



Digital Communication Strategy for Environmental Education Through Social Media: Analysis of the Instagram Account @sayapilihbumi

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Abstract. Environmental issues such as waste management continue to pose serious challenges in Indonesia, requiring effective communication to increase awareness and encourage sustainable behavior. Social media, as a widely used digital platform, offers significant potential to communicate environmental messages in ways that are both informative and participatory. This study aims to analyze how communication strategies are employed on Instagram to promote environmental awareness and collective responsibility, with a specific focus on the account @sayapilihbumi. The research applies the concept of environmental communication as proposed by Cox (2013), which emphasizes the integration of messages, channels, and audiences to create social change. The study also employs thematic analysis following Braun and Clarke (2006) to examine Instagram content posted between January and August 2025. Data were categorized into codes, subthemes, and themes to identify patterns in communication approaches. The findings reveal four dominant strategies: global awareness integration, educational storytelling, hybrid digital–offline engagement, and community identity-building. These strategies demonstrate how Instagram’s interactive and visual affordances can transform environmental discourse into relatable narratives and participatory actions. Collaborations with practitioners, campaigns tied to international awareness days, and hashtags used as identity markers further enhance message reach and audience involvement. The study concludes that Instagram can function as both an educational platform and a participatory hub for environmental advocacy. By combining informative content with interaction, @sayapilihbumi illustrates how digital communication can promote sustainable practices and foster grassroots environmental movements.

Keywords: Environmental Communication, Digital Communication Strategy, Social Media, Sustainability, Public Awareness.

1 Introduction

Environmental communication plays an important role in raising public awareness and concern about environmental issues. In Indonesia, pollution and ecosystem degradation remain urgent problems that require effective and sustainable communication strategies. According to Robert Cox (2010), environmental communication is not only about

delivering information but also about fostering awareness, participation, and collective responsibility. Its effectiveness depends on how messages are tailored to the audience so that environmental values can be internalized in daily life.

Waste management has become one of the most pressing environmental challenges. As of 2025, Indonesia produces approximately 64 million tons of waste annually, including 7.68 million tons of plastic (KLHK, 2025). Only 59.94% of this waste is properly managed, while the remainder threatens ecosystems and public health. It is estimated that 800,000 tons of plastic enter Indonesia's waters each year, positioning the country among the largest contributors to marine waste globally (Detikcom, 2025). Although the government has set ambitious targets to reduce and manage waste through policies such as Presidential Regulation No. 97 of 2017, progress remains limited. A World Bank (2021) report highlights weak public awareness, uneven information dissemination, and lack of stakeholder coordination as major barriers to success.

In this context, communication plays a critical role in transforming waste management efforts into collective action. Social media, particularly Instagram, provides new opportunities for environmental communication through its visual, interactive, and community-building features (Highfield & Leaver, 2016). Yet, there is still limited academic research exploring how Instagram is used to construct and implement environmental communication strategies in Indonesia.

Environmental issues such as waste and plastic pollution remain a critical challenge in Indonesia, with millions of tons of unmanaged waste threatening ecosystems and public health each year (KLHK, 2025; Detikcom, 2025). While government policies provide structural solutions, their effectiveness depends on public awareness and participation, which are often limited due to weak communication strategies (World Bank, 2021). Social media has become an important arena for addressing this gap, with Instagram standing out for its visual and interactive features that support storytelling and community-building (Highfield & Leaver, 2016). The Instagram account @sayapilihbumi represents a relevant case because it actively combines education, awareness, and mobilization through diverse formats such as reels, carousels, and collaborations. Studying this account offers valuable insight into how digital platforms can translate environmental discourse into everyday practices and collective action.

This study focuses on the Instagram account @sayapilihbumi as a case study to understand how digital environmental communication strategies are practiced. The account is relevant because it consistently produces content on sustainability, plastic reduction, and lifestyle change, while also mobilizing audiences to participate in offline activities. By conducting a thematic analysis of its posts from January to August 2025, this study aims to examine how Instagram functions as both an educational tool and a participatory hub, addressing the gap in research on digital environmental communication in the Indonesian context.

