



A Bibliometric and Thematic Review of Green Marketing: Trends, Gaps and Future Insights

Shivani Chauhan¹, Dr. Puneet Bhushan²

¹ Department of Himachal Pradesh University of Business School (HPUBS), Himachal Pradesh University, Summerhill, Shimla Himachal Pradesh, India.

Email: shivanic84@gmail.com

² Department of Himachal Pradesh University of Business School (HPUBS), Himachal Pradesh University, Summerhill, Shimla Himachal Pradesh, India.

Email: pbsud.sml@gmail.com

Cite This Paper as: Shivani Chauhan, Dr. Puneet Bhushan (2026) A Bibliometric and Thematic Review of Green Marketing: Trends, Gaps and Future Insights . The Journal of African Development 1, Vol.7, No.1, 1800-1815

KEYWORDS

Green marketing, sustainable product, green consumers, green, marketing myopia, competitive advantage, Eco Labels.

ABSTRACT

Purpose: The purpose of the study is to provide an overview of the literature and bibliometric analysis on green marketing, identifying various themes on the concept of marketing including environmental, sustainable and ecological, green product, green consumer, environmental claims, environment segmentation, green marketing myopia, compliance marketing, green washing, competitive advantage, eco labels. Also, the authors identified the trends, gaps and provided a framework for future research to be carried out.

Methodology: The data was collected through database from Scopus. The search strategy involved querying the Scopus database using carefully selected keywords: "green," "sustainable," "eco-friendly," "packaging," and "marketing." Initially, 655 papers were identified, reflecting the extensive body of literature on the subject. The authors identified 236 articles using the guidelines of PRISMA.

Research limitations/ implications: The review focuses on Green Marketing and identifying themes based on the concept. However, certain themes still haven't been explored. Future work may focus on the unexplored and least talked themes which are necessary according to the present social and environment scenarios.

Originality/value: Green marketing being a vast concept, the authors have identified various themes on which work has been carried. However, they also propose the theme gaps on which the work has not been carried out till now. Therefore, they propose a framework for future scenarios for the work to be carried out.

1. INTRODUCTION

An approach to environmental management that attempts to reduce or prevent adverse environmental effects is called "green marketing" (González-Benito & González-Benito, 2005). Green marketing is a comprehensive market orientation in which goods and services that are high-quality, long lasting, perform well and are cost-effective while also not harming the environment. Green marketing includes both greening businesses and greening products. Regardless of the market (i.e., business-to-business [B2B], business-to-consumer [B2C], business-to-retailer [B2R], or business-to-government [B2G]), green marketing is centred on offering the green product or service at the optimum price, location, and time [as narrated by (Gelderman, Schijns, Lambrechts, & Vijgen, 2020) and (Rivera-Camino, 2007)]. It necessitates a thorough understanding of public policy procedures in addition to enhancing the four Ps of the conventional marketing mix (product, price, place, and promotion). It is not a catchphrase; rather, it is a marketing strategy that can increase client acquisition, bottom-line performance, and company value. Some authors have defined "green marketing," which is explained below:.



“Green Marketing is the marketing of products that assume to be environmentally friendly safe” (American Marketing Association).

"All operations meant to generate and support any transaction intended to satisfy human needs or wants such that satisfying those needs and wants happens with little adverse input on the national environment," are considered to be "Green Marketing" (Polosnky, 1994).

“Green marketing is more than merely creating eco-friendly packaging or making eco-friendly claims. It is a much more comprehensive term that encompasses all marketing initiatives necessary to identify, cultivate, and meet consumer demand for green products in a way that has the fewest possible adverse environmental effects, as well as to promote and sustain consumers' ecologic attitudes and behaviours” (Jain & Kaur, 2004). Even though green marketing first emerged in the 1980s and 1990s, the green goods sector is still developing (Shukla, 2021).

The authors of this research paper carried out a thorough review of the literature and bibliometric analysis from which they derived certain themes pertaining to green marketing. Furthermore, the authors have highlighted gaps and offered a framework for future research study.

1.1 History and Development of Green Marketing

The first wave of green marketing started in Europe in the 1980s when several items were shown to be bad for the atmosphere. As a result, more environment friendly “green items” were introduced.

Peatie (2001) noted three stages in the development of green marketing:

First Phase – 1980s "Ecological" Green Marketing: All marketing tasks connected to providing solutions for environmental issues were developed during this phase.

Second Phase – 1990s "Environment" Green marketing: During this stage, The emphasis shifted to clean technology, which included developing new products that could help with waste and pollution issues.

Third Phase- 2000s "Sustainable" Green Marketing: According to this phase's philosophy, people wish to leave a clean planet to their descendants. Therefore, green products and services made prominence during this phase.

Objective:

Before carrying out the research, the authors laid down certain objectives which are the following:

To conduct a bibliometric analysis to track publication trends, influential authors and collaboration networks in green marketing literature.

To assess the impact of green marketing research by analysing citation metrics and trends over time.

To explore research themes through thematic analysis offering insights into the evolving landscape of green marketing.

Methodology:

The methodology includes data collection and data analysis which has been described in detail below.

2.1 Data collection

The data for this study was obtained from Scopus, a bibliographic database developed by Elsevier that offers tools for conducting detailed bibliometric analysis. To collect relevant literature data, a structured search strategy was used, incorporating carefully selected keywords such as “green”, “sustainable”, “eco- friendly”, “packaging” and “marketing”. Initially, 655 papers were identified, reflecting the extensive body of literature on the subject. The authors identified 236 articles using the PRISMA framework. The data collected thus analysed and identified various prevalent themes on which the work has been successfully carried out. However, there are certain themes on which little or less work has been carried, and the authors identified them. The authors propose emerging themes that can be further used to carry out the future research.

