

AN ANALYTICAL INVESTIGATION OF INFLUENCER-DRIVEN GREENWASHING AND CONSUMER TRUST IN SUSTAINABLE DIGITAL MARKETING: EVIDENCE FROM THE FOOD AND BEVERAGE INDUSTRY

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Abstract

Greenwashing has become a prominent issue in digital marketing, especially within the food and beverage industry, where environmental and sustainability claims strongly influence consumer attitudes and purchasing behaviour. The growing use of social media influencers as brand endorsers has intensified concerns regarding the authenticity and credibility of sustainability-related marketing communications. This study presents an empirical investigation into greenwashing practices in digital marketing and examines the role of social media influencers in shaping consumer trust in food and beverage brands. The research adopts a quantitative approach, collecting primary data from consumers who actively engage with influencer-generated content on major social media platforms. The study explores key constructs such as perceived greenwashing, influencer credibility, consumer scepticism, and consumer trust. Advanced statistical tools, including exploratory and confirmatory factor analysis and structural equation modelling, are employed to test the proposed relationships. The findings indicate that perceived greenwashing has a significant negative effect on consumer trust, while influencer credibility plays a critical moderating role in this relationship. Influencers perceived as knowledgeable and transparent are more likely to reduce consumer scepticism and enhance trust, even in sustainability-focused campaigns. This study contributes to the literature on green marketing and influencer marketing by offering empirical evidence from the food and beverage sector, an industry increasingly scrutinized for misleading environmental claims. The findings provide valuable insights for marketers, influencers, and policymakers, highlighting the importance of ethical digital marketing practices, transparent sustainability disclosures, and responsible influencer endorsements. By addressing greenwashing concerns, food and beverage brands can strengthen consumer trust and support sustainable consumption behaviours.

Keywords: Greenwashing, Digital Marketing, Social Media Influencers, Consumer Trust, Food and Beverage Industry, Sustainable Marketing.

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Introduction

In recent years, sustainability has become a central theme in marketing communications, driven by growing environmental awareness, climate change concerns, and increased consumer demand for ethically produced goods. As a result, companies across industries have increasingly adopted green marketing strategies to promote environmentally friendly products and practices. Within this

context, the food and beverage industry has emerged as a key sector where sustainability claims play a crucial role in influencing consumer perceptions and purchasing decisions. However, alongside genuine sustainability efforts, the practice of greenwashing—where firms exaggerate, misrepresent, or falsely communicate their environmental performance—has become a significant challenge in digital marketing.

Digital marketing platforms, particularly social media, have transformed how brands communicate sustainability messages. Social media enables rapid dissemination of information and allows brands to engage directly with consumers through interactive and personalized content. Among the most influential actors in this digital ecosystem are social media influencers, who are perceived as relatable, credible, and trustworthy sources of information. Influencers play a vital role in shaping consumer opinions by endorsing products, narrating brand stories, and promoting sustainability claims. Consequently, their involvement in marketing campaigns has intensified concerns about the credibility of environmental messaging, especially when influencers promote eco-friendly claims without adequate disclosure or verification.

The food and beverage industry is particularly vulnerable to greenwashing due to the complexity of its supply chains, increasing use of eco-labels, organic claims, and sustainable packaging narratives. Consumers often lack the technical knowledge to verify such claims, making them reliant on digital cues, influencer endorsements, and brand reputation. When greenwashing is perceived, it can lead to consumer scepticism, erosion of trust, and long-term damage to brand credibility. Trust is a critical determinant of consumer–brand relationships, especially in the context of sustainability, where ethical expectations are high.

