

Should Your Brand Go Sustainable: The Case of Skincare Brand in Indonesia

Putu Devi Anjani Putri *, Andreas Reynara Prasadha Putra, and Rini Setiowati

ABSTRACT

Nowadays, sustainability is a common issue among Indonesians. Many brands go sustainable to grab the green community into buying their products, no exception for skincare products. Furthermore, skincare is now a must-have essential for everyone, which makes skincare brands consider going sustainable; using green marketing techniques could also increase customers' perceived quality and, at the same time, reduce perceived risk, which will directly affect customer loyalty. This research used a quantitative approach through an online survey with 149 sustainable skincare customers. Researchers found that Sustainable perceived risk significantly impacts customer trust, customer trust also significantly impacts customer loyalty, and sustainable perceived quality significantly impacts customer loyalty. Furthermore, the country of origin factor significantly affects sustainable perceived quality's impact on customer trust positively.

Submitted: April 25, 2024

Published: July 13, 2024

 10.24018/ejbmr.2024.9.4.2382

*BINUS Business School Master Program,
Management Department, Bina Nusantara
University, Indonesia.*

*Corresponding Author:
e-mail: putu.putri001@binus.ac.id

Keywords: Customer loyalty, Customer trust, Skincare, Sustainability.

1. INTRODUCTION

At the height of green awareness, customers are also becoming more cautious about choosing a brand. Customers are no longer buying a brand merely because of its functionality or quality. They buy a brand that represents the values that they stand for or support a movement. Today, most top skincare brands are leaning towards a more sustainable approach; initiatives range from switching to packaging made from recyclable materials to not using chemical ingredients.

According to [Zion Market Research \(2024\)](#), The global market for natural and organic cosmetics had a value of approximately USD 21.48 billion in 2023. It is projected to reach around USD 37.44 billion by 2032, with a compound annual growth rate (CAGR) of about 7.19% from 2024 to 2032. Furthermore, Natural ingredients are also becoming increasingly popular among Indonesian skincare users; according to [Jakpat \(2023\)](#), 81% of Indonesians consider the brands' commitment to social and environmental issues. This implies their interest in green consciousness. As the industry becomes increasingly competitive, skincare brands in Indonesia are looking for ways to stay relevant. Therefore, they need to establish the right image or perception within the market. As green consciousness continues to bloom within the market, brands should ensure they have conveyed sustainable qualities in their marketing initiatives.

Green marketing should be able to increase customers' perceived quality and reduce perceived risk ([Chen, 2010](#)). By improving perceived sustainable quality, brands can obtain a competitive advantage within the market, especially when the sustainable skincare trend is adequately new in Indonesia. However, their green marketing strategy should ensure credibility and trust to avoid *greenwashing*. Greenwashing refers to a label for a brand's marketing initiatives that are perceived as not truthful or too good to be true. [Arnett \(2019\)](#) found a brand that claims to be "natural" but did not actually disclose its full ingredients list on its website, leaving out less naturally derived ingredients such as parabens, there was also a lack of transparency on their against animal testing claims. This phenomenon often destroys customers' trust and further damages their relationship with their customers. Thus, brands should be attentive in constructing their green marketing strategy. Past studies have shown varied results on how green marketing affects perceived sustainable quality and risk, but little research has been conducted in the Indonesian market.

Aside from greenwashing, customers' understanding of ingredients can also contribute to their perceived risk. It is believed that the origin of a natural ingredient can affect customers' perception of efficacy and quality. For example, Centella Asiatica, one of the famous ingredients found in Korean skincare brands, successfully captivated



the Indonesian market. Little did they know that Centella Asiatica plants are everywhere in Indonesia. They are wild little plants that people can find in their gardens. This implies that the country of origin factor could affect Indonesian customers' views, thus affecting their trust in the products.

In the beauty industry, customer trust is one of the crucial aspects that beauty brands have to achieve. Beauty products directly contact the skin, and customers will think twice about choosing their products. Beauty brands obtain trust when customers acknowledge that their products are safe and credible. When building a sustainable perception, a brand needs to be transparent about the green ingredients it uses in its product. This trust in green quality is known as green trust. Achieving green trust can be relatively tricky in the beauty industry. Brands have to ensure belief in their green ingredients and efficacy. Furthermore, customer trust can form brand loyalty, in which they become the brand's associates. When they become associates, they will promote the product for free through word of mouth, thus advancing the brand's growth within the market.

