

#### How to Cite

Budiman, A., Widiyanti, M., Maulana, A., & Rosa, A. (2023). The influence of product quality and brand image on the decision to purchase non-subsidized NPK fertilizer in the agrosolution program of PT Pupuk Sriwidjaja. *International Journal of Social Sciences*, 6(4), 213-218. <https://doi.org/10.21744/ijss.v6n4.2216>

# The Influence of Product Quality and Brand Image on the Decision to Purchase Non-Subsidized NPK Fertilizer in the Agrosolution Program of PT Pupuk Sriwidjaja

#### Arif Budiman

Master Management, Sriwijaya University, Palembang, Indonesia  
Email: [budiman130691@gmail.com](mailto:budiman130691@gmail.com)

#### Marlina Widiyanti

Lecturer of Magister Management, Economic Faculty, Sriwijaya University, Palembang, Indonesia  
Corresponding author email: [marlinawidiyanti68@yahoo.co.id](mailto:marlinawidiyanti68@yahoo.co.id)

#### Ahmad Maulana

Lecturer of Magister Management, Economic Faculty, Sriwijaya University, Palembang, Indonesia  
Email: [Maulana25@unsri.ac.id](mailto:Maulana25@unsri.ac.id)

#### Aslamia Rosa

Lecturer of Magister Management, Economic Faculty, Sriwijaya University, Palembang, Indonesia  
Email: [aslamiarosa06@gmail.com](mailto:aslamiarosa06@gmail.com)

**Abstract---***This research aims to determine the influence of product quality and brand image on the purchasing decisions of non-subsidized NPK fertilizers in PT Pupuk Sriwidjaja's agrosolution program. The population for this study consists of 100 respondents selected based on specific criteria. The results of multiple linear regression analysis indicate that product quality and brand image positively and significantly impact purchasing decisions. Regarding product quality, improvements are recommended, particularly concerning the information on product packaging, which consumers perceive as insufficient. An evaluation of the packaging quality is necessary, as some consumers have complained about the packaging's inability to withstand an adequate lifespan. Despite PT Pupuk Sriwidjaja's positive efforts in environmental impact assessment (AMDAL) for the surrounding community, there is room for improvement in the allocation of CSR funds to ensure they are targeted towards those affected by the impact.*

**Keywords---***brand image, product quality, purchasing decisions.*

## Introduction

The business landscape in the current era is rapidly evolving and undergoing continuous metamorphosis. Businesses in every category must be sensitive to changes and focus on consumer decisions and purchasing choices as their primary objectives, impacting consumer loyalty (Kotler, 2009). Globalization's influence on the current industrial world has intensified competition among companies. Therefore, companies are compelled to evolve to face the existing competition continually.

PT Pupuk Sriwijaya Palembang (Pusri) is one of Indonesia's oldest fertilizer manufacturers. Established on December 24, 1959, under notary Eliza Pondaag's act number 177 in Palembang, South Sumatra, Pusri is renowned as the first producer of urea fertilizer in Indonesia. Pusri has undergone several transformations in its corporate structure. In 1997, Pusri was designated as the parent company for four state-owned enterprises operating in the fertilizer and petrochemical industries: PT Petrokimia Gresik, PT Pupuk Kujang, PT Pupuk Kaltim, and PT Pupuk

Iskandar Muda. Additionally, it included one more state-owned enterprise in 1988, engaged in trading: PT Mega Eltra.

In 2010, Pusri changed its articles of association, involving a separation (spin-off) from PT Pupuk Sriwidjaja (Persero) to become PT Pupuk Sriwidjaja Palembang. This change was formalized in an Extraordinary General Meeting of Shareholders on December 24, 2010, with the effective transfer of responsibilities and rights on January 1, 2011. Pusri retained the logo and trade name Pusri, while PT. Pupuk Sriwidjaja (Persero) became PT Pupuk Indonesia (Persero) or Pupuk Indonesia Holding Company (PIHC), using the trade name and logo Pupuk Indonesia. This alteration shifted Pusri's legal status to a subsidiary of a state-owned enterprise.

PT Pupuk Sriwijaya Palembang has distributed and marketed subsidized fertilizer to farmers through the public service obligation (PSO) program since 1979. This government program aims to enhance national food production by prioritizing the production and distribution of fertilizer to farmers across Indonesia. Fertilizer subsidies (PSO) are granted to farmers with a maximum landholding of 2 hectares for cultivating food crops, livestock, and community plantations (Adekiya et al., 2019; Chaudhary et al., 2017; Saraswati & Giantari, 2022).

