Exploring the importance of green marketing to increase sales in food industry

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Abstract. Over the past decade, the imperatives of environmental sustainability have significantly transformed consumer preferences, especially within the food sector. This study aims to highlight the importance of green marketing for modern businesses, demonstrating that such strategies not only have the potential to boost sales in the food industry, but also play an important role in protecting and preserving the global environment. Through an in-depth analysis of specific case studies and current market trends, the study highlights the fact that green marketing not only satisfies the growing consumer demand for sustainability, but also acts as a significant tool for differentiation in the face of intense market competition. Companies that implement sustainable practices – from environmentally responsible packaging to ethical sourcing – not only improve public perception of their brand, but also realize economic advantages in the form of increased market share and enhanced consumer loyalty. The results of the study highlight the importance of integrating green marketing into the strategic models of food companies, as it simultaneously supports sustainable profitability and contributes to global environmental stability. In this context, green marketing is being established not just as a competitive advantage, but as a paradigm for long-term development and maintaining competitiveness in the sector.

1 Introduction

In the modern era, the planet is facing a number of serious environmental crises – from air and water pollution to excessive food waste generation, plastic accumulation and the destruction of forest ecosystems. The massive presence of industrial pollutants is stimulating many companies, especially in the food sector, to rethink their production models and integrate sustainable solutions into their operations. In parallel, increased environmental sensitivity among consumers leads to a greater willingness to choose "green" products, even when they require a higher financial investment.

In the context of this transformation of consumer attitudes, more and more companies in the food industry are adopting sustainability as a central principle in their strategic management. Green marketing is becoming a leading tool for achieving a balance between

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economic efficiency, public health and environmental protection. It integrates environmental standards into all stages of the business process – from product and packaging development to corporate communications and public engagement.

Current market data [1] shows that 69% of consumers in the United States consider environmental impact when making purchasing decisions. The global organic food and beverage market reached a value of USD 231.52 billion in 2023, with forecasts indicating a steady annual growth rate of 13.9% for the period 2024-2030. These trends clearly indicate a growing preference for products produced in compliance with the principles of sustainability. As a result, green marketing is establishing itself as a strategic area aimed at developing and promoting environmentally responsible goods and services. This study **aims** to highlight the importance of green marketing for modern businesses, demonstrating that such strategies not only have the potential to boost sales in the food industry, but also play an important role in protecting and preserving the global environment.

2 Materials and Methods

In order to assess the role of green marketing as a factor in stimulating sales in the food sector, a systematic review of the relevant scientific and applied literature was carried out. The analysis focused on contemporary research and empirical reports examining how sustainable business practices influence consumer attitudes and behavior patterns, with a particular emphasis on the food industry. Secondary data sources from reputable academic publications, corporate sustainability reports and specialized industry analyses were used.

For the purposes of the study, representative case studies from internationally recognized companies such as Starbucks, Coca-Cola, Chipotle, Hershey, PepsiCo and Nestle were selected. The selection of these organizations was based on their proven commitment to sustainability and the implementation of innovative marketing strategies aimed at environmental responsibility – a topic of particular importance for the modern food and beverage industry.

The study applies a qualitative methodological approach, including an in-depth analysis of corporate sustainability initiatives and the way they are integrated into the marketing policies of the companies under consideration. The main goal is to identify recurring patterns, effective practices and strategies that help build trust, strengthen consumer loyalty and stimulate sales growth in the sector.

Additionally, to ensure empirical validity of the conclusions drawn, quantitative data related to market trends, consumer preferences and financial indicators were analyzed. This combination of qualitative and quantitative analysis allowed to build a comprehensive picture of the impact of green marketing strategies on both consumer behavior and the economic results of enterprises in the food and beverage industry.

3 Literature review

In recent decades, academic and corporate interest in green marketing has grown significantly, reflecting the growing need for sustainable business models and responsible market practices. In essence, green marketing is a strategic approach aimed at promoting products, services and organizational initiatives that minimize their environmental footprint and support sustainable development. It encompasses a wide range of activities, from designing environmentally efficient products to developing communication strategies that promote responsible consumption. This review aims to summarize the leading trends in the contemporary scientific literature on the impact of green marketing on consumer behavior, brand perception and financial performance of enterprises.

