

EVALUATING THE IMPACT OF SUSTAINABILITY CERTIFICATIONS ON CONSUMER TRUST IN INDIAN ONLINE MARKET PLACES-A STUDY

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ABSTRACT

The digital commerce ecosystem is something that's constantly evolving, and since that means out of season harvesting is becoming more prevalent, one of the contributing factors that play a major role in the decision to purchase is the trust consumers place in their associated businesses. This study titled, 'Sustainability Certifications and their impact on customer trust in the online marketplaces' focuses on the impact of sustainability certifications like Fair Trade, Indian Organic and BIS Eco Mark on the Customer trust on the Indian e-commerce platforms. The growing concern over environmental issues and ethics in consumption heightens the interest of people online to buy certified sustainable products. On the one hand, research is very limited which specifically investigates this phenomenon in the Indian context. For this, a quantitative research methodology has been employed and structured questionnaires with 100 online consumers across India were collected. The study was able to analyze how the visibility and transparency of certification affects perceptions of consumers and how it affects the trust and consumer purchasing behaviour. The data were analyzed using tools as descriptive statistics, regression analysis, t-tests, and ANOVA. The findings highlight that all three certifications yielded positive influence on the consumer trust and India Organic was found to have most positive influence. Further, I found that considerably driving confidence in consumers was transparency and the easy accessibility of certification details. The results highlight the fact that for e-commerce platform, credibility of sustainability certifications needs to be put on the front and educate consumers about their meaning. The study concludes that certification labels are a strategic device for reassuring consumers (and not just Business-to-Business clients) in a product and encourage responsible consumption. The results obtained in this research shed pivotal lights for policymakers, marketers, and online retailers who would like to incorporate sustainability with digital commerce approaches in India.

Keywords: Sustainability Certifications, Consumer Trust, Online Marketplaces, India Organic, E-commerce

1. Introduction

The craze among people for sustainable products is growing in India, and an increasing number of online marketplaces in India have been emphasizing sustainability certifications. The certifications which verify products' environmental and ethical claims have become such a big deal in the marketplace that these

things have a lot to do with a consumer's buying decisions in an environment that is more and more aware of what's going on. Today consumers are more educated on what their purchases are doing to the environment and people and studies have shown that 58% of consumers are willing to pay more for product by companies that are committed to sustainability (Nielsen, 2015). This is a growing trend that is a tip of the iceberg in a move toward a greater understanding by consumers in prima facia just focusing on product quality and price, but rather the wider ethical responsibility.

The need to integrate inbuilt sustainability certifications into the online retail platforms comes in handy, especially in a country like India, which has seen a fast rise in the online retail sector. While, progressively, sustainability certifications are to be found, their effects on trust in India's online marketplace of consumers are yet to be researched. Studied widely, a sustainability certification can help increase consumer trust if it is supported by the transparent, credible organization. In the context of Indian market, this is unique because it has a diverse consumer demographics and regional disparities in awareness and attitudes toward sustainability (Sharma & Nair, 2020). However, certifications like Fair Trade, India Organic and the BIS Eco Mark are becoming popular in Indian market, and each of them has its own criteria and the consumer acceptance challenges. Yet it is still unclear what effect the certifications have on consumer trust on a uniform basis across different product categories and geographic regions. For instance, the research indicates that the urbanites in India are more receptive to sustainability certifications than urban consumers in comparison since they have better access to information and have been exposed more to an international brands (Bansal, 2021).

Sustainability certifications, as is the case with any certification, draw on the visibility and transparency of the certification to determine the impact they have on consumer trust. Today's consumers expect not only the certification, but also the clear and verifiable information of the product's sustainability claims. According to a recent study consumer that 83% of consumers prefer the products that provide transparency with respect to sustainability claim (McKinsey & Company, 2022).

It becomes imperative for sustainability certifications play a huge role in consumer behavior in the context of Indian e-commerce platforms. Certifications are only thing that is easily visible about the product and backed up with proper explanation of what the certification is, thus consumer tends to believe the product more credible and authentic. It is especially so, since most people nowadays use e-commerce platforms as their first and only contact with a brand, and not having transparency about its origins might dramatically undermine the feeling of credibility of the product, even if it has a known sustainability

certification. Credibility and trustworthiness of the certifying bodies are another important factor that decides how effective the sustainability certifications have been.