The current business phenomenon involves the anticipation that the NPK fertilizer industry and the market will continue to grow in line with the government's program, led by the Ministry of Agriculture, to promote balanced fertilizer programs and shift from single-nutrient to compound fertilizers. This transition is expected to enhance agricultural productivity to meet the limited national demand for NPK fertilizers. Despite implementing the PSO program, where farmers through farmer groups compile the Definitive Plan for the Needs of Farmer Groups (RDKK), the available subsidized fertilizer allocation must be adjusted based on the government's approved budget for that year. This often results in a fertilizer shortage for farmers, prompting them to purchase non-subsidized fertilizer in the open market. In this market, farmers can choose the most beneficial and suitable product for their land (Chao, 1998; Von Helversen et al., 2018; Koutsimanis et al., 2012).

The government's plan to shift fertilizer subsidies directly to farmers poses a new challenge for companies. The loss of a captive market for subsidized fertilizer and consumers' freedom to choose within the market introduces a new dynamic. As a new player in the NPK fertilizer market, Pusri must address various aspects to compete and become a regional and national market leader. However, consumer complaints about NPK fertilizer products and suboptimal promotional activities remain prevalent.

The Agrosolution Program is one of the flagship programs aimed at increasing PT. Pusri Palembang's product sales. The program intensively supports farmers in sustainable agriculture, utilizing a supply chain supported by Triple Bottom-Line 3P (People, Planet, Profit) technology to prosper Indonesian farmers. The benefits offered to farmers joining the Agrosolution program include increasing agricultural productivity, aiding in profit improvement, introducing agricultural technology, and ensuring the authenticity and quality of commercial products by using Pusri Palembang's fertilizer products.

Table 1

The company's budget plan and realization of non-subsidized NPK sales from 2021 to September 2023

	2021	2022	2023
Company's Budget Plan	2.400 Ton	15.000 Ton	12.000 Ton
Realization	5.574 Ton	12.661,25 Ton	1.248,20 Ton
%	232%	84%	10%

Source: PT Pupuk Sriwidjaja Internal Data, processed by the Author in 2023

In purchasing decisions, consumers are influenced by various factors such as price, product quality, brand, attributes, promotions, and more. These factors can originate from both internal and external sources (Kusumastuti, 2012). Purchasing decisions represent an individual's attitude toward buying or using a product believed to satisfy their needs, accompanied by a willingness to bear any potential risks (Kotler & Keller, 2016).

Several NPK fertilizer manufacturers in Indonesia offer products with different specifications and unique advantages. For example, Pusri's NPK with a 15-15-15 formula, previously distributed for subsidized purposes (PSO) and sold commercially, exhibits uneven and easily crushable granules. In contrast, Mutiara's NPK with a 16-16-16 formula presents more uniform, solid, and perfectly round granules. Phonska Plus, with a 15-15-15 + Zinc formula, features relatively uniform granules but with an uneven surface and increased hardness. Meanwhile, Pak Tani's NPK with a 16-16-16 + Micro formula displays less uniform granules and uneven color distribution but with solid granules (Kotler & Armstrong, 2015; Aghekyan-Simonian et al., 2012; Hallak, 2006).

## Research Method

The research population comprises all consumers who purchased non-subsidized NPK fertilizer through PT Pupuk Sriwidjaja's agrosolution program in 2023. The sample includes consumers meeting the following criteria: Aged 17 and above and I purchased a non-subsidized NPK fertilizer through PT Pupuk Sriwidjaja's agrosolution program in 2023. As per Hair (2010), sampling guidance is determined based on the number of estimated parameters. The recommendation is 5-10 times the number of estimated parameters. Considering the 15 parameters used in this study, the sample size ranges from 15 items  $\times$  5 = 75 to 15 items  $\times$  10 = 150. Therefore, 100 respondents were chosen, deemed sufficient to represent the targeted population and meet the maximum sample limit.

## Result and Discussion

The results of this study reveal significant findings regarding the factors influencing the purchasing decisions of non-subsidized NPK fertilizer within PT Pupuk Sriwidjaja's Agrosolution program. Firstly, product quality emerged as a crucial determinant with a positive and significant impact on purchasing decisions. Consumers value appearance, reliability, conformity to specifications, and perceived quality. Notably, while visually appealing, the packaging needs improvement to provide more informative content and ensure durability during transit.