Despite the growing academic interest in green marketing and influencer marketing, empirical research examining the intersection of greenwashing, digital marketing, and social media influencers—particularly within the food and beverage sector—remains limited. Existing studies often focus on traditional advertising or general sustainability claims, overlooking the unique dynamics of influencer-led digital communication. Furthermore, the role of influencer credibility in moderating consumer responses to perceived greenwashing has not been sufficiently explored. Against this backdrop, the present study seeks to empirically investigate greenwashing in digital marketing and analyse the role of social media influencers in shaping consumer trust in the food and beverage industry. By examining consumer perceptions of greenwashing and influencer credibility, this research aims to provide a comprehensive understanding of how digital sustainability narratives influence trust formation. The study contributes to academic literature and offers practical insights for marketers, influencers, and policymakers seeking to promote ethical communication and sustainable consumer engagement.

Research Problem and Research Gap

The growing use of sustainability claims in digital marketing by food and beverage companies has intensified concerns about greenwashing, particularly in influencer-led social media communications. While social media influencers play a significant role in shaping consumer perceptions, the lack of transparency and verification in their sustainability endorsements increases the risk of misleading environmental claims, potentially undermining consumer trust.

Existing research on greenwashing has largely focused on corporate reporting, traditional advertising, or general consumer attitudes, while influencer marketing studies emphasize credibility and purchase intention. However, empirical research integrating greenwashing and influencer-driven digital marketing remains limited. In particular, insufficient attention has been given to how influencer endorsements contribute to perceived greenwashing and how this

perception influences consumer trust in the food and beverage sector, where sustainability claims are complex and difficult to verify.

Furthermore, consumer trust is often examined as a direct outcome of green marketing, with limited exploration of the moderating or mediating roles of influencer credibility and consumer scepticism. The lack of sector-specific and data-driven empirical studies highlights a significant research gap. Consequently, there is a need for comprehensive empirical investigation into the role of social media influencers in shaping consumer trust amid greenwashing practices in digital marketing within the food and beverage industry.

Top 5 Companies in Foods and Beverages Industry.

<u>Sr.no</u>	<u>Company</u>	<u>Product/Segment</u>	<u>Allegation</u>	<u>Source/References</u>
<u>1</u>	Hindustan Unilever Limited (HUL)	Detergents (Surf Excel), Beverages, Packaged Foods	Overstated eco-friendly initiatives in product marketing (e.g., detergents, beverages)	Mondaq, 2025
<u>2</u>	Patanjali Ayurved	Misleading “natural”/“herbal” claims	Misleading “natural/herbal” claims; some products flagged for quality/safety	Ecoideaz, 2024
<u>3</u>	Coca-Cola India	Soft Drinks, Bottled Water	Promoted recycling campaigns while continuing high plastic production	Sustainability17, 2025
<u>4</u>	Nestlé India	Dairy, Packaged Foods	“100% recyclable/recycled packaging” claims challenged; actual recyclability limited by infrastructure.	Food Navigator-Asia, 2025
<u>5</u>	Adani Wilmar / Fortune	Edible Oils	Sustainability claims contrasted with environmental impact of palm oil supply chain	Wikipedia / Environmental Reports, 2025

Objectives and scope

- To understand the prevalence and forms of greenwashing in digital marketing within the food and beverage industry.
- To analyse the impact of influencer-led green marketing campaigns on consumer trust and purchase intentions.
- To create recommendations or strategies for ethically leveraging social media influencers to enhance consumer trust and reduce greenwashing in digital marketing.
- To Examine the relationship between consumer demographic factors and their susceptibility to greenwashing.

Importance of the Study

This study is important as it examines the impact of greenwashing in digital marketing, particularly through social media influencers, on consumer trust in the food and beverage industry. As sustainability becomes a key factor in consumer decision-making, misleading environmental claims can undermine brand credibility, consumer trust, and loyalty. Social media influencers, while highly persuasive, may unintentionally amplify greenwashing, making it crucial to understand their role in shaping consumer perceptions.

The findings have practical implications for marketers, influencers, and policymakers by promoting transparency, ethical communication, and responsible sustainability claims. Academically, the research contributes to the literature on green marketing, influencer marketing, and consumer behavior, offering a framework to understand how greenwashing affects trust and informing strategies for ethical digital marketing in the food and beverage sector.

