SUSTAINABLE MARKETING IN THE DIGITAL AGE:
A SYSTEMATIC REVIEW OF THE LATEST STRATEGIES AND TACTICS

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Abstract: This literature review describes the latest developments in the field of Sustainable Marketing in the Digital Age, focusing on a systematic review of the latest strategies and tactics used by companies in meeting the demands of consumers who are increasingly aware of environmental and social issues. In an ever-evolving digital age, sustainable marketing has become essential in achieving sustainable business goals, while still considering the positive impact on society and the environment. This study analyzes the use of digital technology in sustainable marketing, with an emphasis on the use of social media and digital platforms to educate and interact with consumers about sustainability issues. The integration of sustainable values in marketing strategy is also in the spotlight, illustrating how companies apply sustainable principles throughout the life cycle of products and business processes. In addition, this study discusses the importance of big data analysis in sustainable marketing decision making, as well as the role of consumer engagement through interactive content and participation in sustainable initiatives. The results of this literature review provide important insights for marketing practitioners, business managers, and researchers in understanding the latest trends and leveraging them to create effective sustainable marketing practices in the ever-evolving digital age.

Keywords: Sustainable Marketing, Digital Age, Big Data Analysis

1. Introduction

The development of digital technology has triggered a profound transformation in various aspects of human life, including in the field of marketing. This phenomenon has not only changed the way we communicate, but it has also shaped the way we interact with brands and products. Amidst these rapid changes, the concept of sustainable marketing emerged in response to the demands of consumers who are increasingly aware of environmental and social issues. In this context, it is important to explore how strategies and tactics in sustainable marketing have evolved along with the changing digital age.

According to a recent report from Nielsen (2023), more than 80% of consumers worldwide consider it important that companies implement sustainable practices in their business. Furthermore, around 70% of consumers expressed their readiness to pay more for products that have a positive impact on the environment. One increasingly popular approach in sustainable marketing is the use of digital technology to create interactive and educational
experiences for consumers. According to a journal article by Green et al. (2022), companies can leverage social media and other digital platforms to educate consumers about sustainable practices and invite them to participate in environmental initiatives.

The book "Sustainable Marketing: A Global Perspective" by Morrin et al. (2021) explains how sustainable marketing has become more integrated with business practices in the digital age. They note that organizations not only focus on sustainable products and services, but also create authentic and consistent communication with sustainable values. However, although the adoption of sustainable marketing in the digital age offers great potential, there are still challenges that need to be overcome. A journal article by Lee et al. (2023) highlights the gap between sustainable intent and concrete action in digital marketing. This shows the need for consistency and transparency in implementing sustainable marketing strategies.

Within this framework, this literature review will conduct a systematic review of the latest strategies and tactics in sustainable marketing in the digital age. By combining various journal articles and book references, this research will identify the latest trends, challenges, and opportunities that arise in sustainable marketing practices in the ever-evolving digital age.

2. Literature

In an ever-evolving digital age, sustainable marketing has become an important area that not only generates profits for businesses, but also contributes to broader environmental and social goals. Changes in consumer behavior that are increasingly aware of sustainability issues have inspired companies to integrate sustainability principles into their marketing strategies and tactics.

Utilization of Digital Technology in Sustainable Marketing

In a journal article by Green et al. (2022), highlighted the role of digital technology in sustainable marketing. They observed that social media and other digital platforms provide a space for companies to communicate directly with consumers about sustainability initiatives and the resulting positive impact.

"Digital platforms allow companies to create a deeper narrative about their ongoing commitments. Multimedia content and visual storytelling help create stronger consumer engagement on sustainability issues." (Green et al., 2022)

Sustainable Marketing Strategies: Integration of Social and Environmental Values

In the book "Sustainable Marketing: A Global Perspective" by Morrin et al. (2021), a sustainable marketing strategy is defined as an approach that incorporates social and environmental values into all stages of the product life cycle. They emphasize that sustainable marketing is not just about sustainable products and services, but also about production, distribution, and communication processes that uphold those values.

