

THE IMPACT OF PRODUCT KNOWLEDGE AND BRAND IMAGE ON PURCHASING DECISIONS OF LE MINERALE IN SURABAYA

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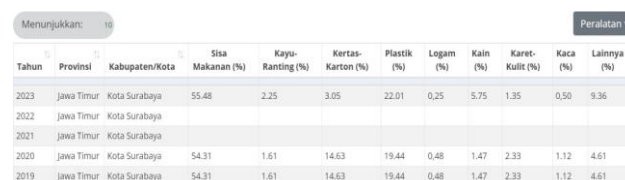
Abstract. Environmental pollution caused by the accumulation of plastic waste, which is difficult to recycle, is a growing concern. Le Minerale offers bottled drinking water made from Polyethylene Terephthalate (PET), which, in addition to being free of BPA, is also highly recyclable. Furthermore, Le Minerale has been subjected to a black campaign from competitors in the market, particularly Aqua, the market leader in bottled water. This research seeks to investigate the effect of Product Knowledge and Brand Image on purchasing decisions for Le Minerale. A quantitative approach was used, employing an ordinal scale and Likert weighting technique, with a sample of 90 respondents. The study utilized a non-probability sampling method, specifically purposive sampling. Data analysis was conducted using the PLS (Partial Least Square) program. The results reveal that both product knowledge and brand image have a positive and significant influence on purchasing decisions for Le Minerale.

Keywords: Brand Image; Purchase Decision; Product Knowledge

I. INTRODUCTION

The environmental pollution caused by plastic waste from bottled drinking water (AMDK) used daily is a result of the limited consumer knowledge about plastic waste, which is difficult to recycle. This issue highlights the importance of properly recycling plastic waste to protect the environment. This is directly connected to the health of the ecosystem and the long-term sustainability of human life. Additionally, some conventional bottled drinking water packaging contains Bisphenol (BPA), a harmful compound derived from polycarbonate and epoxy materials used in the packaging. BPA exposure can lead to diseases such as diabetes, brain function disorders, and cancer. Furthermore, plastic packaging containing BPA is difficult to recycle. To address the plastic waste issue, Le Minerale offers an innovative solution by using Polyethylene Terephthalate (PET) plastic, a high-quality plastic material that is easy to recycle, environmentally

friendly, and free from BPA, contributing to a safer alternative for consumers while positively supporting sustainable waste management practices and environmental health. This approach also emphasizes the importance of educating consumers and fostering a more eco-conscious mindset, promoting cleaner, greener communities.



Tahun	Provinsi	Kabupaten/Kota	Sisa Makanan (%)	Kayu-Ranting (%)	Kertas-Karton (%)	Plastik (%)	Logam (%)	Kain (%)	Karet-Kulit (%)	Kaca (%)	Lainnya (%)
2023	Jawa Timur	Kota Surabaya	55.48	2.25	3.05	22.01	0.25	5.75	1.35	0.50	9.36
2022	Jawa Timur	Kota Surabaya									
2021	Jawa Timur	Kota Surabaya									
2020	Jawa Timur	Kota Surabaya	54.31	1.61	14.63	19.44	0.48	1.47	2.33	1.12	4.61
2019	Jawa Timur	Kota Surabaya	54.31	1.61	14.63	19.44	0.48	1.47	2.33	1.12	4.61

Figure 1: Composition of Waste Accumulation

According to data from the National Waste Management Information System, plastic waste increased significantly by 22.01% in 2023 compared to 2020. The majority of this waste comes from households (85.16%), followed by the market sector. Le Minerale supports environmental

sustainability through its digital-based Plastic Pay program, where consumers can exchange Le Minerale plastic waste for e-wallet balances. The gathered plastic waste is transformed into sustainable materials, such as Recycled Polyester Staple Fiber (Re-PSF), threads, textiles, and an array of products like toys, rugs, home furnishings, car interiors, as well as woven and non-woven fabrics.

Product knowledge is essential for consumers to make informed decisions when purchasing a product, particularly when addressing misconceptions, such as the false claim that PT Mayora Indah Tbk, the company behind Le Minerale, is affiliated with Israel. There are many competing bottled water brands on the market, such as Aqua, Club, Vit, and Cleo, which presents a challenge for bottled water producers to compete fairly without resorting to monopoly tactics or black campaigns. Aqua is the market leader in Indonesia's bottled water sector.

Table 1. Market Share of Bottled Drinking Water (AMDK) in Surabaya City, 2024

Brand	Surabaya City Market Share (%)
Aqua	69,2%
Le Minerale	6,9%
Club	12,2%
Vit	0,1%
Cleo	10,4%
Ades	0,7%
Amidis	0,6%
Grand Total	100%

Source: Mars Indonesia Digital

Market share data for bottled drinking water (AMDK) in Surabaya in 2024 shows Aqua with a dominant 69.2% share, followed by Cleo (10.4%), Club (12.2%), and Le Minerale (6.9%). Le Minerale ranks fourth in Surabaya, with a market share below that of Cleo and Club, but still holds a significant share in the competitive market. The presence of multiple options in the bottled water market can confuse consumers, but those with strong product knowledge are more likely to make informed and confident decisions. In addition to providing product knowledge, building a strong brand image is crucial for increasing sales and

creating consumer trust. A positive brand image leads to better consumer perceptions and ultimately influences purchasing decisions. A good brand image reflects the consumer's overall perception of the product, which impacts their choice to buy it. Le Minerale received the "Pilihan Bunda" award in 2024 for its BPA-free gallon, which reinforces its commitment to consumer health and environmental sustainability. This recognition not only enhances product knowledge but also helps build a positive brand image, leading to increased sales amid the fierce competition in the bottled water market.