It's been researched that when consumers have a relationship with an organization with a strong reputation for upholding rigorous standards, they are more likely to trust the certification from such an organization as the Global Organic Textile Standard (GOTS) or Rainforest Alliance for example. In India, certificates of Government backed organizations like Bureau of Indian Standards (BIS) tends to be more trusted as they are regulatory based. But private certifications, such as Fair Trade or India Organic, are likely to have to prove their credibility to consumers unless widely recognized and transparent in the way that they are certified. Rai et al's (2021) study revealed that consumers would believe more in sustainability certificates when the certificate body gives in-depth information on the entire product's supply chain – from production to delivery.

While these are the positive trends, the Indian market is still facing the challenge from the consumer confusion around the multiple and overlapping sustainability certifications. If the certifications are saturated too much, consumers are likely to become doubtful; in other words, be hesitant to differentiate between certifications that bring certain credence and those that are very debatable. According to research (Accenture 2020), 56 percent of consumers prefer that they are confused with the definition of the variety of sustainability certifications and they are struggling to understand what they mean. This makes it more confusing as many of these online platforms show labels on the sustainability without clearly defining them. This has left many consumers doggedly skeptical about altogether trusting sustainability certifications, instead doubting whether or not the certifications make them more than clever marketing. In light of these concerns, e-commerce platforms in India must take up activities to improve the transparency and communication of sustainability certifications. Online retailers can help consumers develop a stronger link between certified products and certified products by advancing clear information on what each certification signifies, how it can be earned, and how it contributes to the demonstration of consumers and the natural environment. Additionally, the facts highlighted above prompt to make sure that these certifications (although visible and present) are truly linked to the larger story of the sustainability efforts made by the brand. This holistic view on sustainability will not only secure consumers' trust, but also go a long way towards the sustainability certifications' success in the Indian online marketplace. In the end, this study seeks to explain how sustainability certifications affect consumer trust in India's burgeoning e-commerce market. The research shall evaluate the meaning of sustainability certifications, how they can supporting their greater visibility and transparency, and will also be instructive

for brands, policymakers and E-commerce platforms. This can be an important lesson for India's future of online retailing, where the behavior will help encourage more responsible consumption and more trust between the consumers and online marketplaces.

2. Literature Samples

Investigations into the literature on the use of sustainability certificates in such online selling platforms in India reveal an increasing weightage to green marketing, ethical sourcing and transparency as prime factors in building the trust-based brand and promoting green consumption. In the absence of physical product evaluation, Premi, Sharma, and Dangayach (2021) highlight the significance of sustainability certifications in building online brand image and shaping consumers' choices to a great extent. Like Dhote and Zahoor (2017) evaluate a framework for including sustainability in the design of e-commerce models and that green certification improves accountability and long-term customer loyalty of business. In extending this conversation, Bhatta et al. (2024) investigate how green supply chain practices are adopted in B2C platforms, discuss the implementation of sustainable packaging, ethical sourcing as well as the operational and regulatory barriers companies face in adding certifications to their workflow.

This view is further supported by a study published in the Electronic Markets (2024) research that involves a multi case analysis of sustainability efforts in the context of e commerce ecosystems, further proving that certifications and collaboration around the stakeholder considerably help uplift sustainable outcomes. Mokshagundam and Cutinha (2024) also point out that to respond to growing consumer demand; digital marketers should incorporate the use of sustainability certifications in their strategies. We concur with these studies that weren't only sustainable assurance tools but also strategic assets in the digital commerce, helping boost consumer's confidence, buyers' loyalty, and facilitating broader sustainability goals in India's dynamic growth of the e-commerce.

3. Statement of the problem

The importance of ecommerce in India has been rapidly increasing over the last few years, changing the way products, brands and service are being interacted with by the consumers. Due to increasing environmental awareness and ethical issues, people are becoming more conscious in their decision to buy, and for example products that are friendly for the environment and that are ethically obtained. In this shift, sustainability certifications like Fair Trade, India Organic, and the BIS Eco Mark have gained great significance in being the track of credibility and environmental integrity. In fact these certifications are supposed to give a signal to the customers that a product meets certain social and environmental standards.

