

## **Generation Z and Digital Ecology: The Role of TikTok in Environmental Campaigning by Pandawara Group**

### **Generasi Z dan Ekologi Digital: Peran TikTok dalam Kampanye Lingkungan oleh Pandawara Group**

Akhirul Aminulloh<sup>1</sup>, Fathul Qorib<sup>2</sup>, Lukman Hakim<sup>3</sup>

<sup>1</sup>Communication Department, Universitas Negeri Malang, Jl. Semarang No. 5, Malang  
Email: akhirulaminulloh.fis@um.ac.id

<sup>2</sup>Communication Department, Universitas Tribhuwana Tunggaladewi, Jl. Telaga Warna, Malang\*  
Email: fathul.qorib@unitri.ac.id

<sup>3</sup>Islamic Journalistic Department, Institut Agama Islam Negeri Kediri, Jl. Sunan Ampel 7, Kediri  
Email: lukmanhakim@iainkediri.ac.id

---

Masuk tanggal : 22-09-2024, revisi tanggal : 29-11-2024, diterima untuk diterbitkan tanggal : 17-12-2024

---

#### **Abstract**

*Pandawara Group is a community of young environmental activists who have gained widespread attention for their waste cleanup campaigns in Indonesia. Pandawara Group utilizes the social media platform TikTok to reach a larger audience. This research aims to explore how digital technology and social media are used and influence environmental action among Generation Z. Using a qualitative approach, this research analyzes the content strategy of the TikTok social media platform. Through a qualitative approach, this research analyzes their content strategy in the context of digital ecology. The research examined eight TikTok videos with the highest number of likes on Pandawara Group's account to evaluate user engagement patterns and content elements that support campaign effectiveness. In addition, interviews were conducted with Pandawara followers at Tribhuwana Tunggaladewi University to explore their perceptions of Pandawara's hygiene campaign through digital platforms. The results showed that Pandawara's authentic and visually appealing content successfully moved audiences, especially the younger generation, towards environmental activism. The study also found that their strategy of emotional storytelling and community engagement created a strong bond with their followers. In addition, the viral nature of their content significantly extended the reach of the message to a global audience. The discussion in this study highlights how such digital strategies are instrumental in creating sustainable impact for environmental advocacy. The conclusion of this study is that digital platforms are highly effective for strengthening grassroots environmental movements and suggests further research on the role of social media in ecological advocacy.*

**Keywords:** digital ecology, environmental activism, generation z, social media campaigns

#### **Abstrak**

Pandawara Group adalah komunitas aktivis lingkungan muda yang telah mendapatkan perhatian luas karena kampanye pembersihan sampah di Indonesia. Pandawara Group memanfaatkan platform media sosial TikTok untuk mencapai audiens yang lebih besar. Penelitian ini bertujuan untuk mengeksplorasi bagaimana teknologi digital dan media sosial digunakan serta memengaruhi aksi lingkungan di kalangan Generasi Z. Melalui pend

Ekatan kualitatif, panellation ini menganalisis strategi konten mereka dalam Konte's ekologi digital. Penelitian ini mengkaji delapan video TikTok dengan jumlah suka terbanyak di akun Pandawara Group untuk mengevaluasi pola keterlibatan pengguna dan elemen konten yang mendukung efektivitas kampanye. Selain itu, wawancara dilakukan dengan pengikut Pandawara di Universitas Tribhuwana Tunggaladewi untuk menggali persepsi mereka terhadap kampanye kebersihan yang dilakukan Pandawara melalui platform digital. Hasil menunjukkan bahwa konten Pandawara yang otentik dan visualnya menarik berhasil menggerakkan audiens, khususnya generasi muda, menuju aktivisme lingkungan. Studi ini juga menemukan bahwa strategi mereka dalam bercerita secara emosional dan melibatkan komunitas menciptakan ikatan yang kuat dengan pengikutnya. Selain itu, sifat viral konten mereka secara signifikan memperluas jangkauan pesan ke audiens global. Pembahasan dalam penelitian ini menyoroti bagaimana strategi digital tersebut berperan penting dalam menciptakan dampak berkelanjutan bagi advokasi lingkungan. Kesimpulan dari penelitian ini adalah bahwa platform digital sangat efektif untuk memperkuat gerakan lingkungan akar rumput, serta menyarankan penelitian lebih lanjut tentang peran media sosial dalam advokasi ekologi.

**Kata Kunci:** aktivisme lingkungan; ekologi digital; generasi z; kampanye media sosial

## Introduction

In recent years, there has been a marked increase in environmental consciousness, particularly among Generation Z, a cohort that has matured in an era dominated by abundant information and technological advancement. This heightened awareness among young people is critical for environmental preservation and the attainment of overall sustainability (Debrah et al., 2021). Environmental education significantly enhances environmental awareness and attitudes, ultimately fostering more sustainable practices (Sprague et al., 2021). Furthermore, community-based environmental education has proven effective in empowering individuals to identify and address pressing environmental challenges (Lawson et al., 2015).