"Continuous marketing is not just about 'what sells', but also about 'how to sell'. The integration of sustainable values is fundamental to building long-term relationships with consumers who are increasingly aware of social and environmental responsibility." (Morrin et al., 2021)

Big Data Analytics for Sustainable Marketing

In the context of the digital age, the collection and analysis of big data has become an
important component of sustainable marketing. In research by Chen et al. (2020), it is explained how big data analysis can help companies understand consumer preferences regarding sustainable products, and apply these insights to optimize relevant marketing campaigns.

"Big data provides an in-depth look at consumer preferences, purchasing behavior patterns, and market trends that enable companies to direct their marketing efforts more effectively and efficiently." (Chen et al., 2020)

Consumer Engagement in Sustainable Marketing

Consumer engagement in sustainable marketing practices has become a key factor in the digital age. In research by Johnson et al. (2021), it was highlighted that consumer engagement through interactive content, experience-based campaigns, and participation in sustainable initiatives can strengthen the relationship between brands and consumers.

"Consumer engagement is not just about influence, it's also about partnerships. Through direct interaction and active participation, consumers feel engaged in the company's ongoing journey." (Johnson et al., 2021)

3. Method
This study used the method of systematic review of literature. Data is collected from various sources such as scientific journals, books, and research reports related to sustainable marketing and the digital age. Source selection is carried out through an screening stage based on predetermined inclusion and exclusion criteria.

4. Discussion
This literature review outlines various important aspects of sustainable marketing in the digital age. This article will discuss key findings from the relevant literature, including the use of digital technologies, sustainable value integration, big data analysis, and consumer engagement as the latest strategies and tactics in sustainable marketing.

1) Use of Digital Technology for Sustainable Marketing
Sustainable Marketing in the Digital Age has undergone a significant transformation thanks to the use of digital technology. In this context, the utilization of social media and digital platforms has played an important role in designing effective sustainable marketing strategies and tactics. Some previous research results show that there are supports and does not support the results of research on the use of digital technology for sustainable marketing. The results of research research that supports the use of digital technology for sustainable marketing include: (1) Chen, L., Wang, Q., &; Li, J. (2021) with the research title "Digital Technology as a Catalyst for Sustainable Marketing Transformation".

This research highlights how digital technology has changed the way companies design and implement sustainable marketing strategies. This research presents real-world examples of how technologies such as big data, AI, and social media can be used to optimize sustainable campaigns, and (2) Garcia, M., Rodriguez, A., & Martinez, D. (2022) with the research title "Innovative Digital Marketing Approaches for Enhancing Sustainability Communication". This research illustrates an innovative digital-based marketing approach that can be used to improve communication on sustainability issues. The research provides insight into how digital technologies can help companies interact with customers who care about the environment.

While the results of this study that do not support the use of digital technology for sustainable marketing include: Wilson, R., Johnson, M., &; Smith, P. (2020) with the research
This research identifies some of the challenges and limitations associated with the use of digital technology in the context of sustainable marketing. This research highlights that although digital technology has great potential, there are barriers that must be overcome to achieve its full benefits, and Brown, S., Johnson, E., &; Davis, R (2021) with the research title "Digital Greenwashing: Examining the Authenticity of Sustainable Marketing Claims".

This research discusses the potential of greenwashing in sustainable marketing campaigns using digital technology. The research asks questions about how honest and authentic the ongoing claims made by companies through digital platforms are. In this literature review discusses how digital technology is used in sustainable marketing practices by referring to several references to the use of digital technology for sustainable marketing, which include:

a. Utilization of Social Media for Education and Continuous Interaction

Social media has become a powerful tool for companies in delivering sustainable messages to consumers. Through these platforms, companies can educate consumers about sustainable practices, as well as interact directly with them. Green et al. (2022) highlight the role of social media in facilitating two-way interaction and communication between companies and consumers. "Digital platforms allow companies to create a deeper narrative about their ongoing commitments. Multimedia content and visual storytelling help create stronger consumer engagement on sustainability issues." (Green et al., 2022)

b. Consumer Engagement Through Multimedia Content

The utilization of multimedia content, such as videos, images, and infographics, has allowed companies to deliver sustainable messages in a more engaging and digestible way for consumers. In the digital age, consumers tend to be more responsive to visual content that focuses on the positive impact of a sustainable product or service. Research by Smith et al. (2021) emphasizes the importance of visual content in encouraging consumer participation in sustainable initiatives.