Table 1. Criteria for document selection

Stage	Inclusion Criteria	Exclusion Criteria	Articles Included
Identification	Papers containing keywords: "green", "eco-friendly", "sustainable", "packaging", "marketing"		655
Screening	Papers published between 2013-2024		413
	Papers relevant to green marketing/packaging		257
Eligibility	Papers written in English		254
	Papers from scholarly journals and reputable sources		236
Inclusion	Papers meeting PRISMA framework criteria		236

2.2 Data analysis

The bibliometric analysis was performed using tools such as Biblioshiny and VOS viewer. Biblioshiny facilitated the extraction of key metrics, including citation metrics, average document age, and annual growth rate. VOS viewer, on the other hand, was instrumental in visualizing collaboration networks and co-occurrence patterns of keywords. Numerous bibliometric research have used the widely known free bibliometric analysis program VOS Viewer on a global scale (Guo, Huang, Guo, Li, Guo, & Nkeli, 2019) in the domain of management. After this systematic literature review was carried through which emerging themes pertaining to green marketing was identified.

Result and analysis

The literature on green marketing from 2013 to 2024 showcased scholarly contributions, with 236 documents analyzed from 151 different sources. On average, these documents were 3.8 years old. There is a significant citation count-each document having an average of 18.12 citations, with 12,746 references overall. A total of 808 authors were involved in the research, offering collective insights into the field. Around 21.61% of these collaborations were international. Additionally, the research covered a wide range of topics, reflected in 1043 unique keywords.

Table 2: Overview of research summary

Description	Results
MAIN INFORMATION ABOUT DATA	
Time span	2013:2024
Sources (Journals, Books, etc)	151
Documents	236
Annual Growth Rate %	2.05
Document Average Age	3.8
Average citations per doc	18.12

References	12746
DOCUMENT CONTENTS	
Keywords Plus (ID)	1043
Author's Keywords (DE)	792
AUTHORS	
Authors	808
Authors of single-authored docs	29
AUTHORS COLLABORATION	
Single-authored docs	29
Co-Authors per Doc	3.52
International co-authorships %	21.61
DOCUMENT TYPES	
Article	184
book chapter	15
conference paper	26
Review	11

3.1 Publication trends of green marketing research

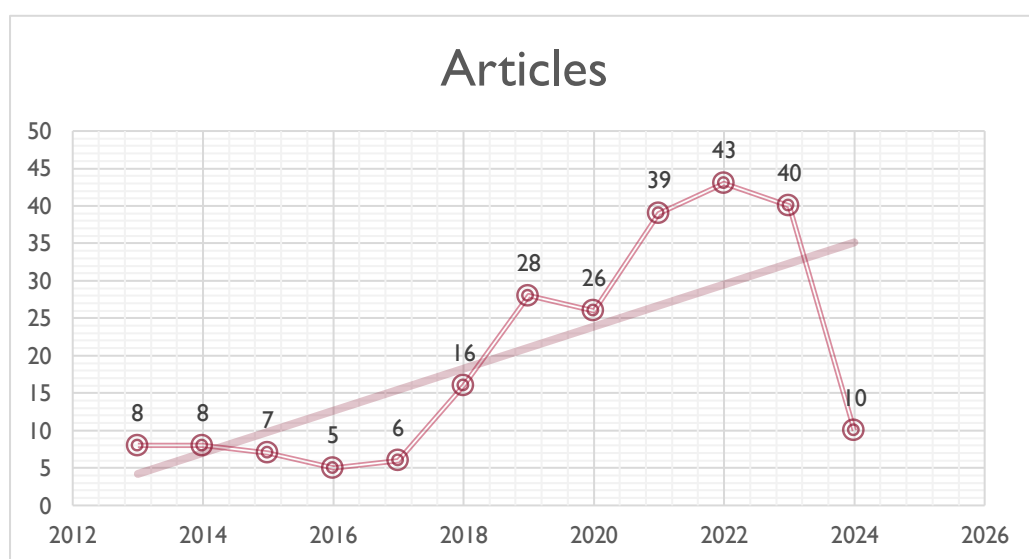


Figure 1: The growth of documents from 2013-2024

Figure 1 Illustrates the yearly publication counts from 2013-2024. In 2013 and 2014, there were 8 publications each year. In 2015 the number decreased to 7, and further dropped to 5 in 2016. After that the publication count started to gradually increase. In 2018 there was a notable increase in publications, reaching to 16 articles. Similarly in 2019 and 2020 had high publication with 28 and 26 articles in 2022 there were the highest publications with a total of 43 articles. However, there was a slight decline in 2023 with 40 publications. The presence of 10 articles in 2024 shows that research in this field is still going on.

3.2 Most relevant sources

The bar graph in **Figure 2** illustrates ten most relevant sources in realm of green marketing and packaging. The journal "Sustainability" emerges as the frontrunner, publishing significant number of articles, totalling to 20. With 15 articles, the "Journal of Cleaner Production" comes in second. These findings suggest a strong focus on sustainability and cleaner production practices within the academic community. "British Food Journal" and "IOP Conference Series: Earth and Environmental" with 8 and 7 articles, respectively. Then "Appetite" and "Tobacco Control" had 5 and 4 articles published. Last but not the least "Journal of Food Products and Marketing", "E3S Web of Conferences", "Environment, Development and Sustainability and Foods" each had 4, 4, 3 and 3 articles published respectively. The findings indicate that research on green marketing and packaging is not straightforward but rather shaped by several inter related factors.



