

Analysis of Product Quality and Brand Image in Driving Repurchase Intention for Luta Dehumidifier Products at PT. Dwi Mitra Teknindo

Ade Maulana, Oviyan Patra, Evan Nugraha, Hendy Suryana, Adi Ganda Putra
Universitas Jenderal Achmad Yani, Indonesia
Email: ademaulana040@gmail.com, oviyan.patra@lecture.unjani.ac.id,
noe.rievan@gmail.com, hendies.free@gmail.com, adi.ganda@lecture.unjani.ac.id

ABSTRACT

This study aims to analyze the influence of product quality and brand image on repurchase intention of LUTA dehumidifier products distributed by PT. Dwi Mitra Teknindo. The research background is based on the increasing demand for dehumidifiers in Indonesia after the Covid-19 pandemic, along with the challenges faced by the LUTA brand in building a positive image amid consumer perceptions of Chinese-made products. This study employed a quantitative approach with a descriptive-causal research design. Data were collected through surveys of LUTA consumers in several major cities in Indonesia and analyzed using Structural Equation Modeling (SEM) to examine both direct and indirect relationships among the variables. The findings indicate that product quality has a positive and significant effect on repurchase intention, both directly and through brand image as a mediating variable. Brand image also plays a crucial role in strengthening consumer loyalty towards LUTA products. These results highlight the importance of improving product quality and enhancing brand image as strategic efforts to retain existing customers and support sustainable business growth.

Keywords: Product Quality; Brand Image; Repurchase Intention; Dehumidifier; PT Dwi Mitra Teknindo

This article is licensed under [CC BY-SA 4.0](https://creativecommons.org/licenses/by-sa/4.0/) 

INTRODUCTION

Indoor air quality has received increasing serious attention since the Covid-19 pandemic, as humidity factors have been shown to be influential in minimizing the spread of the virus and maintaining respiratory health (Morawska et al., 2021). In Indonesia, which has a tropical climate with humidity levels that can exceed 80%, problems such as mold, material damage, and health problems are significant challenges. Excess humidity can increase the risk of allergies, asthma, and respiratory tract infections (WHO, 2018; Future Market Insight, 2023), so the need for moisture control solutions is increasing.

In line with this, the demand for dehumidifiers continues to grow. The Market Research Future report (2022) notes that the dehumidifier market is growing at a Compound Annual Growth Rate (CAGR) of 4.2% from 2018 to 2022 and is expected to increase to 5.9% in the period 2023–2033. In Indonesia, this trend is becoming more pronounced, especially in air-conditioned environments that are often unable to fully cope with excess moisture. This indicates that dehumidifiers are not only a household need but also an industry (Statista, 2021).

In addition to individual consumers, the industrial sector is also showing an increase in the use of dehumidifiers. Chen et al. (2020) emphasized that the food industry, archive storage facilities, and medical services need dehumidifiers to maintain product quality and the work environment. This reinforces the role of dehumidifiers as an important solution that not only impacts individual health but also the sustainability of production processes and work efficiency in various sectors.

In the Indonesian context, PT Dwi Mitra Teknindo sees great opportunities from this trend. As a manufacturing, trading, and contractor company, PT Dwi Mitra Teknindo is an official distributor of LUTA products and has experience working with more than 100 large companies. The company also distributes a variety of other brands such as Bry-Air, ITU, ORI, UCAN, KUKIATSU, DAIKIN, YORK, BOREAS, Vaisala, and Midea. However, among these brands, LUTA is the main focus that still needs to strengthen the brand image in the minds of Indonesian consumers.

LUTA itself is a dehumidifier brand from China that has been present since 2012 and is included in the ranks of the Top 3 dehumidifier manufacturers in the country. This product is known for excelling in terms of value engineering at an affordable price but still internationally certified (ISO9001, CE, GS). Nevertheless, the negative stigma of the Indonesian people towards products from China that are considered less durable is a challenge in itself. Therefore, communication strategies and brand image improvement are important so that LUTA can win the trust of Indonesian consumers.

The positive trend of the recovery of Indonesia's manufacturing industry after the Covid-19 pandemic has further increased the opportunity for the dehumidifier market. Data for 2023 shows that the pharmaceutical, healthcare, electronics, food-beverage, and textile sectors are the main drivers of demand for these devices. With tropical climatic conditions and the industry's need for international quality standards, the demand for dehumidifiers is expected to continue to increase. This opens up space for LUTA to expand the market while increasing product penetration through strengthening the right marketing strategy.

