084, Information Credibility on Purchase Intention has a value of 0.088, Information Quality on Information Usefulness has a value of 0.045, and Information Credibility on Information Usefulness has a value of 0.044 (weak category). These findings indicate that although these relationships contribute to the endogenous variables, their effects are relatively weaker than the effects of Information Quality and Information Usefulness on Purchase Intention.

## IV. CONCLUSION

Related to the results of the data analysis and previous discussion, this study concludes that Information Quality, Information Quantity, and Information Credibility each have a significant positive effect on Information Usefulness and Purchase Intention among consumers of OMG (Oh My Glam) cosmetic products who obtain product information through TikTok. Based on the PLS-SEM analysis of 200 respondents, Information Quantity has the strongest effect on Information Usefulness, indicating that the availability of more product-related information can enhance consumers' perceptions of its usefulness.
Furthermore, Information Usefulness has a significant positive effect on Purchase Intention and represents the strongest factor in increasing consumers' purchase intention, suggesting that consumers are more likely to intend to purchase when they perceive product information as useful in evaluating and understanding the product.

This study also confirms that Information Usefulness significantly mediates the relationships between Information Quality, Information Quantity, and Information Credibility and Purchase Intention. Although these indirect effects are significant, the direct effects of the three information characteristics on Purchase Intention are stronger than their corresponding indirect effects. Thus, Information Usefulness serves as an important mediating mechanism that contributes to the formation of consumers' Purchase Intention, while the direct effects of Information Quality, Information Quantity, and Information Credibility remain stronger pathways.

Overall, these findings extend the Information Adoption Model (IAM) by demonstrating the role of Information Usefulness as a mechanism through which information characteristics contribute to consumers' Purchase Intention toward OMG (Oh My Glam) cosmetic products on TikTok.

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## REFERENCES

[1] Sumaryanto, W. Erni, and S. Nani, "Pengaruh Harga, Kualitas Produk Dan Citra Merek Terhadap Keputusan Pembelian Produk Kosmetik Wardah," *Jurnal* ***Manajemen, Bisnis, dan Pendidikan***, vol. 9, no. 1, pp. 93–110, 2022, [Online]. Available: https://e-journal.stie-aub.ac.id/index.php/excellent

[2] T. Thuy *et al.*, "The impact of eWOM information in social media on the online purchase intention of Generation Z The impact of eWOM information in social media on the online," Cogent Business & Management, vol. 11, no. 1, p., 2024, doi: 10.1080/23311975.2024.2316933.

[3] Indrawati, P. C. Putri Yones, and S. Muthaiyah, "eWOM via the TikTok application and its influence on the purchase intention of somethinc products," Asia Pacific Management Review, vol. 28, no. 2, pp. 174–184, 2023, doi: 10.1016/j.apmrv.2022.07.007.

[4] A. Sanam, S. Shahid, S. M. Nawaz, and A. Lakho, "***Journal of Management & Social Science Journal of Management & Social Science*** https://rjmss.com/index.php/7/about [The Role of Information Quality, Quantity, Credibility, Usefulness, and Adoption in Shaping Purchase Intention: Insights from Social Media Marketing on Tiktok and Instagram] Area of Publication: Business, Management and Accounting (miscellaneous) Review Type: Double Blind Peer Review," ***Journal of Management & Social Science***, vol. 1, no. 4, 2024, [Online]. Available: https://rjmss.com/index.php/7/about

[5] C. Luo, N. A. M. Hasan, A. M. Zamri bin Ahmad, and G. Lei, "Influence of short video content on consumers' purchase intentions on social media platforms with trust as a mediator," Sci. Rep., vol. 15, no. 1, Dec. 2025, doi: 10.1038/s41598-025-94994-z.

[6] E. Kohler and E. Mogaji, "Save the Trip to the Store : Sustainable Shopping, Electronic Word of Mouth on Instagram and the Impact on Cosmetic Purchase Intentions," Sustainability (Switzerland), 2023, doi: https://doi.org/10.3390/su15108036.

[7] P. H. Silaban, W. Chen, S. Sormin, Y. N. B, P. Panjaitan, and A. D. K. Silalahi, "How does electronic word of mouth on Instagram affect travel behaviour in Indonesia : A perspective of the information adoption model How does electronic word of mouth on Instagram affect travel behaviour in Indonesia : A perspective of the information ad," Cogent Soc. Sci., vol. 9, no. 1, 2023, doi: 10.1080/23311886.2022.2163525.