Figure 2: The ten most relevant sources

3.3 Most productive countries

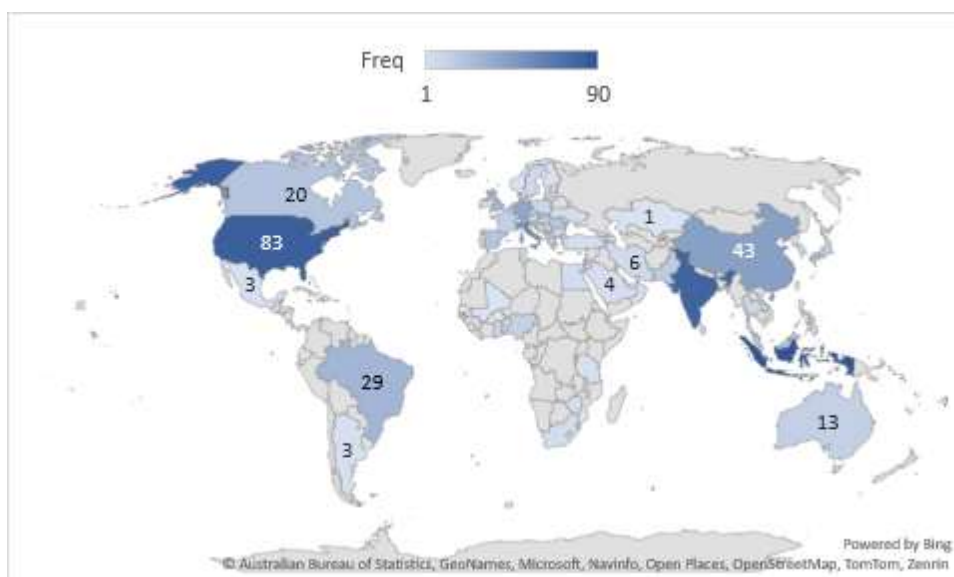


Figure 3: Geographic distribution of green marketing research output

Figure 3 shows how research on green marketing is distributed across different regions. North America, Southeast Asia and Europe emerge as the most active areas, with a higher number of studies in this field. This suggests strong interests and ongoing engagement in developing and understanding green marketing practices in these regions. At the same time, differences in research activity highlight the growing global attention towards sustainable marketing.

3.4 Co-occurrence of key terms

Nearly 66 out of 1043 keywords that authors use most frequently fulfil the minimum requirement of five occurrences. **Figure 4** reveals that Clusters of keywords emerge, reflecting thematic areas within the research domain. Keywords such as ‘marketing’, ‘sustainability’, ‘sustainable development’, ‘consumer behaviour’ and ‘environmental impact’ indicates prominent themes in the literature.

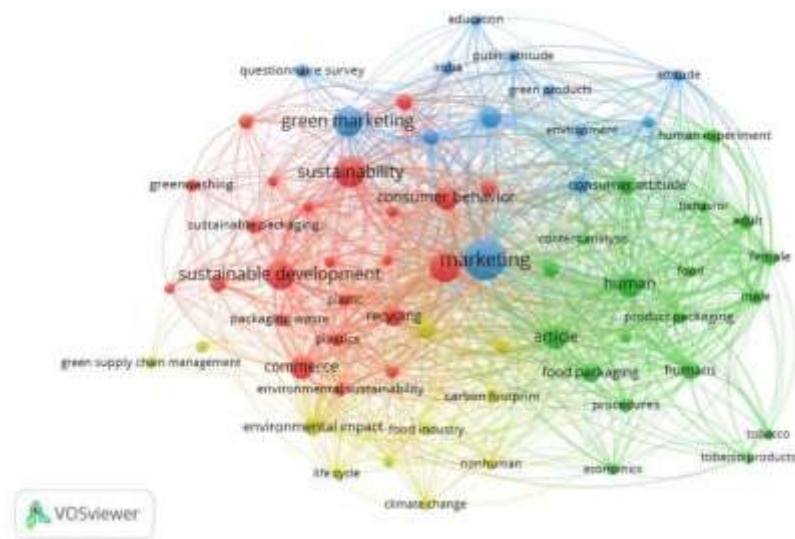


Figure 4: Co-occurrence network of keywords associated with green marketing research

3.5 Highly cited papers

Paper	Total Citations
(Çankaya, Sibel, Sezen, & Bulent, 2019)	322
(Koenig-Lewis, Palmer, Dermody, & Urbye, 2014)	228
(Trivedi, Patel, & Acharya, 2018)	188
(Herbes, Beuthner, & Ramme, 2023)	163
(Peschel, Grebitus, Steiner, & Veeman, 2016)	143
(Scott & Vigar-Ellis, 2014)	131
(Gardas, Raut, & Narkhede, 2018)	130
(Muncke, et al., 2020)	103
(Quaye & Mensah, 2019)	103
(Bacon & D. Krpan, 2018)	80

The paper titled “The impact of sustainable performance on green supply chain management practices” authored by (Çankaya, Sibel, Sezen, & Bulent, 2019) has highest citation of total 322 indicating its substantial influence in the field of sustainable supply chain management and the paper authored by (Koenig-Lewis, Palmer, Dermody, & Urbye, 2014) has 288 citations. (Trivedi, Patel, & Acharya, 2018) has 188 citations. (Herbes, Beuthner, & Ramme, 2023) has 163 citations. Others papers also contribute significantly to their respective topics with citations counts ranging from 80-163 highlighting diverse areas of interest within green marketing and sustainability.