In the digital era, educational tools such as games have been deployed to elevate environmental awareness among students, yielding promising outcomes in terms of increasing levels of environmental consciousness (Fjællingsdal & Klöckner, 2019). The digital age has also shaped social health and environmental behavior among students, underscoring the need to address these issues within educational frameworks (Zakharova et al., 2020; Zorell, 2022).

The engagement of youth in environmental issues has become increasingly vital, particularly in the context of global events such as the COVID-19 pandemic. Implementing effective strategies and tools to raise awareness of environmental concerns and promote appropriate behaviors among young people is essential for fostering a sustainable future (Sundri & Memet, 2021). Indigenous youth, including those in Kenya, have articulated significant concerns regarding environmental issues, notably the slow progress in combating global warming (Mamati & Maseno, 2021). Youth involvement in environmental volunteerism has been recognized as a valuable strategy for achieving sustainable development goals and addressing ecological challenges (Horrocks, 2002; Yee et al., 2021).

The Pandawara Group stands as a prominent example of digital activism in the contemporary virtual landscape, especially through their innovative use of TikTok to promote environmental cleanliness. Formed by a close-knit group of five young men from Bandung—Muhammad Ikhsan, Gilang Rahma, Agung Permana, Rafly Pasya, and Rifki Sa'dulah—Pandawara Group derives its name from a combination of cultural and linguistic roots. "Pandawara" reflects the group's structure, inspired by a traditional puppet story where "Pandawa" symbolizes five brothers, while "Wara" in Sundanese signifies "good news." The name thus embodies their mission as "Five young men who bring good news." Before formally establishing the group, these individuals were already deeply involved in local efforts to clean up their neighborhoods, often volunteering to clear garbage from rivers, sewers, and other areas prone to flooding, driven solely by their sense of civic duty and without expecting any monetary compensation (Gittlin et al., 2023)

The rise of TikTok as a social media platform provided Pandawara Group with a powerful tool to amplify their efforts. Starting in October 2022, the group began sharing content of their river-cleaning activities on TikTok, and their videos quickly gained traction on both TikTok and Instagram. As of now, their TikTok account has amassed an impressive following of over 12 million users and garnered over 215 million likes, demonstrating the vast reach and influence of their content. Their intention was not to seek validation or accolades, but rather to raise awareness and educate the Indonesian public on the importance of environmental stewardship. By demonstrating that cleaning up waste in rivers and sewers is not as daunting as it might seem, they aimed to inspire others to take similar actions, reinforcing the message that environmental responsibility is a collective duty.

The TikTok platform, with its combination of user-generated content and algorithm-driven dissemination, is proving to be an effective medium for engaging young people in political discourse and activism. Research has shown that TikTok is particularly effective in mobilizing support for causes such as environmental conservation, as it allows for the rapid dissemination of messages that are tailored to resonate with younger, digitally-savvy audiences (Literat & Kligler-Vilenchik, 2021). This capability has been proven in a variety of contexts, including political campaigns and social movements, where TikTok has facilitated the formation of affective publics - communities that share the same emotional response - around important issues such as climate change (Hautea et al., 2021). The success of Pandawara Group, which has attracted international attention for its environmental advocacy, further underscores the power of TikTok as a tool to promote grassroots activism. This is in line with a growing body of research exploring the role of social media platforms in driving youth engagement in environmental issues.

For example, previous studies have also shown that social media plays an important role in shaping young people's behavior, especially in encouraging their engagement in activities that match their values. Platforms such as TikTok and Instagram empower young people to engage in social activism, encouraging participation in movements centered on environmental conservation and social justice (Rodriguez et al., 2019; Vaingankar et al., 2022). These platforms also motivate young people to take collective action towards sustainability and positive environmental change (Kadakia et al., 2024; Samari et al., 2022). While it can

encourage positive engagement, it also comes with risks, such as potential negative impacts on mental health if not used critically (Elsaesser et al., 2021; Samari et al., 2022).

Pandawara Group's success in mobilizing millions of TikTok users to join environmental clean-up initiatives also shows how social media resonates. In keeping with previous research, this study wants to explore how Pandawara's creative use of TikTok, in the context of environmental advocacy, reflects broader trends in social media-driven youth engagement. Their campaign demonstrates the efficacy of digital platforms in galvanizing support for environmental issues with the power of creative video content in driving collective action (Roberd & Roslan, 2022). The urgency of research on Pandawara Group is further emphasized by the escalating environmental crises in Indonesia, including frequent floods and pollution in major rivers, which underscore the need for effective grassroots activism and public engagement in environmental conservation.

This research seeks to delve into the ways in which Pandawara Group's TikTok campaigns have elevated environmental consciousness and fostered active participation in environmental conservation among Generation Z. By examining the group's methods and the outcomes of their initiatives, this study aims to identify effective strategies that can be employed to amplify environmental advocacy through digital platforms. The goal is to ensure that such movements not only sustain but also expand, fostering a growing and enduring environmental awareness among younger generations.