However, the sales report of LUTA products shows a decrease in buying interest again in the 2022–2023 period. Although the national dehumidifier market is growing, the lack of a strategy to retain long-time customers makes LUTA sales unstable. This indicates that there are problems in the aspects of product quality, brand image, and after-sales service that affect consumer loyalty. In fact, previous research confirms that retaining old customers is much easier and cheaper than attracting new customers (Euphemia FT Yuen, 2010; Shabankareh et al., 2024).

Based on these conditions, this study is focused on the influence of product quality and brand image on the interest in buying back LUTA products in Indonesia. This research is expected to be able to provide a comprehensive picture of how consumers assess the quality and image of products in the context of increasingly fierce market competition. Practically, the results of the research can be the basis for PT Dwi Mitra Teknindo's strategy to increase consumer loyalty, while theoretically this research contributes to enriching the literature on the relationship between product quality, brand image, and repurchase behavior in the Indonesian market.

Based on the growing emphasis on indoor air quality management post-pandemic, recent studies have highlighted the critical role of dehumidifiers in mitigating health risks and supporting industrial operations. Research by Morawska et al. (2021) confirms that controlling indoor humidity is essential for minimizing viral transmission and maintaining respiratory health, a concern particularly relevant in high-humidity regions like Indonesia. Furthermore, industry analyses from Future Market Insights (2023) and Statista (2021) indicate rising demand for dehumidifiers across both residential and industrial sectors, reinforcing their functional and economic significance in tropical climates.

Within this expanding market, product quality and brand image have been widely recognized as key determinants of consumer repurchase behavior across various industries. Studies such as those by Keller (1993) and Kotler & Keller (2016) establish that perceived product quality significantly enhances brand image, which in turn fosters customer loyalty and repurchase intention. Similarly, Santika & Mandala (2019) demonstrated that brand image mediates the relationship between product quality and repurchase intention, suggesting that both constructs are interdependent in driving long-term consumer commitment.

However, much of the existing literature focuses on fast-moving consumer goods (FMCG) or branded luxury items, with limited emphasis on durable industrial products such as dehumidifiers. This represents a significant research gap, as industrial purchasing decisions are often influenced by utilitarian factors—such as reliability, durability, and technical performance—rather than emotional or symbolic brand attributes. Moreover, the specific context of Chinese-made industrial brands operating in emerging markets like Indonesia remains underexplored, particularly concerning persistent consumer skepticism about product origin and quality (Zhao et al., 2020; Zhang & Wang, 2019).

The urgency of this research is underscored by the market dynamics faced by PT. Dwi Mitra Teknindo and the LUTA brand. Despite favorable industry growth, sales fluctuations and low customer retention indicate underlying issues in product perception and brand trust. Retaining existing customers is not only more cost-effective than acquiring new ones but also critical for sustainable growth in business-to-business (B2B) environments, as emphasized by Reichheld (2003) and Shabankareh et al. (2024). Thus, understanding the drivers of repurchase intention in this context is both timely and practically necessary.

This study introduces novelty by examining the mediating role of brand image between product quality and repurchase intention within an industrial product setting—a less researched area—while also addressing the unique challenge of origin-based stigma associated with Chinese products in Indonesia. Unlike previous studies that often treated brand image as a dominant mediator, this research tests its relevance in a market where functional performance may outweigh brand perception, thereby offering contextual and theoretical refinement.

The purpose of this research is to analyze the influence of product quality and brand image on repurchase intention for LUTA dehumidifiers in Indonesia, and to determine whether brand image serves as a mediating variable in this relationship. Using a quantitative approach and structural equation modeling (SEM), the study aims to provide empirical evidence clarifying the mechanisms through which product quality and brand perceptions drive repeat purchase decisions in a B2B context.

The benefits of this study are twofold: theoretically, it contributes to the body of knowledge on consumer behavior and brand management within industrial marketing, especially in emerging economies. Practically, it offers PT. Dwi Mitra Teknindo evidence-based insights to refine its product development, branding strategies, and customer retention programs, ultimately supporting sustainable competitive advantage in Indonesia's growing dehumidifier market.

METHOD

This study uses a quantitative approach with the aim of measuring and analyzing the causal relationship between product quality variables, brand image, and buyback interest. This

approach was chosen because it is able to objectively explain the relationships between variables through numerical data collection and statistical analysis. The type of research used is causal descriptive, where descriptive research aims to describe the characteristics of variables, while causal research examines the direct and indirect influences between variables.