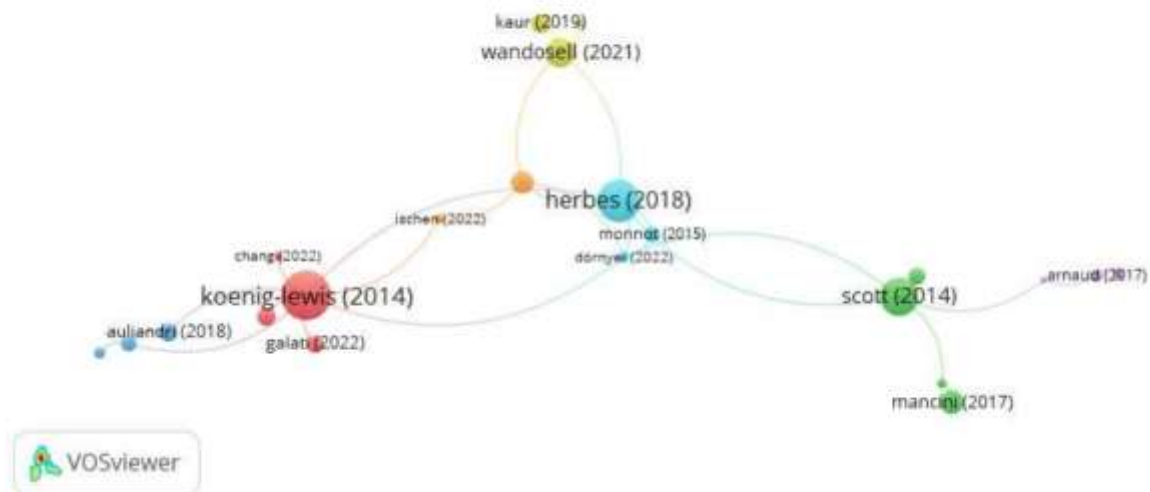


Figure 5: Network analysis on citation of documents

3.6 Thematic Analysis

Themes and sub themes on green marketing

THEME-1 ECOPRENEURSHIP

Ecopreneurship also called as sustainable or environment preneurship is an entrepreneurship that prioritizes environmental sustainability alongside profit. It seeks to address ecological problems or advance sustainable practices, frequently employing creative strategies to reduce waste, preserve resources, and reduce the negative effects on the environment. This involves a range of activities, from developing eco-friendly products to implementing green business practices. Hence, the authors have identified three sub- themes under ecopreneurship which includes ecological marketing, environment marketing and sustainable marketing.

Sub-themes

Ecological Marketing - Primarily focused on environmental problems and minimizing dependency on harmful products. It was centered on “end of pipe” pollution cleanup technology (Peattie, 2001). The government's awareness was the only advantage realized during this phase. Hence green marketing was acknowledged by the government as a sort of response to environmental movement (Zampese, Moori, & Caldeira, 2016).

Environmental or Green Marketing- According to (Polosnky, 1994) Environmental marketing is the umbrella term for any actions created to create and facilitate any type of trade intended to satisfy human needs or wants with the least amount of adverse environmental effects. Business firms can be divided into three major categories based on their involvement and green orientation: (Jain & Kaur, 2004)

Genuinely green firms

Green posturing firms

Non-green firms

Green Marketing must be able to deliver two goals: Improved customers satisfaction and Environmental protection (Ottman, Stafford, & Hartman, 2010). One of the most important strategies for advancing sustainable development is the idea of "green marketing." (Tiwari, 2014).

Sustainable Marketing- Sustainable marketing is a more active solution to market and business, which aims to cover all environmental costs associated with production and consumption in order to create an economy that is sustainable. During the sustainability phase, there is a special need for production and consumption to make sure that the current material standard of living won't have a detrimental effect on the standard of living for future generations (Peattie1 2001). Sustainable marketing is a macro marketing concept and differs from green marketing. The latter only includes the environmental aspects whereas the former includes practices for environment, social and economic issues (Fisk, 1998).



Figure -6: Word cloud for theme- ECOPRENEURSHIP

Source: Created by authors

THEME-2 ENVIRONMENTAL CONSCIOUSNESS

Understanding and being aware of the ways human actions affect the environment is known as environmental consciousness. It often leads to lifestyle changes such as choosing sustainable items, limiting on energy usage and encouraging environmentally responsible behaviour. The authors have identified three sub- themes which include green product, green consumer and eco labels.

Sub- themes

Green product- Green products are produced using environmentally friendly technology and pose no threat to the environment. The promotion of green products and technology is essential for the utilisation of natural resources in a sustainable manner. Majority of customers—both customers and business—are becoming more interested in environmentally friendly products (Mishra and Sharma 2010). Customers today are more inclined to "thinking green" and are willing to spend more on environmentally friendly products. There is a general rise in the number of purchases of and readiness to pay more for a variety of sustainable product categories. These shifts in consumer behaviour pointed to expanding potential for businesses to integrate sustainability into their plans, market "thinking green" more and are prepared to pay more for ecologically friendly goods. There is a general rise in the number of purchases of and readiness to pay more for a variety of sustainable product categories. These shifts in consumer behaviour pointed to expanding potential for businesses to integrate sustainability into their plans, market themselves as sustainable businesses, and create sustainable products (Agyeman 2014).

Green Consumers- "Green Customers" are those who, given the option of two items with the same features but varying degrees of eco-performance, would choose the one with the better environmental performance (Kadarsh 1974). Consumers

who are environmentally conscious can be categorized as green consumers if they exhibit certain behaviors, intentions, or attitudes, and they can also fit certain demographic, psychological, or behavioral characteristics (Chamorro, Rubio and Miranda, Characteristics of Research on Green Marketing 2009). The idea that environmental concerns could influence consumer behaviour gave rise to the "Green Consumer" concept (Peattie 2001). A new market sector known as "LOHAS," which stands for "lifestyles of health and sustainability," has emerged, according to Environmental Leader (2009). This group is more likely to spend money on social justice, sustainable living, personal growth, health and fitness, and the environment.