In addition, this research will explore how TikTok's unique characteristics, including its ability to spread messages quickly and engage users in meaningful discourse, have contributed to the success of Pandawara Group. Understanding these dynamics is critical to developing strategies that can leverage digital platforms to drive positive social change and promote sustainability on a larger scale. This research is expected to provide insights that will support the continued growth of environmental movements, ensuring that they have a lasting and powerful impact. Indonesia's growing environmental challenges and TikTok's proven effectiveness as a tool to mobilize action make this research not only important, but also much needed. This research will also add understanding to the development of communication science, particularly in the integration of digital media with environmental advocacy. By looking at how social media facilitates mobilization and advocacy, this research contributes to a complex understanding of digital communication strategies in the context of sustainability and youth movements.

## Methods

This study uses a qualitative approach to explore the influence of TikTok videos posted by Pandawara Group on youth awareness and participation in environmental hygiene campaigns. The method used is content analysis, with primary data in the form of eight videos with the highest number of likes on Pandawara Group's TikTok account. These videos were analyzed based on elements such as title, theme, duration, number of likes, comments, and favorites to identify

audience engagement patterns and understand the contribution of these elements to campaign effectiveness (Creswell & Poth, 2016; Doelvia et al., 2023).

In addition to TikTok videos, this study also used secondary data obtained from interviews with Pandawara Group followers at Tribhuwana Tunggal University, as many students on this campus are sympathizers and inspired by Pandawara. These interviews aimed to understand followers' perceptions and responses to the hygiene campaign conducted by Pandawara through social media, as well as its impact on their awareness and behavior regarding hygiene and environmental issues (Borgstede & Scholz, 2021). Below is a table that shows information related to the eight most-liked videos from the Pandawara Group's TikTok account:

**Table 1.** Research data sources

No	Title of Content	Theme	Duration	Likes	Comments	Favorites
1	Sukabumi beach	Campaign	52 seconds	7.6 million	44.5 thousand	288 thousand
2	Noname beach	Action	1 minute 46 seconds	13.1 million	173.9 thousand	400.1 thousand
3	Noname river	Expose	48 seconds	6.5 million	27.8 thousand	248.5 thousand
4	Cirebon beach	Campaign	1 minute 28 seconds	4.5 million	28.4 thousand	163.7 thousand
5	Noname beach	Action	10 seconds	3.5 million	14.6 thousand	131.9 thousand
6	Lampung beach	Campaign	54 seconds	4.8 million	37.9 thousand	150.1 thousand
7	Banten beach	Action	2 minutes 23 seconds	5.4 million	61.1 thousand	203.3 thousand
8	Noname river	Action	1 minute 22 seconds	4 million	43.9 thousand	112.9 thousand

Source: data processed by researchers

This table provides an overview of the eight most popular videos from the Pandawara Group's TikTok account and how the audience responded to the content, which will be further analyzed in this study. By combining primary data from the videos and secondary data from interviews, this research aims to provide a more comprehensive insight into the impact of the environmental cleanliness campaigns conducted by the Pandawara Group through the TikTok platform.

## Results and Discussions

### Profile of Pandawara Group

The Pandawara Group, composed of five Generation Z members—Ikhsan Destian, Gilang Rahma, Muhammad Rifqi, Rafly Pasya, and Agung Permana—has emerged as a prominent force in environmental activism, especially on social media platforms like TikTok, Instagram, and YouTube. Their impactful waste cleanup

efforts across Indonesia have been transformed into highly viewed and appreciated online content (Arlanthy et al., 2024). As digital natives, their commitment to the environment has made them a trending topic and a source of widespread admiration on social media.

Originating in Bandung, the group initially focused on clearing local rivers and gutters, filled with trash. Though they started with a local focus, their vision expanded quickly, aiming to inspire Indonesian youth to actively care for the environment by avoiding littering and encouraging others to engage in cleanup efforts. Their approach is straightforward yet inclusive, frequently involving local communities and online audiences in their campaigns.

One of their most remarkable actions was the cleanup of Sukaraja Beach in Lampung, infamous as one of Indonesia's dirtiest beaches. This initiative was significant not only due to the scale of the cleanup but also because of their success in rallying local residents and environmental organizations to join the effort. This collaborative approach showcased Pandawara's ability to mobilize communities, transforming online influence into tangible environmental change (Rajudin & Hadi, 2024).

Their presence on social media has been critical in spreading their message, enabling them to reach a broad audience, particularly the younger generation they most aspire to influence. Their videos often achieve viral status, driven not just by the magnitude of their efforts but also by their genuine and passionate delivery of their mission. This authenticity has attracted a substantial following, including high-profile individuals like MrBeast, the world's most-followed YouTuber, who is among their TikTok followers.

Pandawara's unwavering commitment has earned them numerous awards, but more importantly, it has ignited a movement among Indonesian youth to take responsibility for their environment. They continue to advance their mission by leveraging social media to educate, motivate, and mobilize people toward environmental protection. Their story is a powerful example of how dedicated individuals can use digital platforms to drive real-world environmental change and inspire a generation to take action (Allam et al., 2022).