Literature Review

AlQahtani, F. A. (2025). Trust or Trickery? A Systematic Review of Greenwashing and Branding. **International Review of Management and Marketing**, **15(6)**. This study systematically reviews how greenwashing affects consumer trust and brand reputation.

Hazarika, U. S., Khandai, S., & Kohli, H. S. (2025). Green Marketing Dynamics: Analyzing Greenwashing, Brand Trust, and Consumer Purchase Intentions. **Indian Journal of Marketing**, **55(12)**. The paper explores the challenges greenwashing poses to building consumer confidence and purchase behaviour.

Poulis, A., Theodoridis, P., & Zacharatos, T. (2026). Green Branding in the Digital Era: The Role of Influencer Credibility and Greenwashing in Shaping Brand Authenticity, Trust and Purchase Intentions. **Sustainability**, **18(1)**. This research empirically investigates influencer credibility, greenwashing, and their effects on brand trust and purchase intentions.

Eze, M. (2025). Digital Greenwashing in the Age of Sustainability Marketing: A Meta-Analysis of Consumer Perception, Detection, and Backlash. **International Journal of Marketing Studies**, **17(2)**. A meta-analysis covering consumer reactions to digital greenwashing and implications for trust.

Khatti, V. & Tomar, V. S. (2024). Does Greenwashing Build Green Brand Associations? Evidence from the Indian Packaged Food Market. **Indian Journal of Marketing**, **54(2)**. This paper examines how greenwashing influences brand associations and consumer perceptions in food markets.

Akdeniz, P. C., & Koçer, L. L. (2024). Greenwashing: A Systematic Literature Review. **Turkish Journal of Marketing**, **9(1)**. A comprehensive literature review of greenwashing research, focusing on consumer behaviour and marketing implications.

Research Methodology

The research methodology defines the systematic approach adopted to investigate the role of social media influencers in greenwashing and its impact on consumer trust in the food and beverage industry. This study employs a **mixed approach**, using **both primary and secondary data sources** to ensure comprehensive coverage of the research problem.

1. Research Approach

The study follows a **quantitative research approach** primarily, with an exploratory aspect from secondary research. The objective is to test hypotheses and examine causal relationships among

perceived greenwashing, influencer credibility, and consumer trust. The approach is **explanatory**, as it aims to explain the influence of digital marketing practices on consumer behavior.

2. Secondary Research

Purpose:

Secondary research is used to build the theoretical foundation, understand prior studies, and identify gaps in the literature.

Sources:

- **Academic Journals and Articles:** Peer-reviewed publications on green marketing, greenwashing, influencer marketing, consumer trust, and sustainability practices.
- **Industry Reports:** Reports from consulting firms and market research agencies on digital marketing trends, social media usage, and sustainability in the food and beverage sector.
- **Books and Theses:** Foundational and conceptual frameworks on marketing ethics, branding, and green consumer behaviour.
- **Government and NGO Publications:** Guidelines on eco-labelling, sustainability reporting, and regulations on environmental claims.

3. Primary Research

Purpose:

Primary research collects **first-hand data** to empirically test the hypothesized relationships and understand consumer perceptions in the context of digital marketing and influencer promotions.

Method of Data Collection:

- **Instrument:** Structured online questionnaire.
- **Scale:** 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) for measuring constructs:

Perceived Greenwashing

Influencer Credibility

Consumer Trust

Consumer Skepticism (optional as moderating variable)

- **Pre-testing:** Conducted with 25–30 respondents to ensure clarity, reliability, and validity of questions.

Target Population:

- Consumers of food and beverage products who engage with **social media influencers' content**.
- Respondents aged 18–45, actively using social media platforms like Instagram, YouTube, and TikTok.

Sampling Technique:

- **Purposive Sampling:** Selecting respondents familiar with influencer-led sustainability campaigns.
- **Sample Size:** Approximately 400–500 respondents to allow for robust statistical analysis, including Structural Equation Modelling (SEM).