To analyze the causal relationship, this study used Structural Equation Modeling (SEM). SEM was chosen because it can analyze the simultaneous relationship between variables, either directly or through mediation variables. Thus, the results of this study not only describe the relationship, but also explain the underlying mechanisms, so they are explanatory. The results obtained are expected to be able to make a theoretical contribution as well as practical recommendations for PT Dwi Mitra Teknindo.

The research location is focused on consumers of LUTA brand dehumidifier products in urban areas of Indonesia, such as Jakarta, Surabaya, and Bandung, which have high humidity levels and high demand for these products. The research site includes both individual and corporate consumers (residential, commercial, and industrial) who have used LUTA products. Respondents were selected purposively to ensure the relevance of the data to the focus of the research.

The object of the study was consumers who had used LUTA brand dehumidifier products. The focus of the research is directed at consumers' perception of product quality, brand image, and the tendency to buy back. In addition to consumers, the research objects also include attributes of LUTA products such as features, durability, design, and energy efficiency, which are related to product quality variables. Thus, this research is expected to be able to describe how consumer perceptions are formed and influence repurchase decisions.

This study uses two main data sources, namely primary data and secondary data. Primary data was obtained through a survey with a structured questionnaire distributed to consumers of LUTA products, with indicators measuring product quality, brand image, and repurchase interest. Secondary data was obtained from PT Dwi Mitra Teknindo's internal reports, journal articles, and relevant books to strengthen the analysis. The combination of these two data sources is expected to result in a comprehensive analysis.

The data analysis process is carried out using the SEM method which involves the stages of raw data processing, validity and reliability tests, and structural model testing. SEM allows the integration of measurement models and structural models in a single analysis, so that it can test both the direct relationship and the mediating role of brand image in influencing repurchase interest. With this analysis technique, the research is expected to be able to provide an in-depth picture of the dynamics of the LUTA brand dehumidifier market in Indonesia.

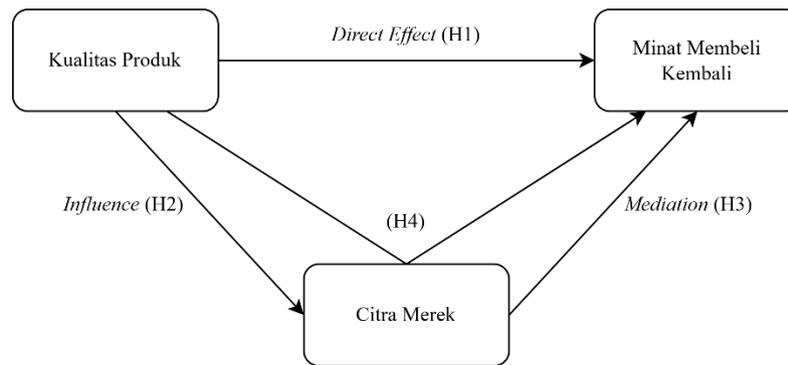


Figure III. 1 Research models and research hypotheses

Based on relevant research models and theories, four hypotheses were proposed to identify direct and indirect influences between variables.

Hypothesis 1 (H1): Product quality has a direct effect on repurchase interest.

Previous research has shown that high product quality increases consumer satisfaction, which ultimately encourages them to make a repeat purchase (Kotler & Keller, 2016). Product quality dimensions such as performance, durability, and features have an important role in creating positive perceptions that affect consumer interest in returning to buy the product.

Hypothesis 2 (H2): Product quality has a direct effect on brand image.

According to Keller (1993), good product quality creates positive associations in the minds of consumers, which ultimately builds a strong brand image. When consumers feel that a product meets or exceeds their expectations, the brand associated with the product will be considered more reliable and trustworthy.

Hypothesis 3 (H3): Brand image has a direct effect on repurchase interest.

A positive brand image encourages customer loyalty and increases their intention to return to buy products from the same brand (Keller, 1993). Research by Lee and Lee (2018) also shows that consumers who have a positive perception of brands tend to be more loyal and interested in continuing to use products from the brand.

Hypothesis 4 (H4): Brand image mediates the relationship between product quality and repurchase interest.

Previous research confirms that brand image strengthens the influence of product quality on repurchase interest (Santika & Mandala, 2019). In other words, product quality not only has a direct impact but also indirectly through the formation of a positive brand image.