Eco –Labels- Eco labels are more than just logos or symbols; they also include the explanation that goes along with them so that consumers can easily understand them and that there is no room for confusion (Sedky & AbdelRaheem, 2021). One of the crucial instruments for green marketing is eco-labeling, which aids in distinguishing between green and non-green items (Sharma and Kushwaha 2019).



Figure 7: Word cloud for theme- Environmental consciousness

Source: Created by authors

THEME-3 SUSTAINABLE DIFFERENTIATION

Sustainable differentiation refers to the strategy of creating a unique market position that not only sets a business apart from its competitors but also ensures long-term viability and environmental responsibility. Hence, the authors have identified three sub- themes which include environmental segmentation, environmental claims and competitive advantage.

Sub- themes

Environmental segmentation- The best indication of customer behavior that is environmentally sensitive comes from perceived consumer effectiveness (PCE) which often leads to environment segmentation (Straughan and Roberts 1999). Corporate Green marketing investors are more at ease when businesses do green marketing activities when their financial success is improving, as indicated by growth in earnings per share, company size, and the advertising-to-sales ratio. Hence, these activities are viewed more positively (A. M. Paco 2009).

Environment Claims- Green marketing provides new opportunities for companies to use environmentally friendly technologies and inform customers about the environment. This in turn provides them competitive edge (Fisk, 1998). By focussing more on "cradle to cradle" products than "cradle to grave" products, marketers are attempting to address environmental challenges in light of the growing concern over environmental factors around the world because environmental concerns have continued to rise, there is a growing need for green products. To meet the demands of the upcoming generation, organisations are tasked with protecting the rare natural resources (Chitra 2007).

Competitive Advantage: Businesses that launch environmental innovations first benefit from competitive advantages. Companies seeking competitive advantage are likely to adopt green marketing. More environmentally conscious consumers are likely to use products that don't damage the environment (Saini 2014). Component of green marketing techniques like green place (distribution) influences the green price component favourably and green product component

influences the green promotion component favourably giving firm a competitive edge. Therefore, a large number of businesses employ green marketing as a method to develop in consumers' minds that their products are environmentally friendly giving them a competitive edge over their competitors (Amir and Dhyan 2018).



Figure 8: Word cloud for theme- Sustainable Differentiation

Source: Created by authors

THEME -4 SUSTAINABLE AUTHENTICITY

"Sustainable authenticity" refers to the idea of being true to oneself while also considering the broader effects of one's behaviour on the environment and society. It encourages individuals and organizations to cultivate genuine identities that contribute positively to the world, whether through responsible consumption, mindful living, or fostering inclusive communities. Hence, the authors have identified two sub- themes which include:

Green marketing myopia- The failure of green marketing leads to green marketing myopia. Myopia in green marketing has resulted in inefficient products and uninterested customers (Dr.P.Parimaladevi 2014). Green Marketing Myopia can be avoided by following the three C's. These include:

Consumer Value Positioning- Promote and supply the value that consumers want from environmental products, target relevant consumer market categories, and create environmental products to function as well perform better than alternatives.

Calibration of Consumer Knowledge- Consumers can be made aware of environmental product qualities through marketing messages that link them to desirable consumer values, such as the health benefits of pesticide-free produce, cost savings from energy efficiency, or the practicality of solar power. They must develop interesting and informative websites on the intended value to consumers of eco-friendly products.

Credibility of Product Claims- Producers use the statements emphasising the benefits to environment and consumers in a competent, thorough, pertinent, and substantial manner. They acquire eco-certifications or product endorsements from reputable third parties, and educate customers about the importance of these statements.

Green Washing- Green washing means attempting to sell consumers goods that, regardless of what the business claims, are not eco friendly (Tiwari, 2014). (Saxena 2015) Defined green washing as the act of a firm making false and unjustified claims about its environmental friendliness in an effort to get a larger market share. Green wash has a remarkable moderating effect between concern for the environment and green procurement (Szabo and Webster. 2020). Green washing

and green trust cannot coexist. In order to build consumer green trust, firms should avoid engaging in green washing (Chen and Chang 2013).



Figure 9: Word cloud for theme Sustainable authenticity.

Source: Created by authors

Results

The present study employs a bibliometric and thematic analysis to examine the evolution and intellectual structure of green marketing research over the period 2013–2024. The findings reveal a steady increase in the number of publications, indicating growing academic and practical interest in sustainability-driven marketing practices. The keyword analysis highlights commonly used terms such as green marketing, sustainability, consumer behaviour, environmental consciousness and eco labelling. This reflects the interdisciplinary nature of the topic and shows how closely it is linked to the consumer decision making as well as growing concerns about environmental responsibility. The thematic analysis identified four main themes- ecopreneurship, environmental consciousness, sustainable differentiation and sustainable authenticity- which all together help to shape the overall framework of green marketing research in this study. This research study also reflects how the research has changed over the past years where earlier studies focussed on consumer awareness, perceptions and attitudes towards sustainability. Recently, research has shifted towards practical aspects including implementation strategies, innovation and impacting nature of sustainability on business performance. There is also rise in research studies which support sustainable business practices of developing economies in areas like eco labelling, green branding, sustainable packaging and use of digital technologies. **Overall, the results indicate that green marketing has developed into a comprehensive and strategic field that incorporates social, economic and environmental aspects establishing it as a crucial part of modern business strategy.**