In conclusion, green marketing is crucial at the height of sustainability development, especially for skincare brands. Globally, most skincare brands are moving towards a sustainable approach. Meanwhile, not many local Indonesian skincare brands have tagged along with the trend. This could be because brands are cautious in their green marketing approach since there is little research on the best practices for green marketing in Indonesia. This research goal is to find a set of best practices for skincare brands that consider going sustainable.

2. THEORETICAL FRAMEWORK

This research explores and examines the literature and theoretical background around sustainability perception, customer trust, and customer loyalty through the angle of Indonesia's skincare brand. As illustrated in Fig. 1, the theoretical framework underpins these key constructs, providing a visual representation of the relationships and interactions studied in this context.

2.1. Sustainable Perceived Quality

Sustainable is a widely used term in industry practice to describe ethical attributes that are actions with positive impacts on society and/or the environment (Luchs et al., 2010). Therefore, the term applies to green, eco-friendly, socially conscious, and fair trade brands. Previous studies on sustainable brands use the perceived quality theory to define customers' positive perceptions. Chen and Chang (2013) proposed a novel construct where they defined green perceived quality as a customer's judgment about a brand's overall environmental excellence. Perceived quality is also a part of brand equity assets that provide value by giving a reason to buy, brand differentiation, room for extension, competitive price, and attracting channel member interest (Aaker, 1992). Thus, perceived quality has a significant role in presenting a brand in the market, which comes with some advantages for the brand. Moreover, perceived quality significantly influences customers' opinions (Falk et al., 2017).

2.2. Sustainable Perceived Risk

On the opposite side, some brand attributes could present negative quality for the customers, which is known as a risk. Perceived risk is consumers' subjective assessment of potential consequences (Peter & Ryan, 1976). A study by Fischhoff et al. (1978) shows that a more severe level of repercussion tends to have a higher perceived risk. When developing a sustainable perception, greenwashing is a risk. The pressure to "be green" prompted some brands to engage in greenwashing, a deceptive practice to influence public opinion on green perception (Akturan, 2018). While brands meticulously design their green marketing strategy, Szabo and Webster (2020) found that previous unpleasant experiences with misleading green marketing could lead to customers' perception of genuine green marketing as greenwashing.

2.3. Customer Trust

Customers often compare a brand with qualities that they consider a benchmark. These qualities formed a perception within the customers' minds about the brand. And whether they should trust it or not. According to Aydin and Özer (2005), positive perceived quality could lead customers to trust a brand. Customers' trust for the sustainable value of a brand is green. Green trust is customers' readiness to rely on a product or service based on a belief or expectation regarding environmental credibility, benevolence, and ability (Chen, 2009). Previous research, such as Marakanon and Panjakajornsak (2017), proves that green perceived quality directly affects trust. Assuming that the effect is the same within the skincare industry, this hypothesis was made:

H1: Sustainable perceived quality significantly impacts customer trust.

On the other hand, sustainable perceived risk has the opposite impact. Greenwashing would jeopardize green marketing practices and cause mistrust (Chen et al., 2018). Moreover, the grade of perceived risk could affect customers' decisions on whether to trust the product or not (Harridge-March, 2006). Previous studies have shown that sustainable perceived risk could negatively impact trust. Research by Chen and Chang (2013) shows that greenwash has a positive association with green confusion and negatively impacts green trust. This implies the following hypothesis:

H2: The sustainable perceived risk significantly impacts customer trust.