Secondly, brand image notably influenced purchasing decisions, aligning with existing literature. The study identifies critical dimensions of brand identity, personality, association, attitude, and benefit. Interestingly, while recognized, the logo and packaging color ranked lower in importance than the brand's overall positive reputation. PT Pupuk Sriwidjaja's vital CSR initiatives have positively impacted local communities and contributed significantly to the favorable brand image.

Product quality and brand image are pivotal in shaping consumer decisions within the competitive fertilizer market. These findings underscore the need for continuous efforts to enhance product quality packaging information, and maintain a positive brand image through meaningful community engagement and CSR activities as follows:

- 1) The constant value indicates a positive value of 0.537, suggesting that purchasing decisions are considered with no influence from product quality and brand image. The variable's magnitude is 0.537.
- 2) The regression coefficient value for product quality is 0.644, with a t-value of 8.049, indicating a positive influence on purchasing decisions. This suggests that higher product quality positively impacts purchasing non-subsidized NPK fertilizer through PT Pupuk Sriwidjaja's agrosolution program.
- 3) The regression coefficient value for the brand image is 0.210, with a t-value of 2.623, signifying a positive influence on purchasing decisions. This implies that an enhanced brand image correlates with higher purchasing decisions for non-subsidized NPK fertilizer through PT Pupuk Sriwidjaja's agrosolution program.

### *Impact of product quality on purchasing decisions for non-subsidized NPK fertilizer in PT Pupuk Sriwidjaja's agrosolution program*

Product quality's vivacious and significant influence on purchasing decisions aligns with findings from various studies (Manyu et al., 2022; Citra & Santoso, 2021; Saputra et al., 2020; Islam, 2020; Setyani & Prabowo, 2020; Wahab & Widiyanti, 2019; Novita et al., 2019; Nasution et al., 2020; Hakim & Saragih, 2019; Amalia, 2019; Amron, 2018; Perdana & Nanang, 2018; Fernando & Aksari, 2018; Igir et al., 2018; Sumiati & Mujanah, 2018). These studies consistently show that product quality positively and significantly impacts purchasing decisions.

The research findings highlight that product quality is associated with dimensions such as appearance, reliability, conformity to specifications, service, and perceived quality. Notably, the packaging indicator of Pusri's urea fertilizer appears attractive and informative but scores the lowest. This suggests that some consumers lacked additional information on the product packaging. Additionally, an evaluation of the packaging quality is necessary, as some packages of Pusri's fertilizer were reportedly torn upon receipt by consumers. Improving packaging quality is essential to ensure that consumers receive products in excellent and suitable condition, avoiding damage and allowing for long-term storage with solid and secure packaging.

Based on direct interviews with consumers in the field, some consumers complain about the need for more easily understandable additional information about the product on the fertilizer packaging. Consumers state that some product information on the packaging quickly fades away, making it somewhat challenging to identify the fertilizer products received (Rybaczewska et al., 2020; Salinas & Pérez, 2009; Greve, 2014; Mahatama & Wardana, 2021).

Regarding the reliability indicator, Pusri's fertilizer products score the highest in meeting consumer fertilizer needs. This indicates that the ability and reliability of PT Pupuk Sriwidjaja's fertilizer products to meet consumer needs are dependable. With a variety of fertilizer variants produced by PT Pupuk Sriwidjaja, the company is reliable in meeting fertilizer needs for the community, especially in Indonesia. The diverse range of Pusri fertilizers and the ability to create fertilizers according to agricultural needs make it convenient for consumers to make bulk purchases for various fertilizer needs.

Some respondents interviewed directly express that the convenience for consumers in making purchases is due to PT Pupuk Sriwidjaja providing many options consumers need for various types of fertilizer needs. This allows consumers to place direct orders with a single delivery, saving shipping costs and making it convenient for consumers who do not have to buy from various brands.

*The influence of brand image on the purchasing decision of non-subsidized NPK fertilizers in the agrosolution program at PT Pupuk Sriwidjaja"*

*Brand image has a positive and significant influence on purchasing decisions*

The positive and significant impact of brand image on purchasing decisions is consistent with findings from various studies (Wu et al., 2022; Nugroho, 2022; Citra & Santoso, 2021; Junia, 2021; Saputra, 2021; Ernawati et al., 2021; Haqiqi & Khuzaini, 2020; Novita et al., 2019; Kim & Chao, 2019; Novita et al., 2019; Firmanto, 2019; Hakim & Saragih, 2019; Amalia, 2019; Amron, 2018; Foster, 2018). These studies consistently demonstrate that brand image positively and significantly impacts purchasing decisions.