2 Literature Review

Environmental communication in digital environments is increasingly shaped by the affordances of social media platforms. Scholars argue that visuality, interactivity, and

networked participation enable environmental issues to be communicated in more engaging ways than traditional media (Highfield & Leaver, 2016). At the same time, participatory culture allows audiences not only to consume environmental messages but also to actively circulate and reinterpret them within their own social networks (Jenkins, 2006). In this context, storytelling becomes an important strategy for translating complex environmental issues into relatable narratives that encourage behavioral reflection and engagement (Dahlstrom, 2014). Together, these perspectives highlight how environmental communication in digital spaces operates at the intersection of information dissemination, narrative engagement, and participatory mobilization.

Environmental communication is the process of delivering messages related to environmental issues, aiming to build awareness, change behavior, and encourage active public participation in environmental preservation. According to Flor and Cangara (2018), environmental communication is part of development communication, used to address environmental problems through effective strategies, both interpersonally and via mass media. It serves as a tool to mediate scientific knowledge, public policy, and community action toward the environment. Research on environmental communication highlights its dual role in raising awareness and motivating action. Cox (2013) emphasizes that environmental communication is both informative and mobilizational, aiming not only to share knowledge but also to influence public attitudes and behaviors toward sustainability.

Dahlstrom (2014) further argues that storytelling in environmental communication increases audience engagement because it situates abstract environmental problems within relatable human experiences. In the context of digital media, Velasco et al. (2019) found that combining online advocacy with offline engagement strengthens long-term behavior change, showing that digital platforms work most effectively when paired with real-world actions. Similarly, Highfield and Leaver (2016) highlight the importance of social media affordances such as hashtags, which function as both organizational tools and community identity markers in sustainability campaigns. This reflects Jenkins' (2006) concept of participatory culture, where audiences actively co-create meaning and mobilize around shared environmental causes.

Together, these studies demonstrate that environmental communication is most effective when it integrates informative content, narrative storytelling, and participatory digital strategies that connect individuals to collective environmental movements. Wahyudin, Bakti, and Ardianti (2024) state that environmental communication involves an understanding of various elements such as messages, media, audiences, and cultural contexts. It is not only informative but also persuasive and educational in conveying the urgency of environmental protection. Furthermore, Rahman and Agustin (2025) emphasize that environmental communication must bridge scientific aspects with the social and emotional values of society. Environmental messages are more effective when connected to local identity, culture, and everyday experiences of the community. Environmental communication strategies are systematic plans to deliver messages that influence knowledge, attitudes, and behavior.

Cox and Pezzullo (2016) define them as planned approaches combining messages, channels, and audiences within cultural and political contexts to drive social and policy change. Wahyudin, Bakti, and Ardianti (2024) emphasize the use of appropriate media,

effective messages, and stakeholder involvement to foster active participation. Environmental communication strategy is defined as a systematic planning process for delivering environmental messages to specific audiences to influence knowledge, attitudes, and behaviors toward environmental issues (Putri et al., 2024). Key indicators of effectiveness include clear objectives, message relevance, suitable channels, proper audience segmentation, and measurable changes in knowledge and behavior (Cox & Pezzullo, 2016; Wahyudin, Bakti, & Ardianti, 2024). Feedback and evaluation further strengthen strategic outcomes.

Communication strategies on digital media must consider user characteristics, content formats, and distribution channels to ensure that messages are effectively delivered (Septiana et al., 2025). Wahyudin (2017) outlines four main stages: assessment, planning, production, and action/reflection. Assessment involves situation analysis and stakeholder mapping; planning includes strategy design and media selection (Nur, 2017; Lippman in Schramm, 1970); production focuses on persuasive content; and action/reflection covers dissemination, monitoring, and evaluation, echoing Oepen and Hamacher (1999). Overall, environmental communication functions pragmatically for education and problem-solving, and constitutively by shaping public understanding of ecology (Cox, 2010). Collaboration across government, media, civil society, industry, and communities is essential to ensure long-term environmental preservation (Wahyudin, 2017).

3 Research Method

Thematic qualitative analysis is one of the most widely used methods in social research to understand patterns of meaning emerging from data. According to Braun and Clarke (2006), thematic analysis is a method for identifying, analyzing, and reporting patterns or themes within data, offering an organized way to interpret participants' experiences. This view is supported by Guest, MacQueen, and Namey (2012), who explain that thematic analysis serves to discover and interpret significant themes in qualitative data in order to better understand the phenomenon under study. Furthermore, Nowell, Norris, White, and Moules (2017) emphasize that thematic analysis is not only useful for generating themes but also provides a systematic framework that can enhance the credibility and trustworthiness of research findings. Thus, thematic analysis is regarded as both a flexible and rigorous method, enabling researchers to explore meaning in depth while ensuring the validity of their findings.