The development of green consumer attitudes has become a central subject of research in recent years. A number of authors have indicated that consumers are increasingly including environmental criteria as a factor in their purchasing decisions. According to Joshi and Rahman [2], environmental commitment, social influences and a sense of personal efficacy are among the main determinants of "green" consumer behavior. These conclusions are confirmed by the meta-analysis of Haws et al. [3], which reveals that sustainable purchase intentions are determined by the individual's value system, level of environmental awareness and the belief that the choice of a given product actually contributes to environmental protection.

Additionally, the work of White, Hardisty and Habib [4] examines the moral and social dimensions of green consumerism. The authors emphasize that consumers are inclined to take sustainable actions when they perceive them as compatible with their own ethical beliefs and social identity. This conclusion outlines a strategic direction for companies – to build marketing messages that emphasize the moral and social value of sustainable behavior.

Sustainability is increasingly becoming a key factor in the formation of a positive brand image. Companies that can convincingly demonstrate a commitment to environmental practices are usually perceived as more trustworthy and innovative. Jalu et al. [5] found that green marketing strategies lead to increased brand value, greater customer satisfaction and longer-term loyalty. These effects are particularly pronounced in industries with high environmental sensitivity – such as the food, fashion and electronics industries.

In parallel, the literature increasingly pays attention to the phenomenon of so-called greenwashing, in which companies exaggerate or falsify their environmental commitment. Laufer [6] emphasizes that authenticity and transparency are fundamental to the success of green marketing. The lack of real evidence of sustainability can not only compromise the brand image, but also permanently undermine consumer trust.

The economic consequences of implementing green strategies are also a subject of intense academic interest. Although environmental initiatives often involve high initial costs, a number of studies have shown that they can generate significant long-term benefits. According to Leonidou and Skarmeas [7], companies that integrate green practices into their business strategy report higher market shares, the ability to charge premium prices, and optimization of operating costs. At the same time, these organizations build a more stable customer base characterized by a high degree of loyalty.

In addition, the study by Eccles, Ioannou, and Serafeim [8] shows that good environmental performance is positively correlated with the ability of companies to attract investments from socially responsible investors. This is in line with the global trend towards integrating ESG (environmental, social, and governance) criteria into investment decisions, where sustainability is seen as a strategic indicator of corporate stability and growth potential.

4 Results and Discussion

The growing pressure to rethink global patterns of food production and consumption is causing profound structural changes in the agri-food sector. These changes are manifested both in the adaptation of eating habits and consumer attitudes, and in the increased efforts to protect natural ecosystems and introduce agricultural practices that favor biodiversity. Consumers are demonstrating an increasing degree of environmental awareness, and a number of companies are responding by integrating sustainable solutions and responsible production approaches. This evolution is not an isolated phenomenon, but part of a global paradigm oriented towards sustainability and social responsibility, which is rearranging the strategic priorities of business.

Although organic farming has long served as the main model for sustainable production, modern practice is characterized by the introduction of new technologies and management tools aimed at minimizing the ecological footprint of food systems. Key areas include sustainable sourcing, resource optimization, and the shift to environmentally friendly solutions in the packaging industry, including the reduction of plastic materials. These transformations confirm the understanding that environmental management is not a peripheral activity, but a strategic component of the long-term competitiveness of enterprises, which simultaneously strengthens business sustainability and meets the expectations of the modern, socially responsible consumer.

One of the most significant trends in contemporary strategies for sustainable food production is the adoption of the principles of regenerative agriculture, a model aimed at restoring ecosystem functions, improving soil fertility and promoting biodiversity. Many global corporations are already integrating this approach into their supply chains. For example, Nestle [9] has stated its intention to source half of its raw materials from farms using regenerative practices by 2030, while Danone has formulated similar ambitions within its agri-initiatives.

While regenerative agriculture represents a significant step forward towards sustainability, it should not be seen as a one-size-fits-all solution or a guarantee of environmental leadership. Rather, it is part of a broader process of systemic transformation that requires synergies between innovation, policy and corporate responsibility. In this context, the increased engagement of business with agricultural transformations can be interpreted as a positive sign – evidence of the transition from reactive environmental measures to proactive corporate participation in building sustainable and renewable food systems.

