

The Influence of E-Wom on Purchase Decisions is Mediated by The Brand Image of Laptop Products on Consumers in E-Commerce

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Abstract

This study aims to influence of e-wom on purchase decisions is mediated by the brand image of laptop products on consumers in e-commerce. This type of research is quantitative. The purposive sampling method was used in this study. This study uses a type of quantitative data quantitative data is a type of numerical data that can be analyzed with statistics, to prove the hypothesis set. This research uses primary and secondary data sources. Primary data was collected by distributing a questionnaire to online laptop buyers via Google Form that included factors such as their purchase decisions, brand image, and e-wom. Secondary data from several journals related to the research subject. This study analyzes laptop buyers, especially those who make purchases through the internet, which occur in the three largest online marketplaces in Indonesia. The researcher used non-parametric inferential statistics with SmartPLS version 4.0. *E-WOM* has a significant influence on laptop purchase decisions in *e-commerce*. This indicates that *e-WOM* is an element that increases consumers' decision to choose laptops sold in *Indonesian e-commerce*. *Brand image* has a significant influence on laptop purchase decisions in *e-commerce*. This means that *brand image* is a factor that increases consumer decisions to buy laptops in *Indonesian e-commerce*. *E-WOM* has a significant influence on purchasing decisions through laptop brand image in *e-commerce*.

Keywords: brand image, e-wom, e-commerce

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1. Introduction

The development of society 5.0 and the industrial revolution 4.0 have changed people's behavior as a result of the advancement of digital technology (Mumtaha & Khoiri, 2019). The shift in the way people shop is one of these behavioral changes. Nowadays, online shopping has become a preferred lifestyle and culture. Shift in purchasing culture from offline to online. This is due to the fact that customers find it easier to buy goods through online platforms than to buy goods offline. Consumers get convenience because of attractive prices, consumer digital assessments, many brand choices, and digital communication (Dewita, 2021). CNN Indonesia collected data from SimilarWeb, which shows that at least three online trading platforms are the most visited by Indonesians in 2023. With a total of 161 million visitors, Shopee, Tokopedia, and Lazada have 106 million, 106 million, and 70 million visitors, respectively, the three online marketplaces. Electronic goods are goods that are often purchased by online users. Laptops are examples of electronic goods purchased in the online market.

Having a laptop has become a must in today's era. Laptops are not just electronic devices; It is a multifunctional device that helps many things in daily life. Laptops can be used for a variety of purposes, from work to entertainment, making them a worthwhile investment. People are looking for laptops not only for career or academic needs, but also to quickly access information, interact with others via the internet, and enjoy the ever-changing digital world. Additionally, the laptop's portability allows users to stay productive and connected no matter where they are. Therefore, laptops are not only considered to be ordinary electronic devices, but also considered a way to enter a digital world full of opportunities and convenience. Many visitors to online marketplaces looking for laptops choose to buy one or more laptop products due to various considerations.

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Purchasing decisions are the most preferred choice to buy brands, but there are two factors that can influence the decision. Purchase decisions are decisions made by customers about what to buy, when, where, and how to pay for it, by considering what factors to buy, the time of purchase, and the method of payment. Conversely, according to Destamar et al. (2021), purchasing decisions are ideas about individual and group behavior that can be leveraged to produce favorable outcomes for those who buy something. When deciding to buy something, they choose the most appropriate behavioral alternative from two or more options. This decision is considered the first step in the decision-making process. Edi Sucipto Tanady & M. Fuad (2020) say that the way consumers make decisions to buy something is influenced by how the decision is carried out. Abdul Yusuf (2021) said that purchasing decisions are concepts where a person thinks about various options and makes decisions about products from various options. Factors influencing the consumer's decision to buy a particular brand because of their needs and desires are their image. This decision is based on factors such as what is being purchased, whose brand is being purchased, where the purchase is made, the amount purchased, the reason for the purchase, and the payment method (Anwar R & Adidarma W, 2021; Fres, 2022; Khoir & Soebiantoro, 2022).