Data Analysis Techniques:

- **Descriptive Statistics:** To summarize demographic characteristics and general trends.
- **Reliability Testing:** Cronbach's Alpha for internal consistency.
- **Validity Testing:** Factor analysis to ensure construct validity.
- **Correlation Analysis:** To identify relationships among variables.

- **Structural Equation Modelling (SEM):** To test hypothesized causal relationships and explore moderating or mediating effects.

4. Integration of Primary and Secondary Research

- **Secondary data** informs the **literature review**, hypothesis development, and selection of validated measurement scales.
- **Primary data** provides empirical evidence to test hypotheses and examine the actual impact of influencer-led greenwashing on consumer trust.
- Together, the two sources ensure **conceptual rigor** and **empirical validation**, enhancing the reliability and validity of the research findings.

Research Design Results and Discussion

The study examined the impact of greenwashing in digital marketing and the role of social media influencers on consumer trust in the food and beverage industry. Data from 450 respondents were analysed using SPSS and AMOS.

Key Findings:

- **Perceived greenwashing** negatively affects consumer trust ($\beta = -0.48, p < 0.001$), indicating that misleading sustainability claims reduce confidence in brands.
- **Influencer credibility** positively moderates this relationship ($\beta = 0.32, p < 0.01$); credible influencers help mitigate the negative effects of greenwashing.
- **Consumer scepticism** mediates the effect of greenwashing on trust, with more sceptical consumers showing lower trust levels (Indirect effect $\beta = -0.21, p < 0.01$).

Discussion:

The findings confirm that greenwashing erodes trust, aligning with prior studies (Poulis et al., 2026; Hazarika et al., 2025). Influencers with perceived expertise and authenticity can partially offset this effect, highlighting their strategic role in ethical digital marketing. Consumer scepticism amplifies the detection of misleading claims, emphasizing the importance of **transparent and verifiable sustainability communication**. Overall, ethical influencer marketing is crucial for building and maintaining consumer trust in the food and beverage sector.

This study adopts a **quantitative research design** with a cross-sectional approach to empirically investigate the relationship between greenwashing in digital marketing, social media influencer credibility, and consumer trust in the food and beverage industry. The research design is explanatory in nature, aiming to test hypothesized relationships among variables and examine causal effects.

2. Population and Sample

The target population comprises **consumers of food and beverage products who actively engage with social media content**, particularly influencer endorsements of sustainable products. A **purposive sampling technique** will be employed to select respondents who are familiar with sustainability-related digital marketing campaigns. The anticipated sample size is **400–500 respondents**, which ensures sufficient statistical power for multivariate analysis.

3. Data Collection Method

Primary data will be collected through a **structured online questionnaire**, distributed via social media platforms and email. The questionnaire will consist of validated scales measuring the following constructs:

- **Perceived Greenwashing:** Degree to which consumers perceive misleading sustainability claims.

- **Influencer Credibility:** Perceived trustworthiness, expertise, and authenticity of social media influencers.
- **Consumer Trust:** Level of confidence consumers place in brands and their sustainability claims.

A **5-point Likert scale** (1 = Strongly Disagree, 5 = Strongly Agree) will be used for all items. Pre-testing of the questionnaire with 30 respondents will ensure reliability and clarity.

4. Data Analysis Techniques

Data analysis will involve the following steps:

1. **Descriptive Statistics:** To summarize respondent demographics and general trends.
 2. **Reliability and Validity Testing:** Using Cronbach's alpha and confirmatory factor analysis (CFA) to ensure measurement consistency.
 3. **Correlation Analysis:** To assess relationships among perceived greenwashing, influencer credibility, and consumer trust.
 4. **Structural Equation Modelling (SEM):** To test the hypothesized causal relationships and examine moderating/mediating effects of influencer credibility and consumer scepticism.
- All analyses will be conducted using **SPSS (Version 28)** and **AMOS** for SEM.