But the level of trust that these certifications really help in creating in the online retail space, hasn't been looked into in the Indian context.

One of the challenges of online marketplace is that they are different from conventional retail environments. Since consumers are not able to physically inspect products, they become more dependent on symbolic cues that can be found in certifications, ratings and reviews. Sustainability certifications can be trust building mechanisms in such an environment as they provide assurances to consumers that a product is certified to be of quality and ethics compliant. In addition, there is increasing doubt among Indian consumers in the authenticity and transparency of such certifications when explained without an appropriate context or visibility. Added factors because of the lack of regulatory clarity and differing certification standards are consumer confusion and reduced perception of value of these labels.

Though there is growing interest in sustainable consumption along with responsible retailing, very little empiric research has been carried out in India to determine if sustainable certifications have any impact on the level of consumer trust in the online shopping environment. To date most of the research has been done in the context of Western markets where consumer awareness as well as regulatory enforcement is stronger. Keeping in mind that India's online retail segment is expected to touch \$350 billion by 2030, it is essential to comprehend if actions towards building the sustainability of a brand truly resonate with Indian consumers. At the same time, the dynamics of digital trust in India are quite different in terms of the linguistic diversity, digital literacy gaps and differences in regional perception of sustainability.

The next piece of advice that we can give is that of certifications and that it is another important requirement that organizations must meet. Even though product certifications may be valid, the products are oftentimes relegated to small, non easily noticeable labels that present in almost no context - with these new features failing to achieve potential impact. Secondly, trust formation with consumers is severely weakened by the fact that many consumers simply are unaware of what these certifications mean or how they are awarded. This exacerbates the same trust deficit as there is no standardized practice for presenting and validating certifications on e-commerce platforms.

With a view to not throw away this opportunity for brand giants in India to cash in on consumers trust issue, there is an urgent need to systematically evaluate the influence of sustainability certifications on consumers trust in India's online marketplaces. To that end, this work attempts to fill this gap by studying the impact that the different kinds of sustainability certifications have in building and creating consumer trust, assess the effectiveness of various certifications across products, and how visibility and transparency impact consumers decisions about purchasing.

The objective of this research is to reveal the contributors to, and obstacles to, consumer trust relating to digital retail environments, so that actionable policies and guidance to business, policymakers and e-commerce platforms for improving the integrity and potency of certification can be made.

4. Objectives of the study

1. To examine how different sustainability certifications (such as Fair Trade, India Organic, and BIS Eco Mark) influence consumer trust in online marketplaces in India.
2. To assess the relationship between the visibility and transparency of sustainability certifications on e-commerce platforms and their impact on consumer purchasing decisions and trust in India.

5. Research Methodology

The study adopts a quantitative research methodology to explore how sustainability certifications influence consumer trust in India's online retail environment. The target population consists of online shoppers in India who have prior experience purchasing products from e-commerce platforms and have encountered sustainability certifications like Fair Trade, India Organic, and BIS Eco Mark. Data will be collected through an online survey, designed to assess consumer awareness, perceptions, and trust toward sustainability certifications. The survey will include both close-ended and Likert-scale questions, focusing on how these certifications influence purchasing decisions. A sample size of 100 respondents will be selected using stratified random sampling, ensuring a diverse and representative sample based on demographic factors such as age, gender, income, and geographic location. The data will be collected via online platforms and forums that cater to e-commerce consumers and participants will be recruited through social media channels.

6. Hypotheses

1. **H₁**: There is a positive relationship between sustainability certifications (e.g., Fair Trade, India Organic, BIS Eco Mark) and consumer trust in online marketplaces.
2. **H₂**: The visibility and transparency of sustainability certifications significantly influence consumer trust in online marketplaces.
3. **H₃**: Demographic factors such as age, income, and location significantly influence consumer trust in sustainability-certified products on online marketplaces.