Mujid & Andrian (2021) say that brand image is the impression in the consumer's mind of a certain brand, be it a good or a service. Many products in circulation make consumers look for alternatives to choosing products. Factors that influence decisions are brand images, reviews, or consumer comments of the product. In addition, the brand image is gradually urbanized through advertising campaigns that use consistent themes, which legitimize customer feelings and experiences, according to Khan in Raju dan Mamidala (2021). Brand traits are only the value of a company's products that can improve business performance because a better brand image results in positive customer behavior. Syafikah & Asnawi (2024) brand image is a collection of consumer perceptions related to brands that are reflected in the mind related to association with brands. Bancin (2021) brand image, which is a collection of consumer perceptions related to brands. A person's beliefs, concepts, and impressions of a brand are called brand image (Dr. Dhiraj Kelly Sawlani, S.E., 2021). If we draw conclusions, brand image is the perception that customers directly have about the positive or negative nature of the name, symbol, or slogan used for a product or service.

Figure 1 shows the ranking of the best laptop brands considered by Indonesian consumers on topbrand sites in 2023. Asus is ranked first, Acer is ranked second, HP is ranked third, Apple is ranked fourth, and Lenovo and Dell are ranked fifth and sixth.

However, based on data from the same source, in figure 2 it can be seen that Acer laptops have experienced a significant decrease in the percentage and ranking in 2023 compared to the previous year. Asus also dropped its percentage in 2023, although it was not significant, but due to Acer's percentage decline caused Asus to be ranked first in the brand. In addition, we can see an improvement in the presentation of Lenovo, Apple and HP. It can be seen in online stores Shopee, Tokopedia, and Lazada that customers buy more Asus brand laptops than Acer. However, there is a phenomenon in the market that Asus' best-selling products are still inferior to Lenovo. Customers also buy Advan brand laptops, although they are not the best brand. Because a good brand image also has an impact on purchasing decisions, research such as influence of brand image and price perception on purchase decisions. The influence of brand image and price perception on Asus laptop purchase decisions, and Khoir & Soebiantoro (2022). The studies in question include research such as Bhai (2021) on students' choice to buy Asus laptops on how brand image, brand equity, and brand trust influence consumers' decision on how product quality and brand image influence consumer decisions. Previous studies have shown that in addition to brand perception, there are other factors that influence purchasing decisions. One of the elements, namely e-wom. The decline in Asus laptop sales from October to March, when ratings increased, may have been due to poor E-WOM. It needs to be re-investigated whether this impacts the brand image, as well as influencing the purchase decision. A good e-WOM in the market determines purchasing decisions, customer satisfaction, and repurchase activities, recommends others buy products in the company, and grows brand loyalty until the company survives. The higher the E-WOM of the product, the higher the purchase decision for the product. This means businesses must improve performance and listen to customers well. This will create a good brand image and give every brand owner a chance to compete in the market. Based on the literature above, the purpose of this study is to understand the influence of E-WOM on purchase decisions mediated by the brand image of laptop products on consumers in e-commerce.

In today's highly competitive digital marketplace, understanding the psychological and behavioral factors that drive consumer purchasing decisions is critical for business sustainability and growth. The rise of e-commerce has drastically changed how consumers evaluate products, with electronic word of mouth (e-WOM) emerging as one of the most influential sources of information. Unlike traditional advertising, e-WOM provides perceived authenticity, peer trust, and real-time feedback. However, not all e-WOM translates directly into purchase decisions, making it essential to identify the mediating mechanisms that bridge this relationship. Brand image plays a strategic role in this context, acting

as a cognitive filter through which consumers interpret e-WOM content. Investigating this relationship is urgent, especially for technology-based products like laptops, where trust, reputation, and brand perception significantly influence consumer behavior. Given the increasing reliance on online reviews and brand-based values, understanding how e-WOM shapes brand image and, in turn, affects purchase decisions is essential for formulating more targeted and impactful marketing strategies.