Their environmental efforts have not gone unnoticed. Pandawara Group has been honored as TikTok Local Heroes in the "Year on TikTok 2022" and received the "Best Green Communication" award at the Indonesia Green Awards 2023. Additionally, they were bestowed the Anugerah Konservasi by Universitas Negeri Semarang and recognized with the "Inovasi Pegiat Perlindungan dan Pelestarian Lingkungan Hidup" award at the detikJabar Awards 2023. Making history, they won three major awards at the TikTok Awards Indonesia 2023, including "Creator of the Year," "Rising Star of the Year," and "Changemakers of the Year." Furthermore, they received the Gatra Awards 2023 for their contributions to environmental protection. These achievements underscore the profound impact of Pandawara Group's work, highlighting their success in inspiring and mobilizing communities toward environmental stewardship on both national and international levels.

## Characteristics of Pandawara Content

### *Campaign*

“Campaign” videos are one of the most engaging types of content from Pandawara Group. These videos focus on directly inviting the public to participate in clean-up actions scheduled by them. Pandawara often opts for a humanistic and emotional approach, where they do not use harsh and bombastic language.

Instead, they show a lot of trash scattered around, and then local children expressing their hopes of being able to play in the place if it is clean (see figure 1). In addition, the music tends to be roaring and energetic so that the content is easily accepted and understood by audiences from various backgrounds. This approach is effective as audiences can see first-hand the impact that environmental cleanliness has on the younger generation (Yamane & Kaneko, 2021). The message was not only about the environment, but also the future of children, which gave it a strong emotional appeal.



**Picture 1:** Children who want to play ball with a background of piles of garbage

(Source: @pandawaragroup account)

From interviews with student followers of the @pandawaragroup account at Tribhuwana Tunggal University, many stated that they were inspired by the way Pandawara delivered their message through TikTok videos.

*“I usually don't care much about campaign videos, but when I see young people, my age talking about nature and environmental cleanliness, I feel a calling to get involved,”*  
(Results of an interview with one of the informants).

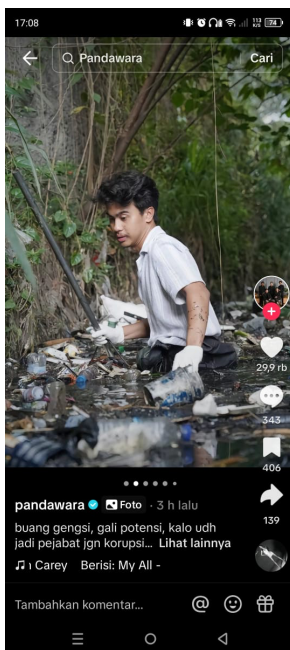
The “Campaign” content also tends to generate a lot of positive comments. Many viewers give praise and prayers for Pandawara, hoping that they can continue their noble mission. However, there are also comments that are critical of the government or the local community for not getting involved in the cleanup action.

There was also a discussion on the importance of early environmental education. Some viewers suggested that Pandawara should not only focus on clean-up actions, but also organize education for children on how to keep the environment clean. This shows that the “Campaign” videos are not only successful in calling people to action, but also in sparking a broader dialog about environmental education and awareness.

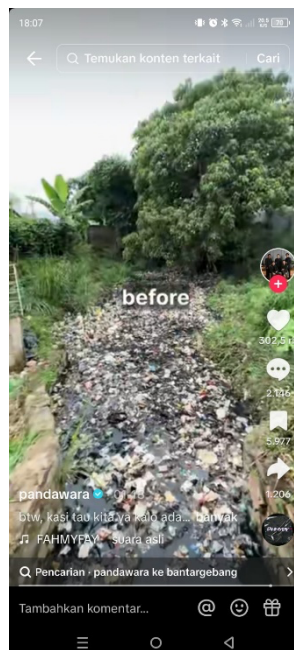
Overall, Pandawara's “Campaign” themed content serves not only as a call to action, but also as a platform to foster empathy, build dialog, and raise awareness of the importance of keeping the environment clean for the future of the younger generation.

### Action

Videos with the theme “Action” are the hallmark of Pandawara Group that showcase their real-life actions in cleaning up the environment. In this video, the five members of Pandawara are often seen working to clean up an area littered with trash. They use accelerated video techniques that show the cleaning process from start to finish. The visualization displayed by Pandawara is very strong as it shows a comparison of the conditions before and after cleaning. As the trash is shown actually piling up, the end result is that the trash is all gone and the river water looks clean and flowing. The video has a very strong visual impact on the audience.



**Picture 2:** Pandawara members cleaning river waste without complete health equipment



**Picture 3:** Condition of one of the rivers before cleaning



**Picture 4:** Picture of the river after being cleaned by the Pandawara



Picture 2 shows members of the Pandawara Group cleaning a heavily polluted river and sharing it on TikTok. By uploading this content on TikTok, they effectively raise awareness about environmental issues and motivate their audience, especially Generation Z, to take action to protect the environment. Picture 3 and 4 depict the condition of the river before and after being cleaned by the Pandawara Group, which provides a strong call to action on what the river will look like after it has been cleaned. One of the most popular examples of an “Action” video is when the Pandawara cleaned up a very dirty river. With only five people, they were able to transform a river full of trash into a much cleaner area. The message in these videos is simple but powerful, showing their dedication and hard work.

The comments on “Action” videos are generally very supportive. Many viewers praised the dedication and effort put in by the Pandawara. “You are unsung heroes,” wrote one viewer, usually addressing teachers. Or other support in other positive words. There were also many suggestions given by viewers to improve the effectiveness of their actions. *“I wish you could use heavier equipment to finish faster,”* suggested one viewer, which was usually followed by a long discussion in the comments regarding the government who should provide the equipment.