The research results indicate that brand image is associated with dimensions such as brand identity, personality, association, attitude, and benefit. Notably, the indicator of Pusri's fertilizer product logo and packaging color, already very familiar among the public, scores the lowest. This suggests that the logo and product packaging are not the primary factors influencing consumers to purchase Pusri's fertilizer products. Consumers are not concerned about the logo and color on the fertilizer product packaging.

In contrast, the indicator of Pusri's fertilizer brand's good reputation scores the highest. This indicates that PT Pupuk Sriwidjaja's reputation among the public is good. The reputation of PT Pupuk Sriwidjaja, especially in the South Sumatra region, is notably positive. PT Pupuk Sriwidjaja frequently provides CSR assistance to the surrounding community, addressing the impacts of Environmental Impact Assessments (AMDAL), such as waste disposal and ammonia odors in the factory area. Some consumers living around PT Pupuk Sriwidjaja's factory area also experience positive impacts, such as the company's regular provision of funds for constructing community gates in nearby residential areas and distributing groceries by neighborhood for less fortunate residents.

## **Conclusion**

In conclusion, this study affirms the substantial impact of product quality and brand image on the decision-making process for non-subsidized NPK fertilizer within PT Pupuk Sriwidjaja's Agrosolution program. The positive and significant influences identified align with prior research findings. Notably, consumers appear less swayed by logo and packaging color but highly value the positive reputation associated with Pusri's fertilizer brand. The results suggest potential areas for improvement in product packaging to enhance consumer information. Additionally, PT Pupuk Sriwidjaja's commendable CSR efforts have positively contributed to its brand image, fostering a favorable reputation. This study underscores the importance of consistently delivering high-quality products and maintaining a positive brand image to influence consumer purchasing decisions in the competitive fertilizer market.

## *Acknowledgments*

Special thanks to all those who contributed to the success of this research. Your support and cooperation have been invaluable.

## **References**

Adekiya, A. O., Agbede, T. M., Aboyeji, C. M., Dunsin, O., & Ugbe, J. O. (2019). Green manures and NPK fertilizer effects on soil properties, growth, yield, mineral and vitamin C composition of okra (*Abelmoschus esculentus* (L.) Moench). *Journal of the Saudi Society of Agricultural Sciences*, 18(2), 218-223. <https://doi.org/10.1016/j.jssas.2017.05.005>