This study contributes to the literature by examining the mediating role of brand image in the relationship between electronic word of mouth (e-WOM) and purchase decision, specifically in the context of laptop purchases through e-commerce platforms. While prior research has widely explored the direct impact of e-WOM on consumer decision-making, few studies have investigated how brand image acts as a partial mediator in this process. The study presents empirical evidence showing that brand image does not fully mediate the relationship, as indicated by a VAF value of 0.483, thereby classifying it as a partial mediation. This nuanced finding adds depth to existing models by showing that other variables, such as brand equity, consumer trust, consumer loyalty, and price perception, may also play important roles in explaining the influence of e-WOM on purchase decisions. Moreover, the research provides insights into consumer behavior within emerging markets, offering practical implications for marketers who aim to strengthen their brand’s positioning and improve customer conversion rates in digital environments.

2. Literature Review

2.1. E-WOM and Brand Image

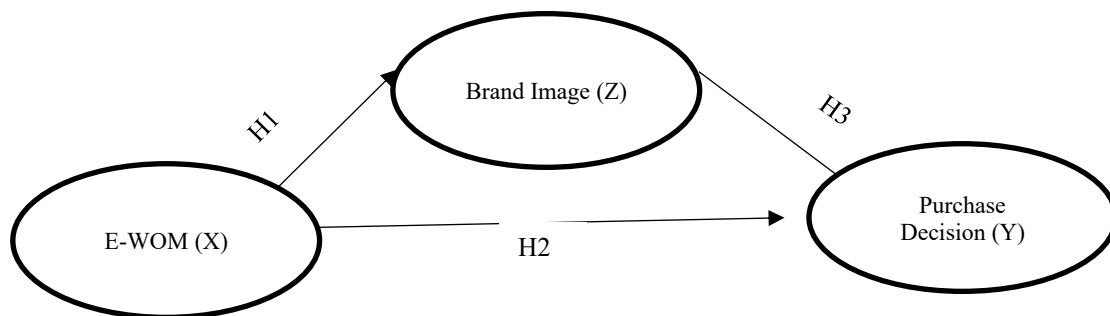
Existing theories and previous research show that brand image is highly correlated with purchasing decisions. Previous research, as shown by Nadhifah (2021) and Afwan and Santosa (2019), found that brand image is influenced by e-WOM. A good e-WOM will affect the brand image and benefit the company.

2.2. E-WOM and Purchase Decision

Previous theories and research show that E-WOM is related to purchase decisions because its function is to provide purchase recommendations to customers. The results of the study (Nofitasari, 2019) support the idea that all E-WOM indicators improve purchasing decisions, in line with the results of the study (Budiono, 2020), showing that E-WOM has a significant effect on things such as.

2.3. E-WOM, Purchase Decisions, and Brand Image

According to existing theories and various previous studies, E-WOM relates to purchasing decisions through brand images. Previous research shows (Nadhifah, 2021) that E-WOM has a great influence on purchasing decisions, which is in line with research by (Budiono, 2020) that E-WOM mediates bra. The model can be seen on Figure 1.



Source: Data Processed 2023

Figure 1. Research Framework of Thought

2.4. Hypothesis

From the background of the research, the formulation of the problem, and the framework of thought and previous research helped this research, the hypothesis was compiled with:

H1: There is an influence of Brand Image on Purchase Decisions.

H2: There is an influence of E-WOM on Purchase Decisions.

H3: There is an indirect influence of E-WOM on Purchase Decisions through Brand Image.

3. Methods

This type of research is quantitative. The purposive sampling method was used in this study. This study uses a type of quantitative data quantitative data is a type of numerical data that can be analyzed with statistics, to prove the hypothesis set. This research uses primary and secondary data sources. Primary data was collected by distributing a questionnaire to online laptop buyers via Google Form that included factors such as their purchase decisions, brand image, and e-wom. Secondary data from several journals related to the research subject. The focus of this research is on purchase decisions, brand images, and e-wom on electronic products, especially laptops. This research uses theories from marketing management and consumer behavior books. This study collected data using a questionnaire method, becoming a data collection approach that involves indirect questions shared with respondents online . This study analyzes laptop buyers, especially those who make purchases through the internet, which occur in the three largest online marketplaces in Indonesia. The researcher used non-parametric inferential statistics with SmartPLS version 4.0. The validity test of the reflective indicator model began with convergent validity and discriminant validity. The validity test of the formative indicator model, starting with looking at the cross loading value, the cross loading value is said to be valid if it has a value of >0.5. Furthermore, the VIF value analysis can be said to be valid and a test requirement if it has a value of <5 (Imam, 2021). The reliability test of the reflective indicator model is seen according to 2 criteria, namely composite reliability and Cronbach's alpha (Imam, 2021).

