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

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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 Pondag'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...
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 x 5 = 75 to 15 items x 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; Igin 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 Pusi'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 Pusi'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.

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References