2.4. The Impact of Customer Trust and Sustainable Perceived Quality and Risk on Customer Loyalty

Customer loyalty is a strong desire to repurchase or patronize a favored product or service in the future despite situational influences and marketing efforts that would tempt customers to switch. According to Tuu et al. (2011), customer loyalty is a composite model that includes both the act of consumption (action loyalty) and expected consumption (future repurchasing). It is vital to establish a long-term relationship with customers to create customer loyalty (Arslan, 2020). Based on the social exchange theory, customer trust would increase customers' social embeddedness in the relationship (Sirdeshmukh et al.,

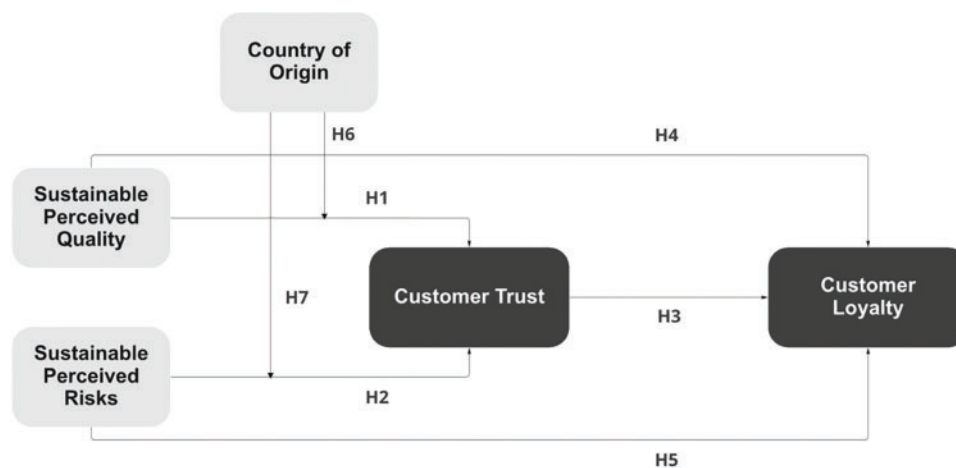


Fig. 1. Theoretical framework.

2002). Previous studies have explored the effect of trust on customer loyalty. Research by Liang (2008) shows that trust is the second most relationship-determining factor in the development of brand loyalty for luxury hotel brands. Past studies also found that trust is a crucial factor in driving customer loyalty (Aydin & Özer, 2005; Li, 2011; Sarwar et al., 2012). As a result of the above findings, the following hypothesis emerges:

H3: Customer trust significantly impacts customer loyalty.

Aside from trust, a brand could promote customers' loyalty by enhancing perceived quality. Previous studies have proven the effect of perceived quality on customer loyalty in different markets. Research on customer loyalty in luxury hotel brands determines perceived quality as the third most determining factor of behavioral loyalty (Liang, 2008). Another study in the retail industry also found that retail service quality is associated positively with brand loyalty (Yuen & Chan, 2010). Moreover, Aydin and Özer (2005) also found that perceived quality does affect customer loyalty in the Turkish mobile telecommunication market. Assuming the same effect applies to the beauty industry, the following hypothesis was developed:

H4: Sustainable perceived quality significantly impacts customer loyalty.

Just like the positive perception, the negative perception of a brand could also affect customer loyalty. A study by Nguyen-Phuoc et al. (2021) shows that perceived risk directly affects customer loyalty in the case of ride-sourcing services. Moreover, other studies have also found a link between perceived risk and customer loyalty (Hu, 2012; Lai-Ming Tam, 2012; Marakanon & Panjakajornsak, 2017; Huy Tuu et al., 2011). As a result, the following hypothesis is proposed in this study:

H5: Sustainable perceived risk significantly impacts customer loyalty.

2.5. Moderating Effect of Country of Origin

Nagashima (1970) defined the Country of Origin as the image, stereotype, and reputation that manufacturers and customers attach to the products of a specific country. This image affects customers' judgment of a product's quality. However, Botschen and Hemettsberger (1998) indicated

that customers connect their Country of Origin not only to product quality but also to feelings of national pride and memories of past vacations. Dobrenova et al. (2015) also confirmed that customers with a more positive Country of Origin have significant effects on product perception. Thus, based on the stated above, the following hypotheses have been developed:

H6: The country of origin factor affects significantly sustainable perceived quality's impact on customer trust.

H7: The country of origin factor affects significantly sustainable perceived risk's impact on customer trust.