4. Result and Discussions

E-commerce in Indonesia, laptop products offer a variety of options that meet the needs of users with various specifications and budgets. Platforms such as Tokopedia, Shopee, Blibli, and Lazada provide a wide range of laptops from various well-known brands, including Asus, Acer, Lenovo, HP, Dell, and Apple. These brands offer a wide range of models adapted for daily use, gaming, graphic design, business purposes. For example, gamers, there are the Asus ROG and Acer Predator series equipped with high specifications, while for professional use, there are Lenovo ThinkPad and HP Spectre which are known for their performance and reliability. This e-commerce provides detailed information about technical specifications, reviews from other users, and product comparisons to help consumers choose the right laptop.

Table 1. T-Statistics Test Results

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
Brand Image (Z) → Purchase Decision (Y)	0,471	0,105	4,480	0,000
E-WOM (X) → Purchase Decision (Y)	0,460	0,108	4,276	0,000
E-WOM (X) → Brand Image (Z) → Purchase Decision (Y)	0,430	0,101	4,244	0,000

Source : SmartPLS Output Results (2024)

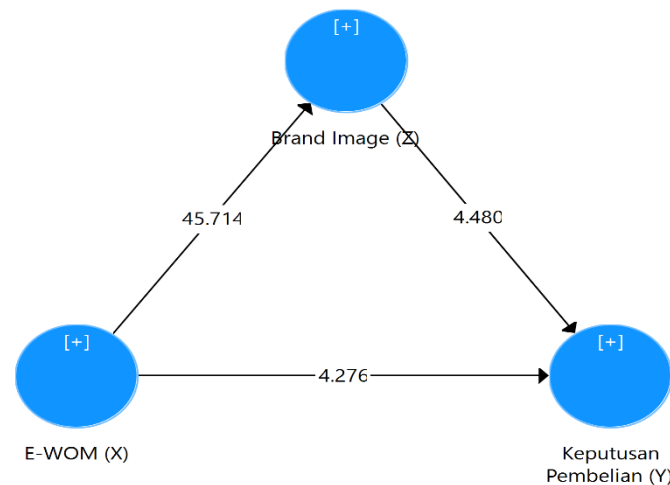
From the table, it is known in the original sample, the e-WOM variable in the purchase decision is 0.460, indicating a positive influence of e-WOM on the purchase decision. The results of the e-WOM variable test on the purchase decision resulted in a t count of 4.267, exceeded the t table by 1.653, and had a significance level of 0.000 which was lower than 0.05. Shows that e-WOM has a significant influence on purchasing decisions, so H1 is acceptable.

Furthermore, in the relationship of the Brand image variable to the Purchase Decision, the original sample produced a value of 0.471, showing the positive influence of the Brand image on the Purchase Decision. The results of the Brand

image variable test in the Purchase Decision resulted in a t calculation of 4.480, exceeding t the table of 1.653 and having a significance level of 0.000 lower than 0.05. This shows that the brand image has a significant influence on the Purchase Decision, so H2 is acceptable.

In addition, in the influence of the e-WOM variable on Purchase Decisions via Brand image, the original sample produced a value of 0.430, showing a positive influence of e-WOM on Purchase Decisions via Brand image. The results of the e-WOM variable test on Purchase Decisions through Brand image produced a t count of 4.244, exceeded t of the table by 1.653, and had a significance level of 0.000 lower than 0.05. This shows that e-WOM has a significant influence on Purchase Decisions through Brand image, so H3 is accepted.

T-statistical hypothesis test Inner model It can be seen in Figure 2.