According to PepsiCo's 2023 ESG Report, the company reported a 4% reduction in its use of virgin plastic compared to the previous year, a result that was partly driven by the transformation of Instant Quaker Oats packaging, replacing plastic with recyclable paper [10]. This example clearly demonstrates how even incremental technological and logistical improvements can become significant drivers of corporate sustainability goals, while simultaneously meeting the expectations of an increasingly informed and environmentally conscious consumer.

Despite the progress made, fully integrating sustainability into corporate models remains a challenge. Organizations that lag behind in implementing comprehensive environmental and social responsibility strategies risk losing consumer trust and facing stricter regulatory requirements. In this context, adopting sustainable business practices is no longer seen as a voluntary act, but as a strategic necessity for long-term market viability and competitiveness within the food and beverage industry.

Analysis of green marketing strategies provides valuable insights into the dynamics of a sector where transparency and sustainability are increasingly becoming a determining factor in consumer choices. A typical example is Starbucks, a global leader in coffee chains and a symbol of corporate sustainability. The company systematically integrates environmental principles into its strategy, making sustainability a core element of its brand. Among its distinctive initiatives are the use of recyclable materials in packaging, the implementation of energy-efficient solutions in the operations and design of establishments, as well as the ethical sourcing of coffee, tea and paper.

These consistent efforts not only strengthen Starbucks' corporate reputation, but also build an authentic connection with an audience oriented towards responsible consumption. The combination of environmental and socially significant actions within the marketing strategy illustrates how sustainability can become a source of competitive advantage, supporting both the realization of corporate goals and the protection of the natural environment.

Starbucks continues to expand its green communications strategy, using digital channels not just for promotion, but to build an authentic connection with its audience. Through personalized social media campaigns, the company showcases its sustainable practices and encourages responsible consumption, emphasizing real actions rather than symbolic gestures. This two-way communication builds trust and strengthens the relationship between the brand and customers, who perceive environmental commitment as part of their own value system. Starbucks thus demonstrates that transparency and active consumer participation can become a catalyst for loyalty and increased sales, confirming the importance of green marketing as a tool for market development in the food and beverage industry [11]. Such an approach reveals the synergy between sustainable operational practices and effective strategic communication – a key factor for sustainable business growth.

In the same context, Coca-Cola [12] introduces the PlantBottle initiative, an innovative solution in the field of sustainable packaging, aiming to reduce the company's environmental footprint. This technology uses up to 30% plant-based raw materials (such as sugarcane and molasses), which replace some of the fossil resources used in traditional plastics. The combination of functionality and environmental responsibility makes PlantBottle a landmark example of how technological innovation can combine corporate efficiency with environmentally friendly solutions.

The implementation of PlantBottle not only reduces the company's dependence on non-renewable materials, but also becomes a central axis of its global sustainability strategy. In addition to the environmental dimensions, the initiative also has a social effect – it stimulates public debate about the role of packaging in sustainable development and motivates other companies to follow a similar example. In this way, Coca-Cola demonstrates that strategically targeted green innovations can simultaneously transform industry standards and shape new models of consumer perception, where sustainability is seen as an expression of corporate and ethical responsibility.

The initiative "Food with Integrity" reflects Chipotle's commitment [13] to providing products that combine high quality with ethical and sustainable practices. The program focuses on supporting local farmers, implementing environmentally and socially responsible farming methods, and ensuring animal welfare. This approach allows Chipotle to differentiate itself from its competitors in the fast food industry by building a loyal customer base that values healthy and ethically produced food products. The initiative demonstrates how ethical and sustainable solutions can be strategically integrated into brand identity and strengthen consumer engagement.

In addition, the program serves as a driver for increased transparency in the food industry by setting standards for responsible production. The benefits of its implementation go beyond corporate reputation and include protecting the environment, promoting animal welfare, and supporting public health. By demonstrating accountability and openness, Chipotle is establishing itself as an example of how corporate initiatives can influence industry standards and shape practices in the sector.

The established confectionery manufacturer Hershey's [14] has set a goal of reducing greenhouse gas emissions by 50% by 2025. To achieve this, the company is implementing a number of sustainable practices, including energy efficiency and significant investments in renewable energy sources. These measures aim not only to significantly reduce the environmental footprint, but also to promote sustainable production and consumption patterns. The approach demonstrates an integrated strategy in which operational efficiency is combined with long-term environmental investments, ensuring sustainability at the level of both business processes and corporate policy.