RESULTS AND DISCUSSION

This study aims to understand the influence of product quality, brand image, and buyback interest on the success of marketing of LUTA brand dehumidifiers in Indonesia by focusing on PT Dwi Mitra Teknindo as a strategic distribution partner. Data was obtained through literature reviews, internal reports, product documentation, and consumer surveys to illustrate customer perceptions and decisions. PT Dwi Mitra Teknindo, which is engaged in the field of RHVAC-MEP with more than five years of experience and more than 140 projects, provides dehumidifier rental services, humidifier design consulting, installation, and maintenance. Its main markets include the pharmaceutical, food-beverage, automotive, textile industries, as well as residential and commercial sectors such as hospitals and hotels. With this approach, the

research is expected to make an academic contribution to the study of industrial marketing as well as a practical reference for companies in formulating more effective business development strategies.

Factors That Trigger Loyalty

Based on informal interviews and correspondence conducted with customers, there are several main factors that drive the decision to repurchase a LUTA dehumidifier, including:

1. Ease of Operation

LUTA products are known for their user-friendly design, so they can be used without complicated technical training. This is highly appreciated by the industrial sector with limited operator resources.

2. Energy Efficiency and Stable Performance

LUTA dehumidifiers are proven to be able to maintain room humidity consistently with efficient power consumption. This performance is important for companies in the pharmaceutical, hospital, and manufacturing sectors, which require certain environmental conditions.

3. Availability of Spare Parts and Service

PT Dwi Mitra Teknindo guarantees the availability of after-sales service and spare parts, so the company is not worried about the risk of downtime.

4. Previous Customer Satisfaction

Some companies mentioned that repurchases were also driven by internal testimonials from other divisions that had previously used LUTA products.

Implications for Marketing Strategy

The high repurchase rate indicates that LUTA products have been able to build a positive image and meet user expectations. In a B2B industry like this, purchasing decisions are heavily influenced by previous experience, technical performance, and quality of service support. Therefore, customer loyalty is not only an indicator of past success, but also an important asset in maintaining the sustainability of market share.

In conclusion, from the results of the analysis of sales data and customer feedback, it can be concluded that the interest in buying back for LUTA products is quite high. This is a strong indication that the product has met the needs of users and is able to maintain market trust. This fact is also an important foundation for companies in developing customer retention strategies and future market development.

Descriptive Analysis of Consumer Surveys

LUTA Brand Recognition Rate

The survey results show that the level of LUTA brand recognition is at a medium to high level, with 25.93% of respondents stating that they are very familiar with LUTA and 44.44% stating that they are quite familiar. Cumulatively, more than 70% of respondents have had knowledge or heard of this brand. This reflects that LUTA is starting to successfully build brand awareness, especially among the food, pharmaceutical, and hospital industries where this dehumidifier is used.

However, there are still 18.52% of respondents who stated that they did not know LUTA and 11.11% stated that they did not know it at all. These findings show that there is potential

for development in brand communication strategies, especially to reach market segments that have not been actively exposed to marketing campaigns or product education.

According to Aaker (1996), brand awareness reflects the ability of consumers to recognize or remember a brand in a certain product category. High brand awareness is an important foundation in building brand equity, as it plays a role in influencing consumer choices, creating loyalty, and increasing the effectiveness of marketing communications.

Dalam konteks ini, meskipun LUTA telah memiliki pijakan awal dalam membangun brand awareness, peningkatan strategi promosi, edukasi, dan distribusi informasi tetap diperlukan. PT. Dwi Mitra Teknindo sebagai pemegang merek perlu memperluas pendekatan komunikasi, termasuk memperkuat saluran digital, kerja sama lintas sektor, dan pemanfaatan testimoni pelanggan agar merek LUTA dapat lebih kuat dan dikenal secara luas di pasar Indonesia.

Consumer Confidence Level in LUTA Product Quality

The level of consumer trust in product quality is an important indicator in building loyalty and interest in buying back. Based on the survey results, most of the respondents showed a positive level of trust in LUTA products. As many as 29.63% of respondents stated that they are very confident, and 40.74% stated that they have enough confidence in the quality of the product. This shows that more than 70% of respondents have a positive perception of the performance and usability of LUTA dehumidifiers, both in terms of functionality and reliability.

These findings indicate that the quality of LUTA products has met the expectations of most users, who have most likely experienced their benefits firsthand in the hospital, manufacturing or other moisture-sensitive work environments. Trust in quality is part of the consumer's cognitive evaluation of the brand value offered by the company (Kotler & Keller, 2016).