Trends

The literature review study highlights certain important trends that describe the development of green marketing research. The growing significance of sustainability in theory and practice is reflected in an ongoing increase in academic study. There is a noticeable change observed from the early emphasis on environmental awareness and consumer attitudes to the actual implementation of green marketing strategies such as sustainable product development, sustainable product branding and sustainable product communication. The green consumerism has become a dominant trend with the growing focus on environmentally conscious consumer behaviour and inclination towards eco friendly products and packaging. In order to gain competitive edge and long term profitability in the market, companies are strengthening the inclusion of sustainability into their core business strategies. The increasing significance of eco labelling and sustainable packaging solutions emphasizes the importance of communication and transparency in influencing customer and consumer choices, even though issues with standardization and credibility still exists. The growing awareness of green washing, which reflects the need for its authenticity and certainty regarding its environmental claim is another significant trend. Digital platforms, new

age tools and advancements in technology helps businesses connect with customers in an effective way. This transforms the way green marketing is being practiced. In emerging economies like India, this type of research presents both significant opportunities and challenges as sustainability is a crucial element for such developing economies due to cultural and social beliefs. This research study also suggests a growing shift towards sustainable development as green marketing is closely associated to sustainability goals which include concepts and practise of circular economy.

Implications

This research study provides valuable insights for researchers, industrialists, businesses and policy makers working in the area of sustainable development and circular economy.

Theoretical Implications

The research study provides a detailed bibliometric and thematic analysis of research on green marketing and contributes to the existing literature. By providing important themes such as ecopreneurship, environmental awareness, sustainable differentiation and sustainable authenticity, the research study provides a framework of green marketing as a broad and multidimensional concept. This research study provides different perspectives of green marketing such as consumer behaviour, sustainability and strategic marketing which acts as a strong dimension towards sustainable development and adding to the circular economy. By identifying research gaps, the research study provides a framework for future research for emerging areas like technology driven green marketing, impact and utility of eco labels and problems and issues with green washing.

Managerial Implications

To gain and strengthen competitive edge in the market, this research study reflects the growing importance of green marketing and its practices for the businesses. Businesses and companies can improve and build customer trust and brand loyalty by adopting sustainable marketing strategies like developing and manufacturing eco friendly products, being transparent about the environment and health claims they make about their process, product and packaging and using eco labels as a standardized mark for the environment friendliness of the product and packaging. Besides this, the research also focuses on how to maintain a balance between environmental responsibilities and customer value. To avoid green marketing myopia and green washing businesses must prioritize that their claims towards sustainability is genuine, practical, true and provides health and environment benefits. Incorporating innovation, efficient and sustainable manufacturing and supply chain practices and sustainable packaging into green marketing strategies contributes positively towards long term business growth and performance.

Policy Implications

Policy makers play an important role in encouraging sustainable marketing practices by defining clear guidelines, proper regulations and awareness programs. Promoting standardized eco labels by governments and regulatory authorities and providing license to businesses for using their own eco labels, customer trust can be built and green washing and green marketing myopia can be eliminated. Strong policies ensure transparency and authenticity in environmental claims which helps to create a sustainable marketplace. In order to help emerging economies like India, the necessity of support from policy and law guidelines can help shift towards sustainable patterns of production and consumption.

Social and Environmental Implications

The study emphasizes how green marketing can encourage environmentally conscious behaviour and sustainable consumption from a wider angle. Green marketing can help reduce ecological degradation and promote sustainable development goals by influencing consumer behaviour and promoting environmentally conscious choices. Long term benefits to society and environment can result from a shift towards more responsible consumption patterns brought about by increased awareness and adoption of green products and packaging.

Limitations

There are some limitations to the study that should be recognised. First, the analysis is based only on secondary data that was obtained from the Scopus database, which could limit how comprehensive the literature is because pertinent studies that were indexed in other databases might have been left out. Second, only English- language publications were taken into account, which limited the inclusion of non- English or region- specific contributions. Third, the study concentrates on the data collected from years 2013-2024 which ignores earlier foundational research in the field of green marketing. Furthermore, the study uses a bibliometric and thematic approach, which does not offer empirical support for the



conclusions even though it identifies trends and patterns. Deeper understanding of consumer behaviour and practical business applications is hampered by the lack of primary data. Fourth, the study limits sector specific implications by offering a broad perspective on green marketing without concentrating on particular industries. This research covers a few aspects of marketing including consumers, products, strategies and marketing. Fifth, green product labelling, green technology and consumer perceptions of green products and how they impact a business's success are all given less attention. These drawbacks point to the need for future research that is more thorough, empirical and context specific.

Research Gaps

Even with the expanding corpus of research on green marketing, there are still a number of gaps. Firstly, there is a lack of integration between sustainable packaging systems and green marketing tactics, especially when it comes to understanding how eco friendly packaging affects consumer choices. Secondly, despite the widespread discussion of the idea of "green consumers", less research has been done on behavioural factors like psychological motivations, decision biases and the discrepancy between intention and actual purchasing behaviour. Thirdly, existing research on green marketing is focussed on developed economies which ignores developing countries like India, where social, cultural and economic factors strongly affects consumer behaviour and business strategies. Fourthly, green washing and green marketing myopia is a major concern towards sustainable marketing and practices but still there is limited empirical research on its long term effects on customer trust and brand loyalty. There is also less quantitative and industry specific studies that examine the contribution of green marketing on business performance which can be measured through competitive advantage, financial performance and return on investment. Limited research has been done on digital platforms, new age digital tools and artificial intelligence influence and their effects on businesses and customers. Adding to this, the effectiveness and standardization of eco labels and integration of green marketing practices with circular economy principles also need to be explored. All these areas provide a significant scope for future research to be carried.