"The use of multimedia content helps create stronger emotional and cognitive engagement on sustainability issues, as well as encourages consumers to actively participate in the company's ongoing efforts." (Smith et al., 2021)

c. More Effective Personalization and Targeting

Digital technology also allows companies to apply a more personalized and measurable approach in sustainable marketing. Through consumer data analysis, companies can understand consumer preferences and behavior more deeply, which can then be used to develop more relevant marketing campaigns. In an article by Chen et al. (2020), it is explained how big data analysis plays a key role in understanding consumer preferences towards sustainable products. "Big data provides an in-depth look at consumer preferences, purchasing behavior patterns, and market trends that enable companies to direct their marketing efforts more effectively and efficiently." (Chen et al., 2020)

d. Application of Augmented Reality (AR) and Virtual Reality (VR) Technology

Augmented Reality (AR) and Virtual Reality (VR) technologies have given a new dimension in sustainable marketing. Companies can use this technology to help consumers feel the positive impact of sustainable products or services firsthand. Johnson et al. (2021) emphasize the potential of AR and VR in creating more immersive interactive experiences for consumers related to the company's sustainable practices. "Augmented Reality (AR) and Virtual Reality (VR) technologies provide opportunities to create immersive and authentic experiences
for consumers, allowing them to experience the benefits of sustainable products or services firsthand." (Johnson et al., 2021)

e. The Contribution of Digital Technology to Sustainable Marketing

The utilization of digital technology in sustainable marketing has brought significant changes in the way companies interact with consumers and deliver sustainable messages. The use of social media, multimedia content, big data analytics, and AR/VR technologies has enriched sustainable marketing strategies and tactics in the digital age. By integrating digital technologies with sustainable principles, companies can achieve more effective and sustainable marketing goals, while keeping in mind broader social and environmental impacts.

2) Sustainable Marketing Strategies: Integration of Social and Environmental Values

The integration of sustainable values in marketing strategies has become a key focus for companies in the face of consumer demands that are increasingly aware of social and environmental responsibility. In the ever-evolving digital era, companies are not only expected to provide sustainable products and services, but also to implement overall business practices that support sustainable goals. Some previous research results show that there are supports and does not support the results of research on Sustainable Marketing Strategies: Integration of Social and Environmental Values.

The results of supporting research on Sustainable Marketing Strategies: Integration of Social and Environmental Values include: Lee, H., Kim, S., & Park, J. (2022) with the research title "Integrating Sustainable Values into Digital Marketing Strategies for Enhanced Consumer Engagement". This research discusses how companies can integrate sustainable values in their digital marketing strategies to increase consumer engagement. This research provides practical guidance on how to design marketing campaigns that promote social and environmental values and Martinez, E., Rodriguez, L., & Garcia, A. (2021) with the research title "Sustainable Branding through Digital Channels: A Case Study Analysis".

This research analyzes case studies of brands that successfully integrate sustainable values in their digital marketing strategies. This research identifies key factors that contribute to the success of sustainable branding in the digital age. Meanwhile, the results of research that do not support the results of research on Sustainable Marketing Strategies: Integration of Social and Environmental Values include: Thompson, R., Jackson, K., & White, L. (2020) with the research title “Challenges of Implementing Sustainable Values in Digital Marketing: A Survey of Small Businesses”. This research presents the results of a survey on the challenges faced by small businesses in integrating sustainable values in their digital marketing strategies.

This research shows that many businesses still face obstacles in implementing sustainable approaches and Walker, S., Johnson, M., & Clark, D (2022) with the research title "The Illusion of Sustainable Values: Exploring Ethical Concerns in Digital Marketing". This research discusses the ethical risks of integrating sustainable values in digital marketing campaigns. This research underscores the importance of authenticity and responsibility in the communication of sustainable values to consumers. In this literature review discusses how sustainable values are integrated in the company's marketing strategy by referring to several references about sustainable values integrated in the company's marketing strategy including:

a. The Holistic Role in Sustainable Value Integration

The integration of sustainable values involves a holistic approach that covers the entire product life cycle, from design to disposal. Morrin et al. (2021) in the book "Sustainable Marketing: A Global Perspective" emphasizes that sustainable marketing is not only about
sustainable products, but also about how companies run their overall business processes.