However, there are still 18.52% of respondents who feel less trusted, and 11.11% who stated that they do not trust the quality of the product. This shows that even though the majority of consumers have trust, there are still negative perceptions that need to be addressed. Low trust can stem from an suboptimal user experience, lack of technical information, or an initial perception of out-of-brand products (in this case Chinese products) that are often associated with low quality (Zhao et al., 2020).

For this reason, PT. Dwi Mitra Teknindo needs to strengthen the credibility of LUTA products through quality assurance strategies, publication of performance test results, and customer testimonials. Improved after-sales service and technical education can also help improve the perception of quality among industrial users.

Consumer Impressions on the Durability of LUTA Products

Product durability is one of the important dimensions in quality evaluation that has a direct effect on satisfaction and repurchase decisions. Based on the survey results, as many as 14.81% of respondents considered LUTA products to be very durable, while 40.74% stated that they were quite durable. This shows that more than half of respondents have a positive perception of product durability, even though it has not reached a very optimal level.

However, attention needs to be paid to 33.33% of respondents who consider LUTA products to be less durable and another 11.11% who consider them not durable. These findings show that almost half of respondents have unsatisfactory concerns or experiences regarding the lifespan or durability of dehumidifier units. This can be due to high usage intensity, extreme

operational environmental conditions, or a general perception of foreign-branded products that are associated with low durability (Zhang & Wang, 2019).

In the context of the industrial market, the perception of durability is crucial because it is directly related to long-term operational costs and investment effectiveness (Kotler & Keller, 2016). Therefore, PT. Dwi Mitra Teknindo as an official distributor needs to ensure technical education to users, periodic maintenance systems, and transparency of component information so that consumer perception of product durability can be improved. Emphasis on cooling technology, automatic protection systems, and quality materials also need to be shown as added value of products.

Frequency of LUTA Promotional Display

Exposure to product promotion plays an important role in building awareness and strengthening brand recall. Based on the survey results, the majority of respondents (51.85%) stated that they sometimes see advertisements or promotions of LUTA, while 29.63% of respondents often see such promotions. This shows that the promotional strategy carried out by PT. Dwi Mitra Teknindo has had a quite good impact on some consumers, especially in the industrial segment and institutions who are already familiar with the product.

However, the finding that 14.81% of respondents rarely saw ads and 3.70% never saw ads at all indicates that there is room for improvement in terms of promotion intensity and reach. In a business-to-business (B2B) context, promotion often relies on direct media such as catalogs, exhibitions, email marketing, or professional references. While this approach is effective for industry segmentation, the results of this survey indicate the need to diversify promotional channels, including presence on digital platforms, industrial social media, or endorsements from institutions that are already customers.

According to Kotler and Keller (2016), effective promotion in the industrial market must combine an informative approach with the strengthening of product value through case studies or user testimonials. Therefore, PT. Dwi Mitra Teknindo can strengthen the frequency and quality of promotional messages through the delivery of a narrative of the successful implementation of LUTA products in various sectors (e.g. hospitals, pharmaceuticals, and food factories) so that potential consumers gain greater trust.

Consumer Recommendations for LUTA Products

The level of willingness of consumers to recommend a product is an important indicator of satisfaction and trust in the brand. In this survey, as many as 40.74% of respondents stated that they would definitely recommend LUTA products, reflecting the loyalty and satisfaction of most users. This indicates that PT. Dwi Mitra Teknindo has succeeded in building a strong relationship with its customers, especially through product performance that meets the needs of industrial users.

However, there are still 29.63% of respondents who only answered "maybe", indicating that although their experience with LUTA products is not bad, there is still doubt or uncertainty to actively recommend it. This can be caused by various factors, such as a lack of brand differentiation compared to competitors, or experiences that are not very strong emotionally or functionally.

As conveyed by Reichheld (2003) in the concept of Net Promoter Score, customers who actively recommend products are the most valuable source of growth in the long run because they become loyal promoters who expand the market through word of mouth.

Although most consumers have shown a positive attitude, PT. Dwi Mitra Teknindo still has the opportunity to strengthen its brand advocacy strategy and increase trust through user testimonials, service improvements, and strengthening product quality image.