Table 1: Descriptive Statistics for Consumer Trust

| Variable | Mean | Standard Deviation |
|-----------------------------|-------------|---------------------------|
| Trust in certified products | 3.85 | 0.72 |
| Influence of certifications | 4.12 | 0.68 |

| | | |
|-----------------------------|------|------|
| Trust in online platforms | 3.92 | 0.75 |
| Transparency in information | 4.05 | 0.60 |

Values of mean consumer trust in sustainability certified products and the effect of their certifications are relatively high, which means customers tend to believe in the certificated products as opposed to the uncertificated ones. The standard deviation indicates that the variability is moderately high which suggests that some people will be more or less trustworthy based on their specific experiences and background knowledge about the certification.

Table 2: Correlation Analysis between Sustainability Certifications and Consumer Trust

| Variable | Trust in certified products | Influence of certifications | Trust in online platforms |
|-----------------------------|-----------------------------|-----------------------------|---------------------------|
| Trust in certified products | 1 | | |
| Influence of certifications | 0.68** | 1 | |
| Trust in online platforms | 0.72** | 0.75** | 1 |

Results of correlation values indicate that there is a significant and positive relationship between trust in certified products, the influence of certifications in making purchase decisions and trust in online platforms. The highest correlation is between "Trust in online platforms" and "Influence of certifications" is that if consumers believe that the certification prove the quality of products, they also believe the platform that sells those products too.

Table 3: Multiple Regression Analysis – Impact of Sustainability Certifications on Consumer Trust

| Predictor Variables | B | Standard Error | Beta | t-value | p-value |
|-----------------------------|------|----------------|------|---------|---------|
| Constant | 2.31 | 0.45 | - | 5.13 | 0.000 |
| Fair Trade Certification | 0.39 | 0.11 | 0.32 | 3.55 | 0.001 |
| India Organic Certification | 0.41 | 0.10 | 0.35 | 4.10 | 0.000 |
| BIS Eco Mark Certification | 0.29 | 0.12 | 0.24 | 2.42 | 0.018 |

All of the sustainability certifications (Fair Trade, India Organic, BIS Eco Mark) have a positive and significant effect on consumer trust in online marketplaces in the regression analysis. Coefficients for

these certifications indicate that India Organic certification has the highest effect ($B = 0.41$) and then Fair Trade ($B=0.39$). The results provide support to hypothesis (H_1) that positive impact on consumer trust can be expected if sustainability certifications are used by an organization.

Table 4: T-test for Trust in Certified vs. Non-Certified Products

| Group | Mean Trust Score | Standard Deviation | t-value | p-value |
|------------------------|------------------|--------------------|---------|---------|
| Certified Products | 4.10 | 0.70 | 5.12 | 0.000 |
| Non-Certified Products | 3.50 | 0.80 | | |

It is found by the T-test that there was a statistically significant difference between the trust levels of certified products (Mean = 4.10) and the ones of non certified products (Mean = 3.50) using a p value of 0.000, which means less than significance level of 0.05. This result confirms hypothesis H_1 , that is, sustainability certifications have a strong effect on building consumer trust when doing online shopping.

Table 5: ANOVA for Consumer Trust Based on Demographic Factors

| Demographic Factor | Sum of Squares | df | Mean Square | F-value | p-value |
|--------------------|----------------|----|-------------|---------|---------|
| Age Group | 4.25 | 3 | 1.42 | 3.45 | 0.021 |
| Income Level | 2.35 | 3 | 0.78 | 2.12 | 0.097 |
| Location | 1.82 | 1 | 1.82 | 4.03 | 0.047 |

The result of ANOVA test indicates that there are difference in consumer trust according to age (p-value=0.021), location (p-value=0.047) but not income (p-value=0.097). This implies that young consumers and those from an urban environment have higher trust in sustainability certified products when they are found on online platforms. This is supportive of hypothesis H_3 , that demographic factors affect consumer trust.

7. Summary of Findings

- H_1 (Positive Relationship between Sustainability Certifications and Consumer Trust):** Supported. The regression analysis and T-test confirm that sustainability certifications positively affect consumer trust in online marketplaces.
- H_2 (Visibility and Transparency of Certifications Influence Trust):** The descriptive statistics indicate that transparency and visibility of sustainability certifications are important to consumers,

though further analysis of the specific influence of visibility (via survey data) would strengthen this finding.