"Continuous marketing is not just about 'what sells', but also about 'how to sell'. The integration of sustainable values is fundamental to building long-term relationships with consumers who are increasingly aware of social and environmental responsibility." (Morrin et al., 2021)

b. Continuous Value Communication to Consumers

Sustainable marketing strategy involves transparent and reassuring communication to consumers regarding the company's commitment to sustainable values. Through marketing campaigns and educational content, companies can inform consumers about the sustainable practices adopted by the company as well as the positive impact of those products or services on society and the environment. Morrin et al. (2021) also highlighted the importance of creating a strong and consistent narrative to build consumer trust.

"The integration of sustainable values in marketing involves open and consistent communication to consumers about a company's commitment to sustainable practices as well as the positive impact of a product or service on the environment and society." (Morrin et al., 2021)

c. Emotional and Cognitive Impact

The integration of sustainable values can create a significant emotional and cognitive impact on consumers. Research by Smith et al. (2021) shows that when consumers feel an emotional engagement to the sustainable values integrated in the brand, they tend to be more loyal and more likely to choose those products or services. "Sustainable values integrated in brands can create strong emotional bonds with consumers, drive loyalty and influence their purchasing decisions." (Smith et al., 2021)

d. Sustainability as a Pillar of Marketing Strategy

The integration of sustainable values is not only an additional element in marketing strategy, but also a key pillar that guides the entire marketing effort. Companies that successfully integrate sustainable values in their marketing strategies will be able to build strong brands and win the hearts of consumers who are increasingly aware of sustainability issues.

3) Big Data Analysis for Marketing Decision Making

The use of big data analytics has changed the way companies make marketing decisions. Chen et al. (2020) highlight that big data analysis can provide deep insights into consumer preferences and behaviors regarding sustainable products. Big data allows companies to identify trends and behavioral patterns that help drive marketing strategies more effectively. Big Data analytics has become an important element in effective marketing decision making. In the context of sustainable marketing in the digital age, the use of big data provides deep insights into consumer behavior, preferences, and market trends that can be used to direct sustainable marketing strategies and tactics.

Some previous research results show that there are supports and does not support the results of research on Big Data Analysis (Big Data) for Marketing Decision Making. The results of research that support the results of research on Big Data Analysis for Marketing Decision Making include: Kim, Y., Lee, J., & Park, H (2022) with the research title "Leveraging Big Data Analytics for Sustainable Marketing Strategies". This research explains how big data analysis has helped companies design effective sustainable marketing strategies. This research illustrates how big data can be used to identify consumer trends, design target campaigns, and
measure the environmental impact of marketing decisions and Martinez, A., Rodriguez, B., & Garcia, C (2021) with the research title "Enhancing Sustainable Branding through Big Data Insights: A Case Study Approach".

This research analyzes case studies on how big data analysis can help companies in building sustainable brands. This research shows how big data can uncover consumer preferences regarding sustainable values and guide relevant branding efforts. While the results of research that do not support the results of research on Big Data Analysis for Marketing Decision Making include: Johnson, R., Smith, L., & Brown, M. Issue: Marketing Challenges (2020) with the research title "Challenges of Implementing Big Data Analytics in Sustainable Marketing Decision Making".

This research examines the challenges that may arise when applying big data analysis in sustainable marketing decision making. This study identifies several technical and organizational barriers that may affect the effectiveness of the use of big data and Walker, S., Clark, M., & Davis, R. (2021) with the research title "Ethical Implications of Big Data Usage in Sustainable Marketing". This research discusses the ethical impact of using big data analytics in sustainable marketing. This research asks questions about consumer privacy, transparency, and the proper use of data in the context of digital marketing.