3. METHODOLOGY

This study was conducted in Indonesia, focusing on local sustainable skincare users in Jakarta. The data was collected through an online questionnaire administered to participants. Non-probability sampling was utilized, and a total of 149 respondents were involved. However, the number was reduced to 121 after filtering users who have used local, sustainable skincare products and intend to repurchase or have already repurchased them. Demographically, the majority of respondents were female (86.78%), aged between 24–29 years (58.68%), private employees (38.84%), with a monthly income level of Rp 7,000,001–10,000,000.

The variables of this study were measured using a five-point Likert scale ranging from strong disagreement to strong agreement. The variable constructs were adapted from previous literature. Constructs for Sustainable Perceived Quality were adopted from Chen and Chang (2013), Sustainable Perceived Risk from Chen and Chang (2013), Customer Trust from Chen (2010), Customer Loyalty from Lau and Lee (1999), and Country of Origin from Schaefer (1997). To ensure linguistic equivalence, the constructs were translated into Indonesian and back-translated into English.

TABLE I: RESEARCH FINDINGS

Variable	Items	Results of the measurement model			Results of the structural model	
		λ	CR	AVE	Mean	Min
Sustainable perceived quality (SPQ)	The quality of the local sustainable skincare product(s) that I use can be a benchmark for other products in the same category.	0.807	0.872	0.576	4.405	3
	The quality of the local sustainable skincare product(s) that I use have a reliable commitment as a sustainable product.			0.743	4.612	3
	The local sustainable skincare product(s) that I use provide the quality results as promised.			0.746	4.281	2
	The local sustainable skincare product(s) that I use have a good image quality as sustainable products.			0.743	4.099	2
	The local sustainable skincare product(s) that I use can maintain its/their reputation as a sustainable product.			0.754	4.215	2
Sustainable perceived risk (SPR)	I feel that there is a chance of bad impact from using the local sustainable skincare product(s) that I am using now.	0.841	0.883	0.716	4.174	2
	The local sustainable skincare product(s) that I use have the opportunity not to work optimally because of the ingredients used.			0.845	4.413	3
	I feel aggrieved as an environmentalist from using this local sustainable skincare.			0.852	4.298	1
Customer trust (CT)	The results of using local sustainable skincare product(s) are as expected.	0.764	0.823	0.701	3.661	2
	The local sustainable skincare product(s) that I use now keep their promise as a sustainable product.	0.905			3.950	2
Customer loyalty (CL)	If other products are having promotions, I will be more inclined to buy the product(s) I am using now.	0.874	0.861	0.676	4.017	2
	If I cannot find this product in stores when I need it, I will look elsewhere.			0.864	4.099	2
	I would not believe it if someone gives a negative critique for this product.			0.718	3.851	1
Country of origin (COO)	I am satisfied with the quality of local sustainable skincare products.	0.899	0.875	0.777	4.157	2
	I feel that local sustainable skincare products have high value for money.			0.864	3.975	1

4. RESEARCH FINDINGS

The data was analyzed using variance-based structural equation modeling (SEM) using the SMART-PLS software. This analysis will help the researchers verify the hypotheses of this study.

4.1. Results of the Measurement Model

The researchers conducted convergent validity testing to validate the relation between the measurement constructs and the established theory by examining outer loading factors and Average Variance Extracted (AVE). Outer loading factors (λ) above 0.7 are considered highly satisfactory (Henseler et al., 2009). By that, items with loading factors below 0.7 were removed. After the removal, AVE values were examined. A minimum of 50% of the variance from manifest variables should be captured by the latent variables, which means the AVE values of the variables should be above 0.5 (Memon & Rahman, 2014). Looking at the final AVE values, all variables have captured more than 50% variance of manifest variables (Table I). Hence, it could be concluded that the data collected is valid for this research.

Reliability testing on the data was then conducted by examining the composite reliability. The standard value for composite reliability is 0.7, in which the variable is

considered modest (Litwin, 1995). The composite reliability values were all above 0.7, which means that the data collected is reliable for this research.