Interviews with students showed that the “Action” video had a huge impact in motivating them to take part in the cleanup movement.

*“Every time I see their videos, I feel like going straight to the field and helping. But they are only in West Java it seems, maybe in the future we can make it in East Java,”* (Results of an interview with one of the informants).

*“The exciting thing is that they are our age too, sometimes I have the desire and motivation to make the same movement, but what, is it cleaning too or other content that has the same spirit but different,”* (Results of an interview with one of the informants).

Pandawara's videos clearly inspire their viewers. This shows that “Action” themed videos not only inspire but also motivate viewers to take action. In some of the videos, Pandawara also involved the local community, government officials, and security forces to participate in the cleanup. This shows that their actions have the support of various parties, which reinforces the message that keeping the environment clean is a shared responsibility. This collaboration not only increased the effectiveness of their actions but also strengthened the public's trust in the movement.

Overall, the “Action” themed video showcases Pandawara's dedication and hard work in keeping the environment clean. This content manages to create a significant impact both visually and emotionally, which not only inspires but also motivates viewers to act. This is one of the reasons why the “Action” content became so popular and gained a lot of support from their audience.

## Expose

“Expose” videos are the least common type of content produced by Pandawara but still play an important role in their campaigns. These videos tend to be simpler and focus on the appearance of very dirty environmental conditions. Typically, “Expose” videos only contain visual footage of a river, or an area filled with trash, accompanied by a short interview with a local resident giving their views

on the situation. Despite its simplicity, this content has the power to show a reality that many people may not know about.



**Picture 5:** Five members of the Pandawara Group while videotaping themselves in front of a stretch of rubbish to expose the piles of rubbish on the beach.

Source: @pandawaragroup account



**Picture 6:** Pandawara Group members exposed trash in a river and interviewed residents.

Source: @pandawaragroup account

Picture 5 above presents a video titled "Expose," where Pandawara documents an unnamed river overwhelmed by garbage stretching as far as the eye can see. In the video, a resident comments, *"The trash from everywhere always piles up here; it's cleaned often, but it keeps coming back."* This statement reflects the frustration and helplessness experienced by the community in dealing with the persistent waste issue. Similarly, Picture 6 showcases another "Expose" video, featuring a beach littered with garbage along its shore. Both videos sparked lively discussions in the comments, with many viewers raising concerns about the government's role in tackling these recurring environmental problems.

Comments on the "Expose" video were often critical, especially of the government and residents who were perceived as not doing enough to keep things clean. However, this discussion has also led to polemics, as some residents or government officials who feel cornered in the video may feel reluctant to take the blame, resulting in a clarification video that also went viral on social media. On the

other hand, there are also comments that provide a simple solution, which is to increase citizen participation in keeping the environment clean.

According to student informants, some of them stated that this “Expose” video illustrates that the waste problem is everywhere but often does not appear on social media so it is considered never existed.

*“Videos like this opened my eyes to how severe the waste problem is in certain areas, and I even thought that maybe my area is the same way. Because sometimes we often pass by there so we don't feel that it is a problem, when we see it on social media like this, we realize that piling up garbage is also a problem,” (Results of an interview with one of the informants).*

“Expose” videos are also often used as a tool to pressure authorities to take action. Some comments indicate that viewers use these videos as evidence to demand action from the government. For example, the comment: Videos like this should be seen by all officials in this area. They need to know what is really happening. This shows that although “Expose” content is produced less frequently, its impact can be very significant in influencing public opinion and driving change.

Overall, “Expose” themed videos play an important role in showing the reality on the ground and highlighting issues that need to be addressed immediately. While not as popular as videos with other themes, this content is still effective in raising awareness and sparking discussions that can lead to action. Pandawara uses this content to pressure authorities and the public to be more active in keeping the environment clean.

## Discussion

Pandawara Group, composed of Generation Z activists, has effectively utilized digital platforms to launch a compelling environmental campaign. Their strategy revolves around engaging the public in waste cleanup activities while raising awareness about environmental conservation. By leveraging social media platforms like TikTok, Instagram, and YouTube, they have transformed local environmental efforts into a widespread digital movement that resonates with audiences far beyond their immediate community (Alaimo et al., 2020; Gruss et al., 2020). This approach aligns with the insights of (Sanjaya et al., 2024), who emphasizes the growing influence of digital green marketing in shaping environmental behaviors, particularly within eco-tourism contexts.

Pandawara’s choice of platforms—TikTok, Instagram, and YouTube—is strategic, as these are highly popular among Generation Z and Millennials. TikTok, in particular, is known for its short-form, engaging video content, which aligns perfectly with the attention span and content consumption habits of younger audiences. By focusing their campaign on these platforms (Vaterlaus & Winter, 2021), Pandawara ensures they reach a demographic that is both socially conscious and digitally connected, maximizing their impact. Alam et al., (2023) have shown that pro-environmental content on social media significantly engages users, further validating Pandawara’s platform choices.