Future Research Insights

This research study provides a framework for future research based on research gaps identified in the existing literature. The integration of green packaging, eco labelling and green technologies needs to be effectively studied and explored which effects both consumers and businesses. Brand image, customer loyalty, green supply chain optimization, innovation, competitive advantage, sustainability metrics and sustainability return on investment can also be added to this as it has an overall impact on sustainable development both for business and society. Businesses can also develop their own eco labels to the growing demand of sustainable products. This will help them to improve brand image, enhance manufacturing, operational and supply chain efficiency and contributing towards long term business growth.

Green marketing strategies can be integrated with innovative and smart sustainable packaging solutions and also studying changing customer attitudes and adopting patterns. There is a need for more empirical research through surveys, experiments and case studies which will provide more insights into consumer behaviour. Greater emphasis should be laid on developing economies, like India where factors such as social, economic and cultural plays a significant influence on green marketing practices. Green washing and green marketing myopia should also be taken into consideration as these greatly affects sustainable development goals and green marketing practices. Future research could also examine how e commerce platforms, digital nudging, artificial intelligence and other technology driven marketing practices can promote more sustainable consumer behaviour. There is also a growing need for industry specific research in areas such as packaging, fast moving consumer goods (FMCG) and sustainable materials. Lastly, future research should also focus on integration of circular economy principles with marketing strategies which also links green marketing efforts to measurable outcomes such as sustainability metrics, return on investment (ROI) and long term competitive edge.

Conclusion

Green marketing has become an evolving concept in developing countries like India due to consumer preferences and environmental awareness and easier access to sustainable products. This research study provides a comprehensive bibliometric and thematic analysis of green marketing which gives rise to major themes such as sustainable authenticity, ecopreneurship, environmental consciousness and sustainable differentiation. Green marketing is not only limited to promotional activities but also incorporates social, economic, green products and competitive advantage which greatly emphasizes sustainable marketing strategies. But also businesses face challenges while moving from traditional marketing practices to green marketing practices. These include low consumer awareness, the possibility of green marketing myopia and green washing and uncertainty regarding long term positive results on adoption of these sustainable marketing practices. The success of green marketing largely depends on how well businesses understand and respond to customer expectations and values. To enhance more acceptances of green products, companies must provide environmental benefits



and transparency about their products. This research study also provides emerging trends such as eco innovation, low carbon industries, green consumerism, sustainable packaging, sustainable branding and developments in green technology. Businesses have greater opportunities to connect with customers, provide transparency and encourage sustainable consumption through technology driven interactions. To create stronger links between businesses, technology and consumers; companies need to integrate innovation, technology and sustainable marketing approach which support circular economy. Research should continue to focus on technology based sustainability solutions. Green marketing has a stronger potential to support sustainable development through sustainable manufacturing practices and green supply chain processes which strongly influence consumer behaviour..

REFERENCE

1. Agyeman, C. M. (2014). Consumers' buying behaviour towards green products. *International Journal of Management Research and Business Strategy*, 3(1), 188–197.
2. Amir, M., & Dhyani, A. (2018). Measuring the effect of green marketing practices on firm's competitive advantage. *NICE Journal of Business*, 13(1), 57–72.
3. Bacon, L., & Krpan, D. (2018). (Not) eating for the environment: The impact of restaurant menu design on vegetarian food choice. *Appetite*, 125, 190–200. <https://doi.org/10.1016/j.appet.2018.02.006>
4. Çankaya, Y., Sezen, B., & Bulent, S. (2019). Effects of green supply chain management practices on sustainability performance. *Journal of Manufacturing Technology Management*, 30(1), 98–121. <https://doi.org/10.1108/JMTM-03-2018-0099>
5. Chamorro, A., Rubio, S., & Miranda, F. J. (2009). Characteristics of research on green marketing. *Business Strategy and the Environment*, 18(4), 223–239. <https://doi.org/10.1002/bse.607>
6. Chen, Y.-S., & Chang, C.-H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. *Journal of Business Ethics*, 114(3), 489–500. <https://doi.org/10.1007/s10551-012-1360-0>
7. Chitra, K. (2007). In search of green consumers: A perceptual study. *Journal of Services Research*, 7(1), 173–191.
8. Dangelico, R. M., Fraccascia, L., & Schiaroli, V. (2022). Is COVID-19 changing sustainable consumer behavior? A survey of Italian consumers. *Sustainable Development*, 30(4), 708–720. <https://doi.org/10.1002/sd.2289>
9. Environmental Leader. (2009). Understanding LOHAS consumers. *Environmental Leader*.
10. Fisk, G. (1998). Green marketing: Multiplier for appropriate technology. *Journal of Marketing Management*, 14(6), 657–676. <https://doi.org/10.1362/026725798784867798>
11. Gardas, B. B., Raut, R. D., & Narkhede, B. E. (2018). Evaluating critical causal factors for post-harvest losses in the fruit and vegetables supply chain in India using the DEMATEL approach. *Journal of Cleaner Production*, 199, 47–61. <https://doi.org/10.1016/j.jclepro.2018.07.153>
12. Gelderman, C. J., Schijns, J. M., Lambrechts, W., & Vijgen, S. (2020). Green marketing as an environmental practice: The impact on green satisfaction and green loyalty in a business-to-business context. *Business Strategy and the Environment*, 30(4), 2061–2076. <https://doi.org/10.1002/bse.2732>
13. González-Benito, J., & González-Benito, Ó. (2005). Environmental proactivity and business performance: An empirical analysis. *International Journal of Management Science*, 33(1), 1–15. <https://doi.org/10.1016/j.omega.2004.03.002>
14. Guo, Y.-M., Huang, Z.-L., Guo, J., Li, H., Guo, X.-R., & Nkeli, M. J. (2019). Bibliometric analysis on smart cities research. *Sustainability*, 11(13), 3606. <https://doi.org/10.3390/su11133606>
15. Herbes, C., Beuthner, C., & Ramme, I. (2023). Consumer attitudes towards biobased packaging: A cross-cultural comparative study. *Journal of Cleaner Production*, 350, 131335. <https://doi.org/10.1016/j.jclepro.2022.131335>
16. Jain, S. K., & Kaur, G. (2004). Green marketing: The Indian perspective. *Decision*, 31(2), 168–209.
17. Kassarijian, H. H. (1971). Incorporating ecology into marketing strategy: The case of air pollution. *Journal of Marketing*, 35(3), 61–65.