Inner model testing was also conducted by examining the data's predictive relevance and model fit. The predictive relevance examination was done by checking the values of construct cross-validated redundancy in Smart PLS, which are all above 0 and are valid for this research. The model fit examination was based on the NFI score of 0.668, which means that this model is a 67% fit for this research.

4.2. Results of the Structural Model

Before testing the variables for this research, some insights on customer preferences for local sustainable skincare were gathered. Out of 121 respondents, Sensatia Botanicals is the most preferred brand among the others at 43.4%, followed by Npure (32.8%) and Lizzie Parra Skin (32%). Aside from that, the type of product that is most used and purchased is facial wash 61.5%, followed by moisturizer (53.3%), serum/booster/ampoule (47.5%), toner (42.6%), and sunscreen (29.5%). It should also be noted that brands should be aware of the adoption of local sustainable skincare products in the market since only 36% of the respondents have used and purchased the product more than 3 times and intend to buy it again. The rest

TABLE II: R-SQUARE AND PATH COEFFICIENTS

Variable	R-square	Path coefficients		
		CT	CL	COO
SPQ		0.053	0.191	0.337
SPR		0.367	0.127	0.217
CT	0.487		0.551	
CL	0.584			
COO	0.269	0.403		

64% of respondents only have purchased local sustainable skincare 1–2 times, but they are willing to buy again.

There is an interesting finding on customers' judgment on SPR. The three items that indicate SPR showed a high agreement level. This means the customers agree that the local, sustainable skincare products that they currently use have a chance of having a bad impact on them. They have the opportunity not to work optimally because of the ingredients, which makes them feel aggrieved as environmentalists as they keep using the products. On the other side, customers seem to perceive positive qualities from the sustainable skincare products that they currently use. The scores given for each of the SPQ items are all above 4, with the second item being the highest. This implies that most of the customers agree that the quality of the local, sustainable skincare products that they currently use has a reliable commitment to a sustainable product.

It is also important to note that despite the perceived quality and risk of the products, the CT for local sustainable skincare is fairly low. The average scores for each item are below 3. Detailed mean and minimum values for all the items are detailed in Table I.

A closer look at the R-Square scores (Table II) revealed that manifest variables have a low to moderate impact on the latent variables. According to Chin (1998), the R-Square score of 0.69 is considered as high, 0.33 to 0.68 is considered moderate, and below 0.33 is considered as low. Based on the R-square scores: (1) SPQ, SPR, and COO have a moderate impact of 0.487 toward Customer Trust, (2) SPQ, SPR, and CT have a moderate impact of 0.584 toward Customer Loyalty, and (3) SPQ and SPR have a low impact of 0.269 towards Country of Origin.

Before continuing the analysis further, it is crucial to highlight the data's Path Coefficients (Table II). Previous studies imply that the Path Coefficient value above 0 shows that there is a positive relationship between the latent and manifest variables. For the relationships between SPR & CT, SPR & CL, and SPR & COO, the Path Coefficients imply a positive relationship; this could be because of how the measurement items were constructed in the survey (Table I). With this, the higher the rate, the more the respondent agrees on the risk of the product and the more negative the value that they perceive.

4.3. Hypothesis Testing

To assess the hypotheses that were determined earlier in this research, the t-statistics values (Table III) are used to determine the significance of each variable relationship. Traditionally, t-statistics scores

TABLE III: T-STATISTICS AND HYPOTHESES

Variables	T-Statistics	Hypothesis
Sustainable perceived quality -> Customer trust	0.523	H1 (Rejected)
Sustainable perceived risk -> Customer trust	3.207	H2 (Accepted)
Customer trust -> Customer loyalty	7.882	H3 (Accepted)
Sustainable perceived quality -> Customer loyalty	2.035	H4 (Accepted)
Sustainable perceived risk -> Customer loyalty	1.197	H5 (Rejected)
Sustainable perceived quality -> Country of origin	3.285	H6 (Accepted)
Sustainable perceived risk -> Country of origin	1.896	H7 (Rejected)
Country of origin -> Customer trust	5.130	H6 (Accepted), H7 (Rejected)

over 1.96 should prove that the manifest variable has a significant relationship with the latent variable.