At the heart of Pandawara’s digital campaign is their content creation strategy. They produce visually compelling videos that document their waste cleanup activities, often using a narrative that is both emotional and relatable. These

videos typically feature before-and-after shots, time-lapsed cleanups, and community involvement, which not only showcase the impact of their actions but also inspire viewers to participate in similar efforts. The authenticity and relatability of their content are key factors in its widespread appeal, a concept supported by (Bernadeth & Junaidi, 2024), who found that TikTok content effectively influences followers' behavior in maintaining cleanliness.

Pandawara's content is designed to evoke an emotional response from viewers. They create a narrative highlighting the human side of environmental issues by incorporating elements like children's voices and local community stories. This storytelling approach makes their content more engaging and fosters a deeper connection with the audience, encouraging them to take action. The emotional appeal in digital campaigns is crucial, as emotional engagement significantly drives behavioral change, particularly in sustainability-related initiatives (Heidbreder et al., 2020).

One of the most remarkable aspects of Pandawara's digital campaign is its ability to mobilize communities both online and offline. Through its social media presence, it has successfully rallied local residents, netizens, and environmental organizations to join its cleanup efforts. This collective action demonstrates the potential of digital platforms to spread awareness and facilitate real-world participation, turning viewers into active participants in the campaign (Durkin et al., 2022).

The influence of high-profile followers, such as MrBeast, further legitimizes Pandawara's campaign. When a globally recognized figure follows and engages with its content, it boosts its credibility and expands its reach to an even broader audience. This endorsement significantly enhances the campaign's impact, attracting media attention and additional supporters (Chamberlain et al., 2017). As more influencers and media outlets get involved, the visibility of their cause grows exponentially. This widespread recognition helps drive even more support from both local and global communities.

Pandawara's digital campaign can be analyzed through the lens of digital ecology, which explores how digital environments influence and shape interactions, communities, and activism. Their use of platforms like TikTok, Instagram, and YouTube exemplifies how digital spaces can be utilized to foster environmental awareness and mobilize collective action. By creating content that resonates with the values and habits of their digital audience, Pandawara taps into the interconnectedness of digital ecosystems, where information spreads rapidly, enabling grassroots movements to gain momentum and influence behavior (Apostolopoulou et al., 2022; Ghobadi et al., 2024)

In the context of digital ecology, Pandawara effectively harnesses the network effects of social media. Their campaign benefits from the algorithmic amplification inherent in digital platforms, where engaging and shareable content is prioritized, thus increasing its reach and impact. This interconnected digital environment allows Pandawara to build communities that transcend geographical boundaries, creating a global network of supporters who are inspired to participate in environmental conservation, both online and offline. This is reflective of the

dynamics discussed by Durkin et al., (2022), who highlight how media landscapes can enhance the visibility and effectiveness of campaigns.

Moreover, digital ecology emphasizes the sustainability of digital campaigns, which Pandawara exemplifies through their consistent content creation and engagement strategies. By maintaining an active presence across multiple platforms, they ensure that their message remains relevant and visible within the ever-evolving digital landscape. This approach not only sustains their campaign but also contributes to the broader digital ecology by promoting positive environmental practices and inspiring collective action on a global scale. As Pickerill, (2024) suggests, blending digital and physical activism is crucial for sustained impact in environmental movements, a strategy that Pandawara has successfully implemented.

## Conclusion

Pandawara Group's digital campaign exemplifies how environmental activism can be effectively scaled using social media platforms like TikTok. By leveraging the power of digital ecology, they have transformed local cleanup efforts into a global movement, inspiring millions, particularly among Generation Z, to engage in environmental stewardship. Their success underscores the potential of digital platforms to not only raise awareness but also drive tangible action in addressing ecological issues.

TikTok has proven to be an instrumental platform for Pandawara, offering a unique space for content that is both visually engaging and easily shareable. The platform's algorithmic nature amplifies content that resonates with users, enabling Pandawara to reach a broad audience quickly and effectively. This highlights the importance of digital strategies in modern activism, where visibility and virality can significantly enhance the impact of grassroots movements.

For Generation Z, Pandawara represents a relatable and inspiring example of how young people can use digital tools to effect change. The group's authentic and action-oriented content aligns with Gen Z's values, showing that environmental activism can be both impactful and accessible. Pandawara's approach not only engages this generation but also empowers them to take an active role in protecting the environment, demonstrating the transformative potential of combining digital platforms with ecological advocacy. The study recommends that future research could explore the long-term impact of digital activism on behavior change among Gen Z. Future researchers could also investigate how different social media platforms compare in driving environmental movements across different demographics.