Thematic analysis was employed to examine the Instagram content related to sustainability. Following Braun and Clarke's (2006) framework, the data were first familiarized by repeatedly reviewing captions, hashtags, and accompanying visuals. Initial coding was then conducted by highlighting key features of the content, such as eco-friendly tips, product promotion, and calls for collective action. These codes were subsequently organized into potential themes, including Educational Awareness, Brand Identity, Community Engagement, and Aesthetic Inspiration.

The themes were then refined to ensure internal consistency and clear distinctions between categories. For instance, posts containing practical advice for reducing waste

were categorized under Educational Awareness, while those emphasizing activism hashtags were placed under Community Engagement. By defining and naming these themes, the analysis revealed that sustainability-related Instagram content operates not only as a platform for education but also as a means of branding, community building, and aesthetic inspiration. This demonstrates how Instagram functions as both an informative and symbolic space for environmental communication.

The coding process followed an inductive approach in which patterns were identified directly from the dataset. Instagram posts published between January and August 2025 were first organized into a dataset consisting of captions, visuals, hashtags, and engagement context. Initial open coding generated descriptive labels such as “plastic reduction tips,” “event invitation,” “community hashtag use,” and “sustainable lifestyle promotion.” These codes were then grouped into broader conceptual categories through iterative comparison and refinement. Through this process, recurring patterns were consolidated into three micro-action themes that later informed the identification of four broader communication strategies. The iterative review process ensured that themes were internally coherent while remaining distinct from one another.

Table 1. Coding table

Initial Codes	Micro-Action Theme	Communication Strategy
Plastic reduction tips, reusable product promotion, waste sorting	Reducing plastic use	Educational storytelling
Event invitations, campaign participation, community activities	Participation in environmental events	Hybrid digital–offline engagement
Sustainable fashion, eco lifestyle tips, food waste reduction	Adopting sustainable lifestyles	Community identity-building
Hashtag campaigns, collaborations with activists	Collective environmental identity	Global awareness integration

4 Results and Discussions

The Instagram account @sayapilihbumi demonstrates a sophisticated communication strategy that weaves together awareness, education, participation, and community-building to promote environmental advocacy in the digital age. Through thematic anal-

ysis (Braun & Clarke, 2006), four overarching communicative strategies were identified: global awareness integration, educational storytelling, hybrid digital–offline engagement, and community identity-building. These strategies are operationalized through three recurring micro-action themes, namely reducing plastic use, participating in environmental events, and adopting sustainable lifestyles, which together exemplify how environmental discourse is translated into accessible, actionable practices.

The integration of global awareness into local discourse reflects how @sayapilihbumi situates Indonesian audiences within wider sustainability conversations. By framing local initiatives such as river clean-ups and coastal resilience campaigns within the language of global sustainability, the account echoes Cox's (2013) view that environmental communication is both informative and mobilizational. This global–local linkage underscores the importance of contextualizing abstract global issues like climate change and marine pollution within culturally resonant narratives that foster relevance for everyday Indonesian audiences.

Educational storytelling emerges as a core communicative method. Collaborations with eco-practitioners, such as the May 2025 partnership with Siska Nirmala (@zerowasteadventure), transform abstract ecological imperatives into tangible role models for sustainable living. In line with Dahlstrom's (2014) findings, narrative communication enhances audience engagement by embedding scientific and environmental knowledge within human-centered stories. By leveraging personal journeys, humor, and everyday struggles, @sayapilihbumi reframes environmental responsibility as attainable rather than utopian, thereby reducing psychological distance between individuals and sustainability goals.

The strategy of bridging digital advocacy with offline engagement highlights the account's capacity to mobilize followers beyond screen-based awareness. Events such as the River Clean Up in Tangerang and the Forum Bumi "Solusi Darat dan Laut" demonstrate that digital communication alone is insufficient for long-term behavioral change (Velasco et al., 2019). Instead, @sayapilihbumi integrates its digital narrative with opportunities for physical participation, generating continuity between online interaction and real-world environmental action. This hybrid approach not only reinforces credibility but also strengthens the account's position as a bridge between media advocacy and grassroots activism.