[8] C. Ngarmwongnoi, "The implications of eWOM adoption on the customer journey," ***Journal of Consumer Marketing, no***. October 2019, 2022, doi: 10.1108/JCM-10-2019-3450.

[9] M. Peng, Z. Xu, and H. Huang, "How Does Information Overload Affect Consumers' Online Decision Process? An Event-Related Potentials Study," Front. Neurosci., vol. 15, Oct. 2021, doi: 10.3389/fnins.2021.695852.

[10] R. Veronita, M. Ariyanti, and R. T. Hidayah, "The Effect Of Electronic Word Of Mouth (E-WOM) on TikTok Application Towards Purchase Intention Mediated By The Variables Of Information Quality, Information Quantity, Information Credibility, And Brand Image On Skintific Products," 2025. doi: https://doi.org/10.46729/ijstm.v6i4.1343.

[11] E. B. Setiawan, S. Wati, A. Wardana, and R. B. Ikhsan, "Building trust through customer satisfaction in the airline industry in Indonesia: Service quality and price fairness contribution," Management Science Letters, vol. 10, no. 5, pp. 1095–1102, 2020, doi: 10.5267/j.msl.2019.10.033.

[12] M. A. Camilleri, C. Troise, and M. Kozak, "Functionality and usability features of ubiquitous mobile technologies : The acceptance of interactive travel apps," ***Journal of Hospitality and Tourism Technology***, no. December, 2022, doi: 10.1108/JHTT-12-2021-0345.

[13] R. Shigi and Y. Seo, "Consumer Acceptance of Genome-Edited Foods in Japan," Sustainability (Switzerland), 2023, doi: https://doi.org/10.3390/su15129662.

[14] N. H. Ayob, M. S. Ramli, N. H. Razali, Z. N. Roslan, and N. Z. Md Juperi, "The Influences Between Social Media Usage toward Online Purchase Intention among Netizens in Malaysia," ***International Journal of Academic Research in Business and Social Sciences***, vol. 14, no. 6, Jun. 2024, doi: 10.6007/ijarbss/v14-i6/21543.

[15] N. Hanna, V. Saqofa, and N. Aini, "Peran Kegunaan Informasi E-WOM Sebagai Variabel Mediasi Antara Anteseden Kegunaan Informasi E-WOM Terhadap Minat Beli Moisturizer Skintific di Shopee," Wacana Ekonomi: ***Jurnal Ekonomi, Bisnis dan Akuntansi***, vol. 24, pp. 50–59, 2025, doi:

https://doi.org/10.22225/we.24.1.2025.50-59.

[16] J. D. Pranata, L. O. Hadiwidjaya, and R. Jokom, "Pengaruh Kualitas, Kuantitas, Kredibilitas pada Kegunaan Informasi dan Minat Beli Follower Tiktok," ***Jurnal Manajemen Perhotelan***, vol. 10, no. 2, pp. 67–80, 2024, doi: https://doi.org/10.9744/jmp.10.2.67-80.

[17] S. W. Sussman and W. S. Siegal, "Approach to Knowledge Adoption Informational Influence in Organizations : An Integrated Approach to Knowledge Adoption," Information Systems Research, vol. 14, No.1, no. October 2014, pp. 47–65, 2003, doi: https://doi.org/10.1287/isre.14.1.47.14767.

[18] G. C. Premananto, T. Basuki, S. Hartini, M. Kurniawati, and A. B. A. Rashid, "The Effects of E-WOM, Information Overload, Attitude Towards Online Purchase, and Consumer Psychological Condition on the Intention Towards Online Purchase of Laptop Product," ***Malaysian Journal of Consumer and Family Economics***, vol. 31, pp. 815–833, 2023, doi: 10.60016/majcafe.v31.30.

[19] L. Wang, G. Che, J. Hu, and L. Chen, "Online Review Helpfulness and Information Overload: The Roles of Text, Image, and Video Elements," ***Journal of Theoretical and Applied Electronic Commerce Research***, vol. 19, no. 2, pp. 1243–1266, Jun. 2024, doi: 10.3390/jtaer19020064.

[20] J. F. Hair, G. T. M. Hult, C. M. Ringle, M. Sarstedt, N. P. Danks, and S. Ray, Mediation Analysis. 2021. doi: 10.1007/978-3-030-80519-7_7.

[21] J. Henseler, C. M. Ringle, and M. Sarstedt, "A new criterion for assessing discriminant validity in variance-based structural equation modeling," ***J. Acad. Mark***. Sci., vol. 43, no. 1, pp. 115–135, Jan. 2015, doi: 10.1007/s11747-014-0403-8.