- Aghekyan-Simonian, M., Forsythe, S., Kwon, W. S., & Chattaraman, V. (2012). The role of product brand image and online store image on perceived risks and online purchase intentions for apparel. *Journal of Retailing and Consumer Services*, 19(3), 325-331. <https://doi.org/10.1016/j.jretconser.2012.03.006>
- Amalia, N. (2019). Pengaruh Citra Merek, Harga dan Kualitas Produk Terhadap Keputusan Pembelian (Studi Kasus Pada Konsumen Mie Endess Di Bangkalan). *Jurnal Studi Manajemen Dan Bisnis*, Vol. 6 (2), 96–104.
- Amron, A. (2018). The influence of brand image, brand trust, product quality, and price on the consumer's buying decision of MPV cars. *European Scientific Journal*, ESJ, 14(13), 228.
- Chao, P. (1998). Impact of country-of-origin dimensions on product quality and design quality perceptions. *Journal of Business research*, 42(1), 1-6. [https://doi.org/10.1016/S0148-2963\(97\)00129-X](https://doi.org/10.1016/S0148-2963(97)00129-X)
- Chaudhary, S., Dheri, G. S., & Brar, B. S. (2017). Long-term effects of NPK fertilizers and organic manures on carbon stabilization and management index under rice-wheat cropping system. *Soil and Tillage Research*, 166, 59-66. <https://doi.org/10.1016/j.still.2016.10.005>
- Citra, T., & Santoso, S. B. (2021). Analisis Pengaruh Kualitas Produk dan Citra Merek Terhadap Keputusan Pembelian Cetakan Continuous Form Melalui Kepercayaan Merek (Studi pada Percetakan Jadi Jaya Group, Semarang). *Jurnal Studi Manajemen & Organisasi*, Vol. 13, 67–79.
- Ernawati, R., Dwi, A. B., & Gunaedi, J. (2021). Analisis Pengaruh Promosi, Harga dan Citra Merek Terhadap Keputusan Pembelian Pada Situs E-Commerce Zalora di Jakarta. *Jurnal Ekonomika Dan Bisnis*, Vol. 4 (2).
- Fernando, M. F., & Aksari, N. M. A. (2018). Pengaruh Kualitas Produk, Harga, Promosi dan Distribusi Terhadap Keputusan Pembelian Produk Sanitary Ware Toto di Kota Denpasar. *E-Jurnal Manajemen Unud*, Vol. 7 (1)(ISSN: 2302-8912), 441–469.
- Firmanto, Y. (2019). Pengaruh Brand Image dan Harga Terhadap Keputusan Pembelian Konsumen Pada Produk Chicken KFC. *Jurnal Manajemen Dan Bisnis*, Vol. 3 (1)(ISSN 2579-4892).
- Foster, B. (2018). Impact of Brand Image on Purchasing Decision on Mineral Water Product “Amidis” (Case Study on Bintang Trading Company). *American Research Journal of Humanities and Social Sciences*, Vol. 2(ISSN: 2378-7031).
- Greve, G. (2014). The moderating effect of customer engagement on the brand image–brand loyalty relationship. *Procedia-Social and Behavioral Sciences*, 148, 203-210. <https://doi.org/10.1016/j.sbspro.2014.07.035>
- Hair. (2010). *Multivariate Data Analysis* (Seventh Ed). Pearson Prentice Hall.
- Hakim, L., & Saragih, R. (2019). Pengaruh Citra Perusahaan Persepsi Harga dan Kualitas Produk Terhadap Keputusan Pembelian Konsumen NPK Mutiara di UD. Bareleng Tani Jaya Batam. *Jurnal Ekobisma*, Vol. 6 (2).
- Hallak, J. C. (2006). Product quality and the direction of trade. *Journal of international Economics*, 68(1), 238-265. <https://doi.org/10.1016/j.jinteco.2005.04.001>
- Haqiqi, F., & Khuzaini. (2020). Pengaruh Citra Merek, Kualitas Pelayanan, Atmosfer Toko dan Harga Terhadap Keputusan Pembelian. *Jurnal Ilmu Dan Riset Manajemen*, Vol. 9 (4)(ISSN: 2461-0593).
- Igir, F. G., Tampi, J. R. E., & Taroreh, H. (2018). Pengaruh Kualitas Produk dan Harga Terhadap Keputusan Pembelian Mobil Daihatsu Grand Max Pick Up (Studi pada PT. Astra International Tbk Daihatsu Cabang Malalayang). *Jurnal Administrasi Bisnis*, Vol. 6 (2).
- Islam, D. S. (2020). Pengaruh Harga, Promosi dan Kualitas Produk Terhadap Keputusan Pembelian Pupuk Cair Amina di Mojokerto. *Jurnal Ekonomi Dan Bisnis Islam*.
- Junia, Y. I. (2021). Pengaruh Brand Awareness, Brand Image dan Brand Trust Terhadap Keputusan Pembelian Pada Produk Pocari Sweat di Jakarta. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, Vol. 5 (4).
- Kim, R. B., & Chao, Y. (2019). Effects of Brand Experience, Brand Image, and Brand Trust on Purchase Decisions: The Case Chinese Millennial Generation Consumers. *Journal of International Studies*, Vol. 13.
- Kotler, P. (2009). *Manajemen Pemasaran* (Edisi 13). Erlangga.
- Kotler, P., & Armstrong, G. (2015). *Marketing an Introducing* Prentice Hall. England: Pearson Education Inc.
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). Pearson Education, Inc.
- Koutsimanis, G., Getter, K., Behe, B., Harte, J., & Almenar, E. (2012). Influences of packaging attributes on consumer purchase decisions for fresh produce. *Appetite*, 59(2), 270-280. <https://doi.org/10.1016/j.appet.2012.05.012>
- Kusumastuti, A. E. (2012). *Consumer's perceptions and purchasing decision toward yogurt-A case study in Malang city, East Java Province, Indonesia* (Doctoral dissertation, Prince of Songkla University).
- Mahatama, A. A. B. P., & Wardana, M. (2021). The role of brand image and customer commitment in mediating service quality towards customer loyalty. *International Research Journal of Management, IT and Social Sciences*, 9(1), 79-89.