3. **H₃ (Demographic Factors Impact Trust):** Supported. The ANOVA results show that age and location significantly influence consumer trust in sustainability-certified products.

These results suggest that online marketplaces should focus on increasing the visibility and transparency of sustainability certifications and consider targeting younger, urban consumers to maximize the impact of these certifications on consumer trust.

8. Conclusion

In the context of Indian online marketplaces, the study worked to determine the impact that well regarded sustainability certifications such as Fair Trade, India Organic and BIS Eco Mark have on the trust levels of Indian consumers. Moreover, it evaluates the effect of the visibility and transparency of such certifications on consumer behavior and trust as well as the impact of demographics on such perceptions. Descriptive statistics yielded results that consumers generally have high level of trust with sustainability certified products available on online market places. We found that consumer confidence was increased in greatly when the certifications were clearly visible and customers knew exactly what the certifications meant.

Each of the three cases studied for the sustainability certifications had a positive and statistically significant impact on trust as confirmed through regression analysis. The strongest result regarding eco labeling in an online environment turned out to be the result of the India Organic certification, which was followed by Fair Trade and BIS Eco Mark with almost the same effect. A T-test analysis also validated that there is a statistically significant difference in the trust levels towards products certified and non-certified products which signifies the importance of certifications as means of promoting perceived authenticating product and assuring quality of product. It's evidence of a bigger trend in consumers who prefer ethically produced, environmentally conscious items and that features certifications clearly in place and verified. Results of ANOVA tests indicate that demographic factors of age and location significantly influence the degree of trust in certified products and younger consumers and urban consumers demonstrated higher degree of trust. Interestingly, income level does not appear to have been a great determinant, as sustainability consciousness cuts across the economic segments. The study concludes on the principle that certifications of sustainability play an important role in dictating how consumers trust and purchase on Indian online marketplaces. This insight can be leveraged by e commerce platform and sellers to highlight the certification badges more prominently provide a bit more detail about each

certification, as well as maintaining visibility around where the goods are sourced and made. Additionally, efforts at targeted trust building should be more concentrated on younger and especially urban consumers, who will mostly likely be more open to the sustainability branding. By gaining relative autonomy from existing models of prioritizing demand, sustainability become an integral part of the digital world of commerce, at least partially, benefiting consumer perception and eventually contributing to the attainment of broader environmental and ethical business goals.

References

1. Accenture. (2020). *Consumer sustainability sentiment: A journey toward sustainable retail*. Accenture. <https://www.accenture.com/us-en/insights/consumer-sustainability-sentiment>
2. Bansal, R. (2021). Indian e-commerce market to reach 111 billion in 2025. *Business Standard*. https://www.business-standard.com/article/economy-policy/indian-e-commerce-market-to-reach-111-billion-in-2025-report-121121600399_1.html
3. Babu Ramesh, Shankar R, and Amirtharaj E. Nixon. (2018). Consumers' Purchase Decision on Eco-Friendly products in Coimbatore-Factors Determining. *ZENITH International Journal of Business Economics & Management Research*, 8(3), 77-84.
4. Bhatta, B. S. R., Shetty, D. K., Rodrigues, L. L. R., & Shenoy, S. S. (2024). Advancing green supply chain practices in B2C e-commerce. *Indian Journal of Environmental Protection*, 44(6), 542–552. <https://www.e-ijep.co.in/44-6-542-552/>
5. Chatterjee, S., Sreen, N., Rana, J., Dhir, A., & Sadarangani, P. H. (2022). Impact of ethical certifications and product involvement on consumers' decision to purchase ethical products at price premiums in an emerging market context. *International Review on Public and Nonprofit Marketing*, 19, 737–762. <https://doi.org/10.1007/s12208-021-00288-1>
6. Cutinha, Z. P., & Mokshagundam, S. S. (2024). Sustainability practices in e-commerce: Opportunities and challenges for digital marketers. *International Journal of Research Publication*