Source: Processed Data (2024)

Figure 2. Outer Model Results

4.1. Mediation Test

Table 2. Variance Accounted For (VAF) Test Results

	Indirect Influence	
EWOM → BI → KP (PV : 0.000)		0,430
	Direct Influence	
EWOM → KP (PV : 0.000)		0,460
BI → KP (PV : 0.000)		0,471
	Total Impact	
EWOM → BI and KP (0.430 + 0.460)		0,890
	VAF = Indirect Influence / Total Influence	
VAF = Purchase Decision (0.430/0.890)		0,483 (48,3%)

Source: Data Processed (2023)

Based on the results of the calculation of the Variance Accounted For (VAF) test, a value of 0.483 or 48.3% was obtained. So it can be concluded that brand image can mediate the influence of e-WOM on purchase decisions. This is qualified if the VAF value is at an interval of 20% < VAF < 80% of the mediating variable is proven to mediate with the nature of partial mediation. This result indicates that the brand image is proven to mediate the influence of e-WOM on purchasing decisions in the form of partial mediation.

4.2. Discussion

4.2.1. The Influence of Electronic Word Of Mouth (e-WOM) on Purchase Decisions

The average score results were given by the respondents of the electronic word of mouth (e-WOM) variable, which was 4.287, with an interval range of 1 to 5. If translated into categories in the interval table, the results fall into the "agree" category. If translated into categories in the interval table, the results are included in the category of "agree." The meaning of the answer is that the majority of respondents feel that the electronic word of mouth (e-WOM) obtained by the respondents buying laptop products from e-commerce is very appropriate. This is because word-of-mouth marketing provided by people around them/respondent reviewers related to laptop purchases in e-commerce is very good. It is important to note that the highest value of the indicator is EWOM12, which is the statement "Products reviewed by IT experts / IT Journalists." This shows that laptop products for sale in e-commerce have good reviews from IT experts making electronic word of mouth (e-WOM) marketing successful in building their brand. However, the lowest score is found in EWOM9, containing the statement "Rating is always up-to-date" Looking at these results, it can be concluded that sometimes laptop ratings in e-commerce are not always updated, so the rating is no longer relevant. So that this needs to be repaired by stores that sell laptops in e-commerce to always update the rating. From the results of the hypothesis test, in the original sample, the e-WOM variable in the purchase decision was 0.460, showing a positive influence of e-WOM on the purchase decision. The results of the e-WOM variable test on the purchase decision resulted in a t count of 4.267, exceeded the t table by 1.653, and had a significance level of 0.000 lower than 0.05. Showing e-WOM has a significant influence on the purchase decision, so H1 is acceptable.

These findings are supported by recent studies. Prasetyo et al. (2021) found that e-WOM has a significant influence on consumer purchase decisions, especially when the information source is trustworthy and expert-based. Haque, Chowdhury, and Tarofder (2020) emphasized that e-WOM originating from industry professionals tends to lead to higher purchase intentions compared to non-expert reviews. Likewise, Mudunda et al. (2023) highlighted that consumers place a high level of trust in reviews from credible sources, particularly when purchasing high-involvement products such as electronics. In a similar context, Maulidah and Kartini (2022) emphasized the importance of keeping review and rating information current, as consumers rely on timely and accurate data when making purchasing decisions. Additionally, Sharma, Sharma, and Dwivedi (2020) explained that the effectiveness of e-WOM depends on its credibility, content relevance, and update frequency. Therefore, businesses are encouraged to continuously manage and improve the quality and recency of e-WOM to boost customer trust and purchasing behavior.