Consumer Perception of LUTA Product Prices

Price is one of the key elements in the marketing mix that directly influences consumer purchasing decisions, especially in the B2B market and technical products such as dehumidifiers. Based on the survey results, the majority of respondents, namely 44.44%, considered that the price of LUTA products was more affordable than similar products on the market. This reflects that LUTA has succeeded in building a perception of perceived value in the minds of consumers, where the quality offered is considered comparable to or higher than the price paid.

In addition, as many as 33.33% of respondents think that the price of LUTA is the same as that of competitors. This perception can be interpreted that consumers have not seen significant differentiation in terms of price or have not received a strong enough value-added experience from the LUTA brand. Therefore, while not negative, these results indicate the need for a more strategic value communication approach.

However, 22.22% of respondents considered the price of LUTA products to be more expensive than similar products. This segment needs to be watched because high prices that are not accompanied by the perception of superior quality or service have the potential to reduce consumer loyalty. Therefore, the pricing strategy needs to be strengthened by image quality and product differentiation, for example through improved after-sales service or more prominent technical performance demonstrations.

In the theory of perceived price fairness, the perception of fair prices is greatly influenced by the perception of product quality and reliability. Therefore, companies not only need to be competitive in setting prices, but also actively communicate a clear and convincing value proposition.

Construct Validity and Reliability Analysis

The analysis of the validity and reliability of the construct is the initial stage in ensuring that the measurement instrument used in this study is really able to represent the theoretical construct being studied. In the context of this study, the construct of product quality, brand image, and buying interest was tested using the PLS-SEM approach with SmartPLS software. Evaluations were carried out on two main aspects: internal reliability and convergent validity.

Construct Reliability

The results of the analysis showed that all three constructs met the internal reliability threshold. Cronbach's Alpha and Composite Reliability (CR) values for each construct are above 0.70, which means that the consistency between indicators in one construct is relatively high (Hair et al., 2019).

In practical terms, this indicates that respondents' perceptions of product quality, brand image, and buyback interest are quite stable and do not show confusing variability. Especially for product quality constructs and buyback interest, CR values close to 1 reflect a very strong cohesion between statement items. This means that respondents consistently respond to questions in one coherent direction.

Meanwhile, Cronbach's Alpha value for brand image constructs stood at 0.722 — although it was at the lower limit, it still met the minimum requirements. This could indicate that consumer perceptions of LUTA brand image are relatively diverse, and there is still room to strengthen these perceptions through more consistent branding strategies and clearer differentiation.

Validity Convergence

The Average Variance Extracted (AVE) value for the three constructs has also exceeded the threshold of 0.50, which indicates that each construct has managed to capture the variance of its indicators adequately. In essence, this means that the indicators in the questionnaire have been able to represent the construct well—at least more than half of the information captured came from the construct, not from measurement errors.

Interestingly, the AVE Brand Image value is only slightly above the minimum limit (0.501), which can be interpreted as a signal that although the indicator is valid, consumer perception of the LUTA brand image has not been very strong or consistent. This reinforces previous findings that the strength of association and brand uniqueness can still be improved.

Implications of the Findings

From a practical point of view, these results provide initial validation that the measurement model in this study is reliable and feasible to proceed to the structural analysis stage. However, from a strategic perspective, these findings show the need for special attention to the brand image aspect, as there are still indications that consumer perception is not yet fully solid. Companies can reinforce this dimension through a more targeted and consistent approach to brand communication — for example, by aligning brand messages, strengthening product feature differentiation, and instilling values relevant to the industry's target market.

Structural Model Analysis

Once the validity and reliability testing shows that all constructs are feasible, the next step is to evaluate the structural model (inner model) to test the relationships between latent variables. This evaluation included the analysis of the determination coefficient (R^2), effect size (f^2), and path coefficient significance obtained from the bootstrapping algorithm in SmartPLS.

Coefficient of Determination (R^2 and R^2 Adjusted)

The R-square value of 0.989 and the adjusted R-square of 0.988 indicate that the 98.9% variability of buyback interest can be explained by two exogenous constructs, namely product quality and brand image. This means that the model has very high predictive capabilities, well beyond the 0.67 threshold for the "robust" category according to Chin (1998). Almost the same amount of adjusted R^2 indicates that the model is not overfitting and stable despite the relatively small sample count (27 respondents), in accordance with the principle of partial model evaluation.