5. CONCLUSION AND DISCUSSION

Sustainable skincare is a fairly new industry in Indonesia, with only a few players in the market. Most of the respondents in this research showed great enthusiasm towards the products, but when it comes to trust, the brands have to work more on it. Respondents give deficient scores on customer trust, an area where sustainable perceived risk has a more significant impact than sustainable perceived quality. Our first hypothesis (H1) proposed that Sustainable Perceived Quality significantly affects Customer Trust, but our findings indicate otherwise. Despite a positive relationship observed in the path coefficients, the statistical analysis shows no significant impact. This aligns with the research by Assaker et al. (2020), who found that Sustainable Perceived Quality has an indirect impact on Customer Trust, and it should be mediated by Customer Satisfaction to achieve the desired effect. In contrast, our second hypothesis (H2) proposed that Sustainable Perceived Risk affects Customer Trust, and our results support this idea. We found a significant negative relationship between Sustainable Perceived Risk and Customer Trust, suggesting that higher perceived risk lowers trust.

On the other side, the customers of local sustainable skincare products are showing a tendency towards customer loyalty. It should be noted that 92.6% of the respondents of this research consist of environmentalists and might trust the brands due to their interest. Our third hypothesis (H3) posited that customer trust significantly influences customer loyalty, and our findings support this assertion. Based on both path coefficients and t-statistics, we found a positive relationship between customer trust and customer loyalty, indicating a significant impact. Thus, as customer trust increases, so does customer loyalty.

Due to the significant number of environmentalists among our research participants, the results might show a

significant impact of sustainable perceived quality towards customer loyalty. Our fourth hypothesis (H4), which predicts the significant impact of sustainable perceived quality on customer loyalty, is supported by this research. The examination of t-statistics reveals a significant positive impact of sustainable perceived quality on customer loyalty, corroborated by the positive relationship indicated by path coefficients. Thus, an increase in sustainable perceived quality corresponds to heightened customer loyalty. In contradiction, our fifth hypothesis (H5) that proposed sustainable perceived risk significantly affects customer loyalty, was rejected. The analysis demonstrates that sustainable perceived risk lacks a significant impact on customer loyalty, with a negative relationship evident in the path coefficients. This conclusion aligns with the insights of Cheng and Lee (2011), who suggest an indirect influence of sustainable perceived risk on customer loyalty through its effects on customer satisfaction and perceived risk rather than a direct impact.

Earlier studies suggested that the country of origin, the brand's origin, may influence the relationship between sustainable perceived quality and risk and customer trust. Our sixth hypothesis (H6) predicts that the country of origin significantly affects the impact of sustainable perceived quality on customer trust, and our analysis confirms this hypothesis. The t-statistics indicate a significant effect, and the path coefficients reveal a positive relationship, highlighting the crucial role of the country of origin in enhancing customer trust through sustainable perceived quality. Conversely, our seventh hypothesis (H7) proposed that the country of origin significantly influences the impact of sustainable perceived risk on customer trust, but our findings led to its rejection. The t-statistics show no significant effect, and the path coefficients demonstrate a negative relationship. Our results suggest that sustainable perceived risk already exerts a significant impact on customer trust without the additional mediation of the country of origin factor.

6. MANAGERIAL IMPLICATION

The findings highlight the critical role of addressing perceived risks associated with sustainable skincare products within marketing strategies. Given that sustainable perceived risk has a more substantial impact than sustainable perceived quality on customer trust, brands must prioritize mitigating these risks to foster trust among consumers. This underscores the importance of highlighting the safety and reliability of sustainable skincare products to induce trust and loyalty in the brand.

Moreover, Indonesian sustainable skincare brands should benefit by targeting environmentalists, considering the majority of participants in this study identify as such. The research underscores that sustainable perceived quality significantly influences brand loyalty, further supported by the mediating effect of brand trust, potentially influenced by the country of origin factor. In light of these findings, brands contemplating a move towards sustainability should carefully consider their target market. Referring back to the question posed in the title, "should your brand go sustainable?"—the affirmative answer is

clear for brands targeting environmentalists. However, for those not aligned with this market segment, prudent measures include risk assessment and leveraging the country of origin effect to induce brand trust.

CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

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