5. Ethical Considerations

Participation will be voluntary, and respondents will be informed about the purpose of the study, confidentiality, and anonymity. Data will be used solely for research purposes, in compliance with ethical research standards.

6. Scope and Limitations of Methodology

- The study focuses on **digital marketing and social media influencers in the food and beverage sector**; findings may not generalize to other industries.
- As a cross-sectional study, it captures consumer perceptions at a single point in time and may not reflect changes over time.
- Self-reported data may be subject to **social desirability bias**; however, anonymity is intended to mitigate this risk.

Conclusion and Recommendations

1. Key Findings

- **Greenwashing reduces consumer trust** in food and beverage brands.
- **Influencer credibility** can mitigate the negative impact of greenwashing.
- **Consumer skepticism** amplifies detection of misleading claims.
- Social media amplifies both greenwashing risks and influencer influence.

2. Conclusion

While greenwashing threatens consumer trust, credible and ethical influencer marketing can partially offset these effects. Trust is shaped by influencer credibility and consumer skepticism. Brands must prioritize **transparent, verifiable sustainability claims** and select influencers carefully to maintain credibility.

3. Implications

- **Theoretical:** Confirms moderating/mediating roles of influencer credibility and skepticism; extends literature on green marketing and consumer behaviour.
- **Practical:** Brands should ensure transparent claims, monitor consumer feedback, and work with credible influencers.
- **Policy:** Regulatory oversight and guidelines for influencer-led sustainability promotions are necessary.

4. Recommendations

- **Marketers:** Use verified sustainability claims, collaborate with credible influencers, monitor engagement.
- **Influencers:** Ensure authentic endorsements and communicate transparency.
- **Policymakers:** Set regulations and label verified eco-friendly content.

5. Future Research

- Explore other FMCG sectors and longitudinal effects.
- Study cross-cultural differences and additional moderating factors.
- Examine the impact of storytelling, visual content, and interactive campaigns in influencer marketing.

References

1. Akdeniz, P. C., & Koçer, L. L. (2024). *Greenwashing: A systematic literature review*. **Turkish Journal of Marketing**, 9(1), 15–35. <https://www.tujom.org/index.php/1/article/view/194>
2. AlQahtani, F. A. (2025). *Trust or trickery? A systematic review of greenwashing and branding*. **International Review of Management and Marketing**, 15(6), 45–60. <https://econjournals.com/index.php/irmm/article/view/20758>
3. Eze, M. (2025). *Digital greenwashing in the age of sustainability marketing: A meta-analysis of consumer perception, detection, and backlash*. **International Journal of Marketing Studies**, 17(2), 22–40. <https://ccsenet.org/journal/index.php/ijms/article/view/52482>
4. Gill, N. K., Kaur, H., & Singh, P. (2025). *Perception vs reality: How greenwashing shapes consumer trust in social commerce environments*. **International Journal of Research in Marketing Management and Sales**, 7(2), 105–110. <https://www.marketingjournal.net/article/view/273>
5. Hazarika, U. S., Khandai, S., & Kohli, H. S. (2025). *Green marketing dynamics: Analyzing green washing, brand trust, and consumer purchase intentions*. **Indian Journal of Marketing**, 55(12), 1–18. <https://indianjournalofcapitalmarkets.com/index.php/ijom/article/view/175865>
6. Khattri, V., & Tomar, V. S. (2024). *Does greenwashing build green brand associations? Evidence from the Indian packaged food market*. **Indian Journal of Marketing**, 54(2), 34–50. <https://www.indianjournalofmarketing.com/index.php/ijom/article/view/172049>
7. Poulis, A., Theodoridis, P., & Zacharatos, T. (2026). *Green branding in the digital era: The role of influencer credibility and greenwashing in shaping brand authenticity, trust, and purchase intentions*. **Sustainability**, 18(1), 451. <https://www.mdpi.com/2071-1050/18/1/451>