Hershey's initiatives are seen as an example of corporate social responsibility and environmental commitment. Through them, the company emphasizes the importance of proactive actions in the fight against climate change and their role in achieving the global

goals for sustainable development. This example also illustrates a broader industry trend – the integration of environmental strategies into the main corporate plans as a key factor for competitiveness and long-term sustainability.

The global market for sustainable technologies and solutions is projected to exceed $60 billion by 2027. In this context, green marketing – as a tool for positioning a brand as environmentally responsible – has gained significant momentum, reflecting the growing environmental awareness among modern consumers. Global online searches for sustainable products have increased by approximately 70% in the past five years, while up to 55% of consumers are willing to pay more for brands that demonstrate a commitment to environmental practices. These data highlight the real impact of green marketing on driving sales and increasing consumer engagement, providing empirical justification for companies' strategic investments in sustainable initiatives. [15]

A systematic examination of the collected quantitative and qualitative data reveals several significant conclusions. *Figure 1* illustrates how green marketing initiatives impact various dimensions of corporate performance in the food and beverage industry, structured into six main categories:

Fig. 1. Impact of Green Marketing on the Food Industry

- Market expansion and sales growth: Implementing green marketing strategies allows companies to capitalize on the growing demand for environmentally friendly products and services. A significant portion of consumers prefer sustainable solutions and are willing to pay a premium for them. By strategically positioning themselves as environmentally

responsible, food and beverage companies can attract and retain these consumers, increasing sales and expanding their market share.

- Brand reputation and consumer trust: Implementing green initiatives significantly strengthens a company's image. Transparency about its commitment to sustainability builds trust and credibility among consumers. This not only differentiates a business from its competitors, but also attracts new customers and strengthens the long-term loyalty of existing ones.
- Competitive advantage and differentiation: Green marketing provides a unique commercial proposition and an opportunity to differentiate itself in the market. By emphasizing the environmental benefits of products or services, companies can reach niche segments of sustainably minded consumers, increasing market share, sales volume, and customer loyalty.
- Operational efficiency and cost optimization: Integrating environmentally friendly practices into business processes can lead to cost reductions and increased efficiency. Examples include energy-efficient manufacturing processes and sustainable packaging. Communicating these benefits in marketing messages appeals to consumers who value both sustainability and cost efficiency.
- Regulatory compliance and risk management: Green marketing helps companies adhere to environmental regulations and minimize associated risks. Transparently demonstrating regulatory compliance builds consumer trust and establishes the company as a responsible market player.
- Innovation and strategic development: Implementing green strategies stimulates innovation and the development of sustainable solutions for the future. Investments in research and development of green products and technologies allow companies to anticipate changes in consumer preferences and market trends. A proactive approach ensures long-term sustainability and business growth in the food industry.

Overall, integrating green marketing brings multiple benefits: increasing consumer appeal, strengthening brand reputation, optimizing costs, and providing a competitive advantage. For companies in the food industry, these effects are key, as sustainability is becoming an increasingly important factor in consumer behavior. Evidence shows that incorporating sustainability into both operational and marketing strategies is not only ethically justified, but also strategically advantageous.

5 Conclusion

The implementation of green marketing as an integral part of corporate strategies is becoming a key success factor in the food industry. The changing profile of consumers – with increasing environmental awareness and a preference for sustainable solutions – highlights the strategic importance of environmentally-oriented marketing. Companies that integrate green practices not only strengthen their image and brand loyalty, but also contribute to global sustainability. Within the food industry, meeting consumer expectations for sustainability, improving corporate reputation, differentiating themselves from competitors, and driving innovation are proving crucial to reaching the growing segment of environmentally-oriented customers.

The application of green marketing – from environmentally friendly packaging to ethical sourcing – provides significant competitive advantages, accelerates sales, and supports long-term growth. By effectively integrating and communicating sustainable practices, companies can meet consumer expectations, stand out in the marketplace, and achieve financial results.

The findings of this study show that green marketing goes beyond a passing trend and represents a fundamental transformation in the approach to business operations and communications. For organizations in the food industry, adopting green strategies is critical

to maintaining competitiveness and ensuring sustainable success in a market that increasingly values environmental awareness.

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