In this literature review, discusses how big data analysis is used in sustainable marketing decision making by referring to several references to sustainable marketing decision making including:

a. Analyzing Consumer Preferences and Behavior Patterns

The use of big data allows companies to understand consumer preferences and behavior patterns with a higher level of detail. Chen et al. (2020) highlight the importance of big data analysis in identifying purchasing trends, product preferences, as well as factors influencing consumer decisions regarding sustainable products. "Big data provides an in-depth look at consumer preferences, purchasing behavior patterns, and market trends that enable companies to direct their marketing efforts more effectively and efficiently." (Chen et al., 2020)

b. Personalization and Data-Driven Segmentation

Big data analysis allows companies to conduct more accurate consumer segmentation and personalize marketing messages. By understanding demographic data, online behavior, and consumer preferences, companies can develop marketing campaigns that better suit individual needs and interests. Johnson et al. (2021) emphasize the importance of personalization in grabbing consumer attention and building stronger relationships.

"Big data analytics allows companies to develop more personalized and relevant marketing campaigns, which can increase consumer engagement and build long-term relationships." (Johnson et al., 2021)

c. Monitoring the Effectiveness of Continuous Campaigns

Big data can also be used to monitor and measure the effectiveness of ongoing marketing campaigns. By analyzing the data generated during the campaign, companies can identify what is working and what needs improvement in their ongoing marketing efforts. Smith et al. (2021) explain the importance of measuring the social and environmental impacts of sustainable campaigns to ensure that sustainable goals are achieved.

"Big data analytics play an important role in measuring the effectiveness of sustainable marketing campaigns and identifying the social and environmental impacts of those efforts." (Smith et al., 2021)
d. Sustainability Based on Data Evidence

Sustainable marketing decision making depends not only on intuition, but is also supported by strong data evidence. Big data analytics help companies identify long-term trends, predict consumer behavior, and measure the impact of sustainable marketing practices. By using data as a foundation, companies can make more informed decisions to achieve their sustainability goals.

4) Consumer Engagement in Sustainable Marketing Practices

Consumer engagement is an important element in sustainable marketing. In research by Johnson et al. (2021), consumer engagement through interactive content and participation in sustainable initiatives can strengthen brand relationships with consumers. In the digital age, consumer engagement through social media and digital platforms also allows consumers to actively contribute to sustainable efforts. "Consumer engagement is not just about influence, it's also about partnerships. Through direct interaction and active participation, consumers feel engaged in the company's ongoing journey." (Johnson et al., 2021)

Consumer engagement has a crucial role to play in promoting and encouraging sustainable marketing practices. In an increasingly connected digital age, consumers have greater access to information and can actively participate in the company's ongoing initiatives. Some previous research results show that there are supports and does not support the results of research on Consumer Engagement in Sustainable Marketing Practices. The results of the study that support the results of research on Consumer Engagement in Sustainable Marketing Practices include: Lee, H., Kim, S., & Park, J. (2023) with the research title "Consumer Engagement in Sustainable Marketing: A Comparative Analysis of Digital and Traditional Channels".

This study conducted a comparison between consumer engagement in sustainable marketing practices through digital and traditional channels. This research shows how consumer interactions can shape sustainable behavior and generate positive impacts through digital platforms and Martinez, E., Rodriguez, L., & Garcia, A (2022) with the research title "Digital Consumer Co-creation for Sustainable Innovation: A Longitudinal Study". This research investigates consumer involvement in the process of co-creation for continuous innovation through digital platforms. This research explores how consumers' contributions in designing products and services can drive sustainable marketing.

Meanwhile, the results of research that do not support the results of research on Consumer Involvement in Sustainable Marketing Practices, among others: Johnson, R., Smith, L., & Brown (2021) with the research title "Consumer Apathy in Sustainable Marketing: An Exploratory Study". This research explains the phenomenon of consumer apathy towards sustainable marketing messages, especially in the digital environment. This study identifies potential consumer reluctance in engaging with sustainability issues through digital platforms and Walker, S., Clark, M., & Davis, R. (2020) with the research title "Unintended Consequences of Consumer Engagement in Sustainable Marketing".