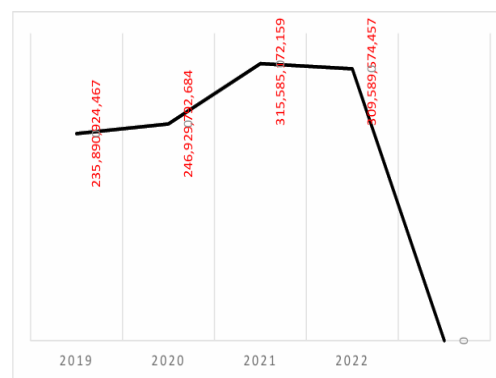


Figure 2. Sales Report of PT Tirta Fresindo Jaya 2019-2022

Source: Annual Report of PT Mayora Indah Tbk. 2019-2022

Despite receiving awards, Le Minerale's sales have seen a decline in recent years, as indicated by the financial reports of PT Mayora Indah Tbk, the parent company. This decline may be attributed to a lack of product knowledge among consumers, which affects their purchasing decisions. Research shows that better product knowledge leads to higher purchase intentions (Dwi Santy & Daniyah Atika, 2020). Studies (Ayuningsih & Maftukhah, 2020; Nurcaya & Rastini, 2020) This research focuses on analyzing how product knowledge and brand image influence consumers' purchasing choices for Le Minerale in Surabaya, confirming that both factors positively influence consumer purchasing choices.

1) Product Knowledge

According to Dhea Febyana *et al.* (2023), product knowledge is a collection of information about a product's knowledge that exists in the consumer's mind. This information is then used by

consumers as a tool to consider their future actions. Consumers who have deep product knowledge tend to rely more on intrinsic requirements rather than stereotypes (Ramadhanty & Masnita, 2023). Product knowledge is the information a consumer has about a particular product, which can come from prior experiences with the product (Ubaidi & Batu, 2020). Based on this definition, Product knowledge refers to the information and experiences that a consumer holds, which can serve as a foundation for making future decisions. The key indicators of product knowledge include awareness of product features or attributes, understanding of the benefits, and knowledge of the satisfaction value the product provides. (Rezky Maulana *et al.*, 2020).

2) Brand Image

According to Ernawati (2021), Brand image refers to the perception and overall impression that consumers develop about a particular brand, based on their past experiences and knowledge of the product. It consists of various associations related to a specific brand, which often create a unique meaning (Miati *et al.*, 2020). Brand image refers to the mental concept that arises when consumers think of a particular product brand (Lia *et al.*, 2022). In essence, brand image is shaped by previous information, experiences, and spontaneous associations. Key indicators of brand image include the image of the producer, the product, and the consumer (Putri Amanda & Aslami, 2021).

3) Purchase Decision

Companies as marketers of products must identify who makes the purchase decisions, the types of purchase decisions, and the steps involved in the consumer's purchasing process. Gunarsih *et al.* (2021),

A purchase decision is the step where consumers choose one product from two or more available options (Nurfauzi *et al.*, 2023). A purchasing decision involves a series of steps that consumers go through before choosing to buy a product. (Rumaidlany *et al.*, 2022). Based on the definitions from several experts, a purchase decision is the process where consumers select a product from several available options, through a series of steps to make the purchase. The indicators of a purchase decision include information search,

aligning with needs, product priorities, and consumer satisfaction (Indrianna Meutia *et al.*, 2021).

II. RESEARCH METHOD

This study adopts a quantitative approach, Employing a purposive sampling approach within a non-probability sampling framework. The variables in the research are measured using an ordinal scale, with a Likert scale ranging from 1 to 5. The population in this study consists of Surabaya residents who have made at least one purchase of Le Minerale bottled drinking water (AMDK). The sampling criteria are based on characteristics, specifically Surabaya residents who have purchased Le Minerale bottled water in a 1,500 mL package. The sample size is calculated based on Ghazali's (2011) guideline, which suggests a sample size of 5 to 10 times the number of indicators. With 10 indicators, the required sample size is $10 \times 9 = 90$ respondents. This study employs the SEM (Structural Equation Modeling) method based on components to analyze the data collected.. PLS (Partial Least Squares) is chosen as the analytical tool because PLS is widely used for causal predictive analysis and is also used for prediction and theory development.