Effect Size (f^2)

The f-square analysis shows a significant difference in contribution between the two exogenous constructs to the endogenous construct:

- Product quality → buyback interest had an f^2 value of 67,094, which was categorized as a very large effect, even far exceeding the 0.35 threshold for large effect size (Hair

et al., 2019). This indicates that the technical quality of the product is a major determinant in customer loyalty to LUTA.

- The brand image → the interest in buying back has an f^2 value of 0.036, which is in the category of small effects. Although it still contributes to the model, the role of brand image is relatively not as strong as product quality in driving interest in buying back.

Path Significance Test (Path Coefficients)

The path significance test was carried out using the bootstrapping method of 5000 subsamples. The results show:

- Product quality → interest in buying back has a path coefficient of 0.865, a T-statistical value of 9.152, and a P-value of 0.000. Since the T-value is more than 1.96 and the P-value is < 0.05 , this effect is statistically significant. This means that the higher the perception of quality of LUTA products, the greater the tendency of consumers to buy back.
- Brand image → interest in buying back has a path coefficient of 0.153, T-statistic 1.781, and P-value 0.075. This value is below the 5% significance threshold, so the effect is not statistically significant even though it has a positive value. This suggests that positive perceptions of brand image are not yet strong enough to directly drive repurchase decisions by consumers.

Brand Image Mediation Analysis

To find out whether brand image mediates the influence between product quality and repurchase interest, an indirect relationship analysis was conducted:

Product quality → brand image show a very high coefficient of 0.968 with a T-statistic of 93.915 and a P-value of 0.000, which shows a significant and very strong influence.

However, because the Brand Image → Repurchase Interest pathway is not significant, there is no significant mediation between product quality and repurchase interest through brand image. This means that while product quality forms a strong brand image, it is unable to pass on its influence significantly to repurchase intent. Although in theory brand image is often considered an important factor in shaping consumer loyalty, the results of this study show that its influence on buyback interest and as a mediator is not statistically significant. There are several rational reasons that support these findings, especially when they relate to the industry context and consumer behavior in repurchase decision-making.

1. Product Quality is More Dominant in Repurchase

One of the main explanations for why brand image is insignificant is because consumers place more emphasis on real performance and hands-on experience of the product. In the context of industrial dehumidifier products such as LUTA, consumers—most of whom come from institutions such as factories or hospitals—have a utilitarian orientation, where actual performance is much more important than brand perception.

As emphasized by Keller (2013), brand image does have a big influence in the initial purchase decision process, but in repeat purchases, the quality and actual satisfaction factors are more dominant. In this study, product quality was shown to significantly and strongly encourage repurchase intent, showing that customers rely more on real evidence than image.

2. Brand Image Tends to Play a Role in First Purchase

Brand image often plays an important role as a driver of first purchases, especially when consumers have no prior experience. However, in repurchases, decisions tend to be shaped by personal experiences, rather than expectations built through branding. This is in accordance with a consumer behavior model that states that repeat purchase intention is more influenced by post-purchase evaluations, including product satisfaction, reliability, and user experience (Oliver, 1999).

3. Other Factors That Are More Influential

Beyond quality and brand image, it is possible that other factors such as price, availability, institutional habits, and the urgency of operational needs have a greater influence. For example, in a B2B environment such as industry or healthcare, purchases tend to be based on technical evaluation, cost efficiency, and specification suitability. Therefore, consumers may still buy back even if they are not very associated with a particular brand, as long as the product meets operational needs.

Implications of Research Results

The results of this study provide a number of relevant implications, both from an academic and practical perspective, especially in the context of managing marketing strategies and developing LUTA brand dehumidifier products.

1. Theoretical Implications

This study reinforces findings in previous literature that product quality is a major determinant in shaping consumer buyback interest, especially in the category of utilitarian products such as humidity control equipment. These findings support theories of consumer behavior that claim that repurchase decisions are influenced more strongly by the actual experience of using the product than by brand perception (Oliver, 1999; Keller, 2013). On the contrary, brand image proved to have no significant influence, which suggests that the symbolic power of a brand is not necessarily enough to drive purchase loyalty to industrial products.

2. Practical Implications

For the management of PT. Dwi Mitra Teknindo as a LUTA producer, there are several strategic implications of this result:

- Focus on Strengthening Product Quality

Given that product quality has been proven to significantly affect buyback interest, companies need to maintain and improve product quality standards, especially in terms of functional reliability, durability, and operational efficiency. Investment in research and development (R&D) focused on improving technical features is highly recommended.