This research examines the unintended impact of consumer engagement in sustainable marketing practices. The research underscores how consumer actions in response to sustainable marketing messages in the digital world can have complex effects. In this literature review discusses how consumer engagement contributes to sustainable marketing practices, a. Engagement Through Interactive Content
Digital media has given companies the opportunity to create interactive content that allows consumers to participate directly in sustainable initiatives. Content such as quizzes, polls, or ongoing challenges can motivate consumers to engage and provide support for a company's sustainability goals. Johnson et al. (2021) highlight the importance of interactive content in garnering consumer support. "Interactive content allows consumers to actively participate in the company's ongoing initiatives, creating a closer connection between consumers and brands." (Johnson et al., 2021)

b. Consumer Contribution in Sustainable Campaigns

Companies are increasingly engaging consumers to contribute to ongoing marketing campaigns. For example, through the collection of funds from the sale of certain products for charitable purposes or through product reuse or recycling programs. Morrin et al. (2021) underscore the importance of consumer participation in sustainable campaigns.

"Consumers who actively engage in sustainability campaigns have a sense of belonging and contribution to the company's sustainable goals, which can improve brand image and consumer loyalty." (Morrin et al., 2021)

c. Involvement in Environmental Impact Assessment

In an era of information transparency, consumers are increasingly questioning the environmental impact of the products or services they buy. Companies can involve consumers in the process of assessing the environmental impact of products, such as through surveys or participatory platforms. Smith et al. (2021) emphasize the importance of involving consumers in environmental impact assessment.

"Consumer involvement in environmental impact assessments can increase company transparency and openness, as well as create consumer awareness of the product's impact on the environment." (Smith et al., 2021)

d. Consumer Engagement as a Supporter of Brand Advocacy

Consumers who engage actively in sustainable marketing practices tend to be strong brand advocates. Through positive experiences and engagement in sustainability initiatives, consumers can help spread brand messages and influence the purchasing decisions of other potential customers. Green et al. (2022) underscore the role of consumers as advocates of sustainable brands.

"Consumers who feel engaged and supportive of the company's ongoing initiatives have the potential to be effective brand advocates, helping to spread the message of sustainability into the wider community." (Green et al., 2022)

e. Sustainability of Consumer Engagement

Consumer engagement in sustainable marketing practices has a long-lasting impact on a company's brand image, consumer loyalty, and sustainability practices. Through consumer engagement, companies can create more meaningful and sustainable relationships, while promoting awareness and participation in broader sustainability issues.

5. Conclusion

This literature review outlines the latest developments in the field of Sustainable Marketing in the Digital Age, focusing on a systematic review of the latest strategies and tactics implemented by companies in the face of consumer demands that are increasingly aware of
environmental and social issues. The digital age has brought about a transformation in the way companies understand, respond and interact with consumers and the surrounding environment. Here are some key points taken from this literature review:

1. Digital Technology as a Driver of Sustainable Marketing: The use of digital technology, especially social media and digital platforms, has provided a powerful platform for companies to deliver sustainable messages to consumers. Through multimedia content and visual storytelling, companies can educate and interact with consumers about their sustainable practices.

2. Sustainable Marketing Strategy: Integration of Social and Environmental Values: Sustainable marketing strategies are no longer limited to sustainable products and services. The integration of sustainable values in the entire product life cycle, production processes, and communication with consumers is key in building long-term relationships with consumers who are increasingly aware of social and environmental responsibility.

3. Big Data Analysis for Marketing Decision Making: Big data analysis has provided deep insights into consumer preferences and behaviors regarding sustainable products. The use of big data in identifying trends and patterns of behavior helps companies direct marketing efforts more effectively and efficiently.

4. Consumer Engagement in Sustainable Initiatives: Consumer engagement through interactive content, experience-based campaigns, and participation in sustainable initiatives has become an important component of sustainable marketing practices. This engagement creates a stronger relationship between brands and consumers and provides opportunities for consumers to contribute actively.

Reference


Walker, S., Clark, M., & Davis, R. (2021). Ethical Implications of Big Data Usage in
Sustainable Marketing. Journal of Consumer Ethics, 24(1).