4.2.2. The Influence of Brand Image on Purchase Decisions

The average score results given by the respondent of the brand image variable had an average score of 4.277 in the range of 1 to 5. If translated into categories based on the interval table, these results are in the category of "agree." meaning that the majority of respondents feel that the brand image of the respondents to buy laptops from e-commerce is very appropriate. Because as explained, the description of the research object, the brand image provided by laptops sold in e-commerce is good. The highest value of the indicator is BI1, which is the question "Brands have social responsibility to society." This indicates that laptops in e-commerce care about social issues. The trust of laptop products in e-commerce to give the product in the public eye means retaining and attracting more customers, as well as strengthening its position in the market competition. The lowest score is found in BI6, referring to the statement "The laptop product offers features that are superior to other products." From these results, it can be concluded that consumers do not find significant differences between the laptop and competing products in features. Because of other factors that are more influential, such as price, brand image, or reviews of other users. From the results of the hypothesis test, it was found that the relationship of the Brand image variable in the Purchase Decision, the original sample produced a value of 0.471, showing a positive influence of the Brand image on the Purchase Decision. The results of the Brand image variable test in the Purchase Decision resulted in a t count of 4.480, exceeding t of the table of 1.653 and having a significance level of 0.000 lower than 0.05. This shows that the brand image has a significant influence on the Purchase Decision, so H2 is acceptable.

These findings are consistent with Kim, Kim, and Park (2020), who found that a strong brand image positively influences purchase intention in the online shopping context by reinforcing emotional and cognitive associations with a brand. Rahman and Areni (2021) also demonstrated that brand image is a key factor in shaping consumers' perceived value and subsequent purchase decisions, particularly in the electronics category. Additionally, Susanti and Prabowo (2022) revealed that social responsibility plays an important role in shaping brand image, which in turn influences consumer loyalty and willingness to purchase. Nguyen et al. (2023) further emphasized that, in e-commerce, non-functional attributes such as brand reputation, consumer trust, and social values often outweigh technical specifications

in shaping consumer behavior. These findings highlight the importance for e-commerce businesses and laptop brands to go beyond technical product enhancements and instead focus on building a strong, ethical, and trustworthy brand image. In an online environment where many products offer similar features, a brand's reputation and social responsibility can serve as a powerful differentiator and driver of consumer purchase decisions.

4.2.3. The Influence of e-WOM on Purchase Decisions Through Brand Image

The results of the hypothesis test found the influence of the e-WOM variable on the Brand Image Purchase Decision, the original sample produced a value of 0.430, indicating a positive influence of e-WOM on the Brand Image Purchase Decision. The results of the e-WOM variable test on the Brand Image Purchase Decision resulted in a t count of 4.244, exceeded the t table by 1.653, and had a significance level of $0.000 < 0.05$. According to the results of the VAF calculation, Brand Image is included in the category of partial mediation variables. It can be seen in the VAF value of 0.483 so that the Brand Image variable is not only a mediating variable that affects the relationship between e-WOM and Purchase Decisions, there are still other variables such as Brand Equity, Consumer Trust, Consumer Loyalty, and Price Perception. Overall, it shows that e-WOM has a significant effect on Purchase Decisions through Brand image, so that H3 is accepted.

These findings are consistent with recent literature. Prasetyo et al. (2021) found that e-WOM significantly enhances brand perception and purchase intent when consumers perceive the information as reliable and aligned with their values. Similarly, Nguyen et al. (2023) emphasized that e-WOM helps form emotional and cognitive associations with a brand, which are critical in forming brand image and ultimately guiding purchase behavior. Studies by Sharma et al. (2020) and Susanti and Prabowo (2022) support the notion that while brand image partially mediates the relationship, other factors such as consumer trust and loyalty also significantly affect consumer decision-making in e-commerce. This highlights the multidimensional nature of online consumer behavior, where brand image plays a vital, though not exclusive, mediating role. The findings confirm that e-WOM significantly influences purchase decisions both directly and indirectly through brand image. Although brand image partially mediates this relationship, the presence of additional influencing variables such as brand equity and trust suggests that marketers need to adopt a holistic approach in managing online branding strategies. Enhancing the quality of e-WOM and building a strong, consistent brand image can collectively contribute to stronger consumer engagement and increased purchase intention in the digital marketplace.

5. Conclusions

E-WOM has a significant influence on laptop purchase decisions in e-commerce. This indicates that e-WOM is an element that increases consumers' decision to choose laptops sold in Indonesian e-commerce. Brand image has a significant influence on laptop purchase decisions in e-commerce. This means that brand image is a factor that increases consumer decisions to buy laptops in Indonesian e-commerce. E-WOM has a significant influence on purchasing decisions through laptop brand image in e-commerce. This illustrates that a company that builds e-WOM well, while supporting it with a strong brand image, can increase consumers' decision to buy laptop products in e-commerce. In the theoretical context, it is hoped that the next research will expand the scope of variables that do not only include e-WOM and Brand Image for Purchase Decisions. This certainly expands and obtains more diverse results and is able to increase the perfection of this research.