## References

- Alaimo, C., Kallinikos, J., & Valderrama, E. (2020). Platforms as service ecosystems: Lessons from social media. *Journal of Information Technology*, 35(1), 25–48. <https://doi.org/10.1177/0268396219881462>
- Alam, Md. M., Lutfi, A., & Alsaad, A. (2023). Antecedents and Consequences of Customers' Engagement with Pro-Environmental Consumption-Related Content on Social Media. *Sustainability*, 15(5), 3974. <https://doi.org/10.3390/su15053974>
- Allam, Z., Sharifi, A., Bibri, S. E., Jones, D. S., & Krogstie, J. (2022). The Metaverse as a Virtual Form of Smart Cities: Opportunities and Challenges for Environmental, Economic, and Social Sustainability in Urban Futures. *Smart Cities*, 5(3), 771–801. <https://doi.org/10.3390/smartcities5030040>
- Apostolopoulou, E., Bormpoudakis, D., Chatzipavlidis, A., Cortés Vázquez, J. J., Florea, I., Gearey, M., Levy, J., Loginova, J., Ordner, J., Partridge, T., Pizarro, A., Rhoades, H., Symons, K., Veríssimo, C., & Wahby, N. (2022). Radical social innovations and the spatialities of grassroots activism: Navigating pathways for tackling inequality and reinventing the commons. *Journal of Political Ecology*, 29(1). <https://doi.org/10.2458/jpe.2292>
- Arlanthy, I. P., Ardilla, Y. P., Fauzi, A. Z., & Deskita, Z. (2024). Analisis Campaign Program Go Green Yang Dilakukan Pandawara Group. *Jurnal Komunikasi, Masyarakat Dan Keamanan*, 5(2), 117–129. <https://doi.org/10.31599/5dnbg426>
- Bernadeth, G. Y., & Junaidi, A. (2024). Pengaruh Konten TikTok terhadap Perubahan Perilaku Menjaga Kebersihan Pengikut Pandawara Group. *Koneksi*, 8(1), 187–196. <https://doi.org/10.24912/kn.v8i1.27632>
- Borgstede, M., & Scholz, M. (2021). Quantitative and Qualitative Approaches to Generalization and Replication—A Representationalist View. *Frontiers in Psychology*, 12, 605191. <https://doi.org/10.3389/fpsyg.2021.605191>
- Chamberlain, C., Perlen, S., Brennan, S., Rychetnik, L., Thomas, D., Maddox, R., Alam, N., Banks, E., Wilson, A., & Eades, S. (2017). Evidence for a comprehensive approach to Aboriginal tobacco control to maintain the decline in smoking: An overview of reviews among Indigenous peoples. *Systematic Reviews*, 6(1), 135. <https://doi.org/10.1186/s13643-017-0520-9>
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. SAGE Publications.
- Debrah, J. K., Vidal, D. G., & Dinis, M. A. P. (2021). Raising Awareness on Solid Waste Management through Formal Education for Sustainability: A Developing Countries Evidence Review. *Recycling*, 6(1), 6. <https://doi.org/10.3390/recycling6010006>
- Doelvia, A., Hien, V. T. T., & Rathee, S. (2023). Assessment: The Effectiveness of Video Media Through the Tiktok Application on Teenagers' Knowledge About Clean and Healthy Living Behavior at Junior High School Level. *Journal Evaluation in Education (JEE)*, 4(4), 168–174. <https://doi.org/10.37251/jee.v4i4.948>

- Durkin, S. J., Brennan, E., & Wakefield, M. A. (2022). Optimising tobacco control campaigns within a changing media landscape and among priority populations. *Tobacco Control*, 31(2), 284–290. <https://doi.org/10.1136/tobaccocontrol-2021-056558>
- Elsaesser, C. M., Patton, D. U., Kelley, A., Santiago, J., & Clarke, A. (2021). Avoiding fights on social media: Strategies youth leverage to navigate conflict in a digital era. *Journal of Community Psychology*, 49(3), 806–821. <https://doi.org/10.1002/jcop.22363>
- Fjællingsdal, K. S., & Klöckner, C. A. (2019). Gaming Green: The Educational Potential of Eco – A Digital Simulated Ecosystem. *Frontiers in Psychology*, 10, 2846. <https://doi.org/10.3389/fpsyg.2019.02846>
- Ghobadi, S., The University of Leeds, Sonenshein, S., & Rice University. (2024). Creating Collaboration: How Social Movement Organizations Shape Digital Activism to Promote Broader Social Change. *Journal of the Association for Information Systems*, 25(3), 781–803. <https://doi.org/10.17705/1jais.00847>
- Gittlin, M. L., Clarizio, T., Lamino, P., Michels, A., Opejin, A., & Barrera, E. L. (2023). Transdisciplinary approaches to graduate student training for food–energy–water challenges. *Natural Sciences Education*, 52(1), e20119. <https://doi.org/10.1002/nse2.20119>
- Gruss, R., Kim, E., & Abrahams, A. (2020). Engaging Restaurant Customers on Facebook: The Power of Belongingness Appeals on Social Media. *Journal of Hospitality & Tourism Research*, 44(2), 201–228. <https://doi.org/10.1177/1096348019892071>
- Hautea, S., Parks, P., Takahashi, B., & Zeng, J. (2021). Showing They Care (Or Don't): Affective Publics and Ambivalent Climate Activism on TikTok. *Social Media + Society*, 7(2), 205630512110123. <https://doi.org/10.1177/20563051211012344>
- Heidbreder, L. M., Steinhorst, J., & Schmitt, M. (2020). Plastic-Free July: An Experimental Study of Limiting and Promoting Factors in Encouraging a Reduction of Single-Use Plastic Consumption. *Sustainability*, 12(11), 4698. <https://doi.org/10.3390/su12114698>
- Horrocks, K. A. (2002). *Experiential environmental education: A tool for mountain conservation in the Ecuadorian Andes* [Master of Science, University of Northern British Columbia]. <https://doi.org/10.24124/2002/bpgub1231>
- Kadakhia, M., Veena Malkhed, A. Sandhya, P. Durga Rani, & Santoshi Loya. (2024). From Selfies to Scholarly Insights: The Educational Potential of Youth Engagement on Social Media. *International Research Journal on Advanced Engineering and Management (IRJAEM)*, 2(03), 228–236. <https://doi.org/10.47392/IRJAEM.2024.0036>
- Lawson, E. T., Christopher, C., Mensah, A., & Atipoe, E. edu. gh. (2015). Developing Tools for Community-Based Environmental Education for Migrant Children and Youth in Ghana. *Journal of Education and Learning*, 4(2), p6. <https://doi.org/10.5539/jel.v4n2p6>