The use of hashtags and collaborative tagging functions as a tool for community identity-building. Hashtags such as #sayapilihbumi and #zerowaste serve not only as digital categorization but also as identity markers that connect individuals to a broader sustainability movement (Highfield & Leaver, 2016). Through this practice, the account cultivates a participatory culture where environmental protection is reframed from an isolated duty into a collective social endeavor. This aligns with Jenkins' (2006) concept of participatory culture, where digital platforms enable the co-creation of meaning and solidarity around shared causes.

The micro-action themes identified further clarify how these strategies are implemented. The theme of reducing plastic use was reflected in 18 posts, including campaigns such as "Buang Mantanmu Sampahmu," Bank Sampah Bobo, and Jersey Reborn. These posts combined humor, visual metaphors, and practical tips to encourage

sustainable consumption behaviors, illustrating how digital campaigns can make systemic issues like plastic waste feel actionable at the individual level. The theme of participating in environmental events, the most frequent with 20 posts, highlighted offline activities including City Cleanup, Festival Si Manis Munjul, and the Living at the Urban Seafront exhibition. Such content not only documented action but also created momentum and visibility for collective environmental practices. Finally, the theme of adopting sustainable lifestyles, with 15 posts, encompassed food waste reduction initiatives, eco-fashion promotions, and Ramadan-specific campaigns linking faith-based practices with sustainability. This reflects a culturally sensitive approach that situates sustainability within everyday habits and local traditions, resonating strongly with diverse audience identities.

Taken together, these strategies and themes reveal how @sayapilihbumi leverages Instagram's affordances of visual storytelling, interactive features, and community-driven hashtags to create a participatory hub for environmental advocacy. The account exemplifies how digital platforms can translate global environmental discourses into localized, culturally resonant micro-actions that motivate both individual and collective participation. By blending education, narrative, offline mobilization, and community-building, @sayapilihbumi embodies a form of environmental communication that is at once accessible, engaging, and mobilizational, advancing Cox's (2013) vision of environmental communication as a vehicle for both awareness and action.

While Instagram provides important opportunities for visual storytelling and participatory engagement, the platform also imposes structural limitations that shape environmental communication. Algorithmic visibility determines which posts gain wider circulation, meaning that environmental advocacy must compete within an attention-driven content ecosystem. This dynamic may encourage the production of visually appealing or emotionally engaging content in order to maintain audience attention, potentially privileging performative expressions of environmental concern over deeper structural discussion. As a result, environmental communication on Instagram operates within an "attention economy" where advocacy messages must balance educational depth with platform-driven visibility and engagement metrics. Recognizing these constraints helps contextualize the strategies used by @sayapilihbumi as adaptive responses to the communicative logic of social media platforms.

Despite its contributions, this study has several limitations. The analysis focuses on a single Instagram account, which limits the generalizability of the findings to broader environmental communication practices in Indonesia. Additionally, the study examines content rather than audience reception, meaning that the actual behavioral impact of the communication strategies cannot be directly measured. Future research could combine content analysis with audience studies or engagement metrics to better understand how environmental communication on social media influences attitudes and behavioral change.

5 Conclusion

The analysis of @sayapilihbumi's Instagram activity from January to August 2025 demonstrates the account's strategic use of social media as a platform for environmental communication. Findings indicate that the content reflects four dominant communication strategies: global awareness integration, educational storytelling, hybrid digital–offline engagement, and community identity-building. Each of these strategies illustrates how environmental messages can be adapted to Instagram's affordances, combining visually appealing formats with participatory features to strengthen audience engagement.

The results align with existing scholarship on environmental communication, which emphasizes that impactful advocacy requires both credible information and opportunities for public participation (Cox & Pezzullo, 2016). Furthermore, the interactive nature of Instagram enables users not only to receive messages but also to contribute to the circulation of sustainability discourse (Highfield & Leaver, 2016). @sayapilihbumi effectively applies this model by integrating knowledge-sharing with interactive elements, thereby encouraging behavioral reflection and collective responsibility among its audience.

In sum, the case of @sayapilihbumi highlights the potential of Instagram to function as both an educational and participatory space for sustainability advocacy. The account's communication strategies illustrate how digital platforms can transform environmental awareness into meaningful engagement, suggesting that future efforts in environmental communication should prioritize hybrid approaches that combine information dissemination with participatory interaction.

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