- and *Reviews*, 5(2), 1068–1075.
https://www.academia.edu/127037575/Sustainability_Practices_in_E_commerce_Opportunities_and_Challenges_for_Digital_Marketers
7. Dhote, T., & Zahoor, D. (2017). Framework for sustainability in e-commerce business models: A perspective-based approach. *Indian Journal of Marketing*, 47(4).
<https://indianjournalofcomputerscience.com/index.php/ijom/article/view/112681>
 8. Electronic Markets. (2024). E-commerce ecosystems as catalysts for sustainability: A multi-case analysis. *Electronic Markets*, 34, Article 58. <https://link.springer.com/article/10.1007/s12525-024-00733-z>
 9. Hota, S. L. (2024). Exploring the impact of sustainable marketing strategies on consumer behavior. *International Journal of Multidisciplinary Research & Reviews*, 3(1), 1–7.
https://www.researchgate.net/publication/377397702_Exploring_The_Impact_of_Sustainable_Marketing_Strategies_on_Consumer_Behavior
 10. Jalil, F., Yang, J., Al-Okaily, M., & Rehman, S. U. (2024). E-commerce for a sustainable future: integrating trust, green supply chain management and online shopping satisfaction. *Asia Pacific Journal of Marketing and Logistics*. Advance online publication. <https://doi.org/10.1108/APJML-12-2023-1188>
 11. Kalaivani, G and Shankar, R. (2017). Impact of promotional activities on consumers' behaviour at shopping malls in Coimbatore city. *International Journal of Applied Research*, 3(5), 177-182.
<https://www.allresearchjournal.com/archives/?year=2017&vol=3&issue=5&part=C&ArticleId=3673>
 12. Lin, H., & Wei, H. (2024). Green product certification and consumer trust mechanism in the e-business environment. In *Proceedings of the 4th International Conference on Informatization Economic Development and Management (IEDM 2024)* (pp. 1–8). EAI.
<https://doi.org/10.4108/eai.23-2-2024.2345928>
 13. McKinsey & Company. (2022). *The sustainability imperative: Rethinking consumer engagement*. McKinsey & Company. <https://www.mckinsey.com/industries/retail/our-insights/the-sustainability-imperative-rethinking-consumer-engagement>
 14. Premi, H., Sharma, M., & Dangayach, G. S. (2021). Green marketing: A systematic literature review. *Indian Journal of Marketing*, 51(8).
<https://indianjournalofmarketing.com/index.php/ijom/article/view/165761>

15. Rai, S., Sharma, A., & Nair, S. (2021). Sustainability in e-commerce in India: Challenges and opportunities. *International Journal of Business and Social Science*, 12(4), 45–55. https://www.ijbssnet.com/journals/Vol_12_No_4_April_2021/6.pdf
16. R, S. (2021). Digital marketing in hospitality and tourism. In C. Cobanoglu, S. Dogan, K. Berezina, & G. Collins (Eds.), *Hospitality & tourism information technology* (pp. 1–26). USF M3 Publishing. <https://www.doi.org/10.5038/9781732127593>
17. Sharma, P., & Nair, V. (2020). Sustainability in Indian e-commerce: Implications for consumer behavior and marketing strategies. *Research Gate*. https://www.researchgate.net/publication/343153267_Sustainability_in_E-Commerce_in_India
18. Shankar, R. (2024). Generation Z *versus* Millennial purchase intentions: A comparative study based on social media marketing strategies in India with respect to the fashion and beauty industry. *Multidisciplinary Reviews*, 7(7), 2024127. <https://doi.org/10.31893/multirev.2024127>
19. V. Sivakumar and Shankar R. (2019). Social Media Advertisement and its Consequences on Women Consumers. *International Journal of Emerging Technologies and Innovative Research*, 6(1), 624-630.
20. Vedprakash, Uppal, S. B., Jain, D., & Bansal, S. K. (2025). Sustainable marketing practices and their impact on consumer purchase intentions: An empirical study of Indian startups. *Journal of Informatics Education and Research*, 5(1). <https://jier.org/index.php/journal/article/view/2351>

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