- Manyu, A., Saroh, S., & Zunaidah, D. (2022). Pengaruh Kualitas Produk, Kualitas Pelayanan dan Harga Terhadap Keputusan Pembelian KFC (Studi Kasus Pada Konsumen KFC Kota Malang di Masa PPKM). *JIAGABI, Vol. 11*(ISSN: 2302-7150), 253–262.
- Nasution, S. L., Limbong, C. H., & Nasution, D. A. R. (2020). Pengaruh Kualitas Produk, Citra Merek, Kepercayaan, Kemudahan dan Harga Terhadap Keputusan Pembelian Pada E-Commerce Shopee (Survei pada Mahasiswa S1 Fakultas Ekonomi Jurusan Manajemen Universitas Labuhan Batu). *Jurnal Ecobisma, Vol 7* (1).
- Novita, M. D., Ujianto, & Panjaitan, H. (2019). The Influence of Product Quality, Brand Image and Product Attraction Purchase of Impulsif Purchases and Its Impact on Intention To Buy Ajifol Liquid Organic Fertilizers in East Java. *American International Journal of Business Management (AIJBM), Vol. 2*(ISSN: 2379-106X), 70–75.
- Nugroho, N. A. (2022). Pengaruh Brand Image dan Perceived Value Terhadap Keputusan Pembelian dan Dampaknya Terhadap Repurchase Intention (Studi Pada Dolkopi di Tembalang). *Diponegoro Journal of Management, Vol. 11*.
- Perdana, K. E., & Nanang, W. (2018). Purchase Decision of Chemical Compound Fertilizers by White Pepper Farmers. *RJOAS Journal, Vol. 4*(76). <https://doi.org/DOI> <https://doi.org/10.18551/rjoas.2018-04.30>
- Rybaczewska, M., Sparks, L., & Sułkowski, Ł. (2020). Consumers' purchase decisions and employer image. *Journal of Retailing and Consumer Services, 55*, 102123. <https://doi.org/10.1016/j.jretconser.2020.102123>
- Salinas, E. M., & Pérez, J. M. P. (2009). Modeling the brand extensions' influence on brand image. *Journal of business research, 62*(1), 50-60. <https://doi.org/10.1016/j.jbusres.2008.01.006>
- Saputra, D. (2021). Pengaruh Brand Image, Brand Trust, Perceived Value dan eWOM Terhadap Purchase Decisions Smartphone di Jakarta. *Jurnal Manajemen Bisnis Dan Kewirausahaan, Vol. 5* (5).
- Saputra, I., Lewangka, O., & Munir, A. R. (2020). The Influence of Product Quality and Promotion on Repurchase Pertamax through Consumer Satisfaction in Makassar City. *Hasanuddin Journal of Business Strategy, Vol. 2* (2).
- Saraswati, A. R., & Giantari, I. G. A. K. (2022). Brand image mediation of product quality and electronic word of mouth on purchase decision. *International Research Journal of Management, IT and Social Sciences, 9*(1), 97-109.
- Setyani, A. D., & Prabowo, R. E. (2020). Pengaruh Kualitas Produk, Citra Merek dan Harga Terhadap Keputusan Pembelian Sepatu Merek Adidas (Studi di Toko Original Sportcenter Cabang Medoho Semarang). *Proceeding SENDIU, ISBN: 978-979-3649-72-6*.
- Sumiati, & Mujanah, S. (2018). Persepsi Kualitas Produk, Persepsi Harga dan Promosi Terhadap Keputusan Pembelian Tas Sophie Paris pada Mahasiswa. *Andalas Management Review, Vol. 2* (2)(ISSN (Online): 2548-155X).
- Von Helversen, B., Abramczuk, K., Kopeć, W., & Nielek, R. (2018). Influence of consumer reviews on online purchasing decisions in older and younger adults. *Decision Support Systems, 113*, 1-10. <https://doi.org/10.1016/j.dss.2018.05.006>
- Wahab, Z., & Widiyanti, M. (2019). Effect of Trust, Quality of Products and Quality Services on Purchase Decisions on E-Commerce Shopee in Palembang City. *International Journal of Management and Humanities, 3*(12), 1-6.
- Wu, L., Qu, Y., Zhao, S., & Zhou, S. (2022). The Impact of Brand Image on Laptop Purchasing Intention. The Moderating Role of Consumer Ethnocentrism. *International Journal of Business, Economics and Management, Vol. 9*(1)(ISSN: 2312-0916), 1–19.