III. RESULTS AND DISCUSSION

PLS Model Analysis

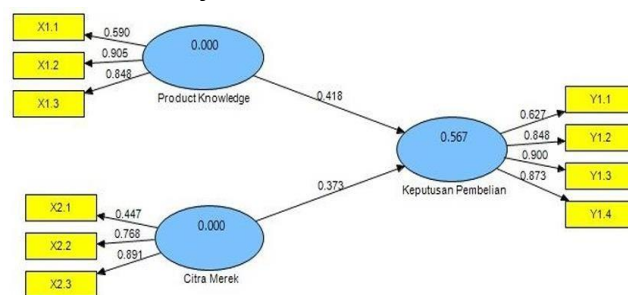


Figure 1 Path diagram of PLS results

Based on the PLS output image shown above, the factor loadings for each indicator can be observed. The highest factor loading for the product knowledge variable (X1.2) is 0.905. The highest factor loading for the brand image variable (X2.3)

is 0.891. The highest factor loading for the purchase decision variable (Y1.3) is 0.900. Furthermore, the path coefficients are presented above the arrows linking the exogenous variables to the endogenous variable, which is depicted within the circle of the endogenous variable, specifically the Purchase Decision variable in this instance.

Inner Model

	R Square
Customer Loyalty	0.566647

An R^2 value of 0.566647 indicates that the model explains 56.66% of the variability in purchase decisions, meaning product knowledge and brand image significantly influence consumer choices. This suggests that these two factors play a key role in determining whether consumers choose a particular product.

However, the remaining 43.34% of the variance is unexplained, implying that other external factors, such as price, quality, or personal preferences, also impact purchase decisions. Further studies are required to explore these additional factors and gain more insight into consumer behavior.

Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
Product Knowledge → Purchase Decisions	0.417526	0.418883	0.146702	0.146702	2.846082
Brand Image → Purchase Decisions	0.372657	0.375157	0.134309	0.134309	2.774631

From the table above, the following conclusions can be made:

1. Product knowledge plays an essential role in shaping purchasing decisions. The analysis reveals a path coefficient of 0.417526 and a T-statistic of 2.846082, exceeding the critical threshold of 1.96 ($Z \alpha = 0.05, 5\%$). These results demonstrate that individuals who possess greater awareness and understanding of a product tend to approach their purchasing choices with greater consideration and confidence.
2. Brand image emerges as a key factor in driving purchase decisions. The variable's path coefficient is recorded at 0.372657, with a T-

statistic of 2.774631, which also surpasses the benchmark value of 1.96 ($Z \alpha = 0.05, 5\%$). This outcome underscores the importance of a positive brand image in fostering consumer trust and ultimately guiding their purchasing behavior.

The Influence of Product Knowledge on Purchase Decisions of Le Minerale in Surabaya

The findings of the research indicate that product knowledge plays a crucial role in shaping purchasing decisions for Le Minerale. As consumers gain more insights about the product, such as its ingredients and advantages, it positively influences their decision to purchase. A deeper understanding of the product empowers consumers to make more informed choices when deciding whether to buy. The analysis of factor loading for product knowledge reveals that the most impactful indicator is the understanding of the product's benefits.

These findings support previous research by Rustandi & Marlina (2022) and Tridiwianti & Harti (2021). The analysis indicates a strong positive influence of product knowledge on purchasing decisions. This suggests that consumers with better understanding and awareness of the product are more likely to make informed purchasing choices. Therefore, it can be concluded that product knowledge significantly impacts purchasing decisions for Le Minerale in Surabaya.

The Influence of Brand Image on Purchase Decisions of Le Minerale in Surabaya

The research results indicate that brand image has a significant positive effect on purchasing decisions for Le Minerale. This suggests that the stronger the brand image perceived by consumers, the higher their trust in the product's quality. The analysis of factor loading for the brand image variable reveals that the user image is the most influential factor. The user image of Le Minerale can be observed from consumers who have used the product, which reflects the product's benefits, quality, and advantages. This user image is strengthened by effective advertising campaigns and celebrity endorsements, which increase consumer trust in the product, affirming its superior quality, health benefits, hygiene, and refreshing qualities due to its natural mineral content. The product's hygiene is also maintained with a seal cap

to prevent dust and dirt from contaminating the product.

The findings align with the studies by Apriani & Khairul Bahrin (2021) and Darmansah & Yosepha (2020), which highlight that brand image plays a significant and positive role in shaping purchasing decisions. Additionally, brand image can be strengthened for potential consumers by enabling them to directly experience the product's benefits and see how well it aligns with their expectations.

IV. CONCLUSIONS

The findings from this research highlight the significant role that both product knowledge and brand image play in influencing purchasing decisions for Le Minerale. This is evidenced by the fact that both product knowledge and brand image play significant roles in influencing consumers' purchasing choices. The direct benefits perceived by consumers and the positive impression of the product increase the intensity of purchasing decisions. Le Minerale is expected to continue maintaining and improving its efforts in providing and building product knowledge, especially regarding the product's benefits, through ongoing campaigns. As for the strong brand image already held by consumers, Le Minerale is encouraged to further enhance and sustain the user image to maintain the intensity of consumer purchasing decisions and foster future business growth.

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