References

- Abdul Yusuf. (2021). Pengaruh Persepsi Manfaat Dan Kemudahan Penggunaan Terhadap Kepuasan Konsumen Ovo. *Jurnal Manajemen*, 11(1), 54–63. <https://doi.org/10.26460/jm.v11i1.2168>
- Anwar R, & Adidarma W. (2021). Pengaruh Kepercayaan dan Risiko pada Minat Beli Belanja Online. *Jurnal Manajemen Dan Bisnis Sriwijaya*, 14(2), 155–168.
- Bancin, J. budiman. (2021). Citra Merek dan Word of Mouth (Peranannya Dalam Keputusan Pembelian Mobil Nissan Grand Livina). *Cv Jakad Media Publishing*, 13. https://books.google.co.id/books/about/Citra_Merek_dan_Word_of_Mouth_Peranannya.html?id=riAzEAAQBAJ&redir_esc=y
- Bhai, R. (2021). Buying Decision of laptop at Collage level Students. *American Journal of Multidisciplinary Research*

& *Development (AJMRD)*, 3(03), 22–27. www.ajmrd.com

- Destamar, D. L., Aryani, L., & Pusporini. (2021). Analisis keputusan pembelian pada pengguna aplikasi gojek fitur gofood. *Prosiding Konferensi Riset Nasional Ekonomi, Manajemen, Dan Akuntansi*, 2(1), 1744–1758.
- Dewita, E. (2021). Hubungan Antara Pola Makan Dengan Kejadian Obesitas Pada Mahasiswa. *Jurnal Kesehatan Tambusai*, 2(1), 8–14.
- Dr. Dhiraj Kelly Sawlani, S.E., M. M. (2021). Keputusan Pembelian Online: Kualitas Website, Keamanan Dan Kepercayaan. In *Surabaya: Scopindo*. <https://webadmin-ipusnas.perpusnas.go.id/ipusnas/publications/books/186221>
- Edi Sucipto Tanady, & M. Fuad. (2020). Analisis Pengaruh Citra Merek Dan Kualitas Layanan Terhadap Keputusan Pembelian Tokopedia Di Jakarta. *Jurnal Manajemen*, 9.
- Fres. (2022). Analisis Gas Karbon Monoksida (Co) Di Ruas Jalan Ap Pettarani Kota Makassar. *Skripsi*, 8.5.2017, 2003–2005. <https://www.who.int/news-room/fact-sheets/detail/autism-spectrum-disorders>
- Imam, G. (2021). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 26 Edisi 10. *Semarang, Universitas Diponegoro*, 490.
- Khoir, M. M., & Soebiantoro, U. (2022). Pengaruh Persepsi Kemudahan Penggunaan dan Promosi terhadap Minat Penggunaan E-Wallet LinkAja di Kota Surabaya. *J-MAS (Jurnal Manajemen Dan Sains)*, 7(2), 752. <https://doi.org/10.33087/jmas.v7i2.619>
- Mujid, A., & Andrian, A. (2021). Strategi Citra Merek, Kualitas Pelayanan, Dan Harga Terhadap Minat Melanjutkan Sekolah. *Jurnal Ilmiah Manajemen Ubhara*, 3(2), 66. <https://doi.org/10.31599/jmu.v3i2.946>
- Raju, P. dan Mamidala, E. (2021). Anti-diabetic activity of Compound isolated from *P. angulata* fruits extracts in Alloxan induce diabeticrats. *The Ame J Sci and Med Res*, 1, 40–43.
- Syafikah, N. N., & Asnawi, N. (2024). The Influence of Brand Image and Service Quality on Customer Loyalty with Customer Satisfaction as a Mediation Variable. *American Journal of Economic and Management Business (AJEMB)*, 3(7), 163–173. <https://doi.org/10.58631/ajemb.v3i7.91>