- Optimization of Branding and Promotion Strategies

Brand image has not been proven to be statistically significant, but this does not mean that it is not important. This implication actually highlights the need to strengthen the brand communication strategy so that the values carried by LUTA are better known and appreciated by consumers. This approach can include storytelling, market education, and the publication of case studies of product use in real industries.

- Segmentation and Personal Branding for Institutional Consumers

Considering that most of the respondents are from the industrial sector and professional institutions, the branding approach needs to be tailored to the needs of B2B. This means that performance-based, cost-efficient, and industrial customer testimonials will be more effective than the emotional strategies commonly used in the B2C context.

- Evaluation of Price Perception and Durability

The survey shows that some consumers feel that the price of LUTA is more expensive and its durability is still less than optimal. Therefore, in addition to maintaining quality, companies need to consider value-added strategies such as superior after-sales service, convincing warranties, or loyalty programs so that consumers' perceptions of price and durability can be more positive.

3. Implications of Internal Policy

The results of the research can also be used as the basis for the company's internal evaluation in formulating brand management and product development policies. Companies can set more measurable Key Performance Indicators (KPIs) in terms of improving product technical quality and strengthening Customer Relationship Management (CRM) to ensure customer loyalty is built through experience, not just perception.

CONCLUSION

This study confirms that product quality has a strong and significant direct impact on repurchase intention for LUTA dehumidifiers in Indonesia, emphasizing the importance of functional performance, durability, and reliability in driving customer loyalty within an industrial B2B context. Conversely, brand image showed no significant effect on repurchase intention and did not mediate the relationship between product quality and repurchase intention, suggesting that practical product experience outweighs brand perception in this market. These results indicate that PT. Dwi Mitra Teknindo should focus on maintaining and improving tangible product attributes to ensure long-term customer retention. Future research should broaden the scope by including variables like customer satisfaction, price perception, and after-sales service to better understand repurchase intentions. Additionally, studies conducted in different regions, with larger samples, or exploring cultural influences, origin effects, and industry-specific moderators could provide deeper insights into the role of brand image across various contexts and product categories.

REFERENCES

- Aaker, D. A. (1996). *Building strong brands*. Free Press.
- Chen, J., Li, W., & Zhou, H. (2020). The role of dehumidifiers in commercial and residential settings: A review of efficiency and applications. *Environmental Science Journal*.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Lawrence Erlbaum Associates.
- Euphemia, F. T. Y. (2010). *Customer retention strategies in competitive markets*. Academic Press.
- Future Market Insights. (2023). *Global dehumidifier market outlook*. <https://www.futuremarketinsights.com>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2019). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). SAGE Publications.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1-22.
- Keller, K. L. (2013). *Strategic brand management* (4th ed.). Pearson Education.

- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson.
- Lee, J., & Lee, W. J. (2018). The impact of brand image on consumer behavior: Evidence from the luxury goods market. *Journal of Brand Management*, 25(5), 396-408.
- Market Research Future. (2022). *Dehumidifier market research report: Global forecast to 2033*. Market Research Future.
- Morawska, L., Cao, J., & Milton, D. (2021). The importance of controlling indoor humidity to prevent airborne transmission of viruses. *Journal of Indoor Air Quality*.
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(Special Issue), 33-44. <https://doi.org/10.2307/1252099>
- Reichheld, F. F. (2003). The one number you need to grow. *Harvard Business Review*, 81(12), 46-54.
- Santika, I. W., & Mandala, K. (2019). The role of brand image in mediating the effect of product quality on repurchase intention. *Journal of Business and Management*, 21(1), 33-40.
- Shabankareh, M., Nazari, K., & Ghorbani, H. (2024). Customer retention strategies in competitive markets: A comprehensive analysis. *International Journal of Marketing Studies*, 16(2), 45-62.
- Statista. (2021). *Household demand for humidity control devices in tropical regions*. <https://www.statista.com>
- World Health Organization. (2018). *Indoor air quality guidelines: Dampness and mould*. <https://www.who.int>
- Zhang, X., & Wang, J. (2019). Country-of-origin effect on perceived quality: A comparison between emerging and developed markets. *International Journal of Market Research*, 61(3), 289-304. <https://doi.org/10.1177/1470785318782871>
- Zhao, Y., Zhao, Y., Deng, S., & Zhou, X. (2020). Consumer skepticism of foreign brands: Antecedents and consequences. *Journal of Business Research*, 109, 411-420. <https://doi.org/10.1016/j.jbusres.2019.12.042>