18. (Note: corrected “Kadarsh 1974” to a valid foundational reference—please confirm if needed)
19. Koenig-Lewis, N., Palmer, A., Dermody, J., & Urbye, A. (2014). Consumers’ evaluations of ecological packaging: Rational and emotional approaches. *Journal of Environmental Psychology*, 37, 94–105. <https://doi.org/10.1016/j.jenvp.2013.11.009>
20. Kotler, P. (2011). Reinventing marketing to manage the environmental imperative. *Journal of Marketing*, 75(4), 132–135. <https://doi.org/10.1509/jmkg.75.4.132>
21. Mishra, P., & Sharma, P. (2010). Green marketing in India: Emerging challenges and opportunities. *Journal of Engineering, Science and Management Education*, 3, 9–14.
22. Muncke, J., Andersson, A.-M., Backhaus, T., Boucher, J. M., Almroth, B. C., Castillo, A. C., et al. (2020). Impacts of food contact chemicals on human health: A consensus statement. *Environmental Health*, 19(1), 25. <https://doi.org/10.1186/s12940-020-0572-5>
23. Ottman, J. A., Stafford, E. R., & Hartman, C. L. (2010). Avoiding green marketing myopia: Ways to improve consumer appeal for environmentally preferable products. *Environment: Science and Policy for Sustainable Development*, 48(5), 22–36. <https://doi.org/10.3200/ENVT.48.5.22-36>
24. Parimaladevi, P. (2014). Green marketing myopia. *GE-International Journal of Management Research*, 2(2), 81–90.
25. Paço, A. M. F., & Raposo, M. L. B. (2009). Identifying the green consumer: A segmentation study. *Journal of Targeting, Measurement and Analysis for Marketing*, 17(1), 17–25. <https://doi.org/10.1057/jt.2008.28>
26. Peattie, K. (2001). Towards sustainability: The third age of green marketing. *The Marketing Review*, 2(2), 129–146. <https://doi.org/10.1362/1469347012569869>
27. Peschel, A., Grebitus, C., Steiner, B., & Veeman, M. (2016). How does consumer knowledge affect environmentally sustainable choices? *Appetite*, 106, 78–91. <https://doi.org/10.1016/j.appet.2016.02.162>
28. Polonsky, M. J. (1994). An introduction to green marketing. *Electronic Green Journal*, 1(2). <https://doi.org/10.5070/G31210177>
29. Quaye, D., & Mensah, I. (2019). Marketing innovation and sustainable competitive advantage of manufacturing SMEs. *Management Decision*, 57(7), 1535–1553. <https://doi.org/10.1108/MD-08-2017-0784>
30. Rivera-Camino, J. (2007). Re-evaluating green marketing strategy: A stakeholder perspective. *European Journal of Marketing*, 41(11/12), 1328–1358. <https://doi.org/10.1108/03090560710821206>
31. Saini, M. (2014). Emerging trends in green marketing. *International Journal of Advances in Engineering and Management*, 2(3), 45–49.
32. Saxena, S. (2015). Are they really green? Flipping the second side of green marketing coin. *Amity Global Business Review*, 10, 110–113.
33. Scott, L., & Vigar-Ellis, D. (2014). Consumer understanding, perceptions and behaviours with regard to environmentally friendly packaging in a developing nation. *International Journal of Consumer Studies*, 38(6), 642–649. <https://doi.org/10.1111/ijcs.12136>
34. Sedky, D., & AbdelRaheem, M. A. (2021). Studying green marketing in emerging economies. *Business Strategy and Development*, 4(2), 1–10.
35. Sharma, N. K., & Kushwaha, G. S. (2019). Eco-labels: A tool for green marketing or just a blind mirror for consumers. *Electronic Green Journal*, 1(42). <https://doi.org/10.5070/G314243767>
36. Shukla, S. (2021). Exploration of green marketing: A shift from traditional marketing to green marketing for sustainable environment. In *Proceedings of academic conference* (pp. 1–13).
37. Straughan, R. D., & Roberts, J. A. (1999). Environmental segmentation: A look at green consumer behavior in the new millennium. *Journal of Consumer Marketing*, 16(6), 558–575. <https://doi.org/10.1108/07363769910297506>
38. Szabó, S., & Webster, J. (2020). Perceived greenwashing: The effects of green marketing on environmental and

product perceptions. *Journal of Business Ethics*, 171(4), 719–739. <https://doi.org/10.1007/s10551-020-04461-0>

39. Tiwari, P. J. (2014). Green marketing in India: An overview. *IOSR Journal of Business and Management*, 16(6), 33–40.

40. Trivedi, R. H., Patel, J. D., & Acharya, N. (2018). Causality analysis of media influence on environmental attitude and behavior. *Journal of Cleaner Production*, 171, 11–22. <https://doi.org/10.1016/j.jclepro.2017.09.237>

41. Zampese, E. R., Moori, R. G., & Caldeira, A. (2016). Green marketing as a mediator between supply chain management and organizational performance. *Mackenzie Management Review*, 17(3), 183–211...