- Literat, I., & Kligler-Vilenchik, N. (2021). How Popular Culture Prompts Youth Collective Political Expression and Cross-Cutting Political Talk on Social Media: A Cross-Platform Analysis. *Social Media + Society*, 7(2), 205630512110088. <https://doi.org/10.1177/20563051211008821>
- Mamati, K., & Maseno, L. (2021). Environmental consciousness amongst indigenous youth in Kenya: The role of the Sengwer religious tradition. *HTS Teologiese Studies / Theological Studies*, 77(2). <https://doi.org/10.4102/hts.v77i2.6690>
- Pickerill, J. (2024). Lived environmentalisms: Everyday encounters and difference in Australia's north. *Geo: Geography and Environment*, 11(1), e00141. <https://doi.org/10.1002/geo2.141>
- Rajudin, A. A., & Hadi, S. P. (2024). Pengaruh Konten Tiktok Pandawara Group terhadap Sikap Peduli Lingkungan Gen Z. *Al-DYAS*, 3(1), 123–144. <https://doi.org/10.58578/aldyas.v3i1.2457>
- Roberd, A., & Roslan, R. (2022). Social Media and Primary School Science: Examining the Impact of Tiktok on Year 5 Students' Performance in Light Energy. *International Journal of Social Learning (IJS�)*, 2(3), 366–378. <https://doi.org/10.47134/ijsl.v2i3.173>
- Rodriguez, D. X., Rodriguez, S. C., & Zehyoue, B. C. V. (2019). A Content Analysis of the Contributions in the Narratives of DACA Youth. *Journal of Youth Development*, 14(2), 64–78. <https://doi.org/10.5195/jyd.2019.682>
- Samari, E., Chang, S., Seow, E., Chua, Y. C., Subramaniam, M., Van Dam, R. M., Luo, N., Verma, S., & Vaingankar, J. A. (2022). A qualitative study on negative experiences of social media use and harm reduction strategies among youths in a multi-ethnic Asian society. *PLOS ONE*, 17(11), e0277928. <https://doi.org/10.1371/journal.pone.0277928>
- Sanjaya, D., Arief, M., Juli Setiadi, N., & Heriyati, P. (2024). Exploring the role of digital green marketing campaigns and environmental beliefs in shaping tourist behavior and revisit intentions in eco-tourism. *Journal of Eastern European and Central Asian Research (JEECAR)*, 11(3), 553–572. <https://doi.org/10.15549/jeecar.v11i3.1693>
- Sprague, N. L., Okere, U. C., Kaufman, Z. B., & Ekenga, C. C. (2021). Enhancing Educational and Environmental Awareness Outcomes Through Photovoice. *International Journal of Qualitative Methods*, 20, 160940692110167. <https://doi.org/10.1177/16094069211016719>
- Sundri, M.-I., & Memet, F. (2021). Tools to engage youth in environmental issues during covid-19 pandemic: Constanta maritime university approach. *Journal of Marine Technology and Environment*, 1(2021), 33–37. <https://doi.org/10.53464/JMTE.01.2021.05>
- Vaingankar, J. A., Van Dam, R. M., Samari, E., Chang, S., Seow, E., Chua, Y. C., Luo, N., Verma, S., & Subramaniam, M. (2022). Social Media-Driven Routes to Positive Mental Health Among Youth: Qualitative Enquiry and Concept Mapping Study. *JMIR Pediatrics and Parenting*, 5(1), e32758. <https://doi.org/10.2196/32758>



- Vaterlaus, J. M., & Winter, M. (2021). TikTok: An exploratory study of young adults' uses and gratifications. *The Social Science Journal*, 12(2), 1–20. <https://doi.org/10.1080/03623319.2021.1969882>
- Yamane, T., & Kaneko, S. (2021). Is the younger generation a driving force toward achieving the sustainable development goals? Survey experiments. *Journal of Cleaner Production*, 292, 125932. <https://doi.org/10.1016/j.jclepro.2021.125932>
- Yee, T. X., Wei, C. C., & Ojo, A. O. (2021). Green Volunteerism – A new approach to achieve the United Nations' Sustainable Development Goals. *Tourism and Sustainable Development Review*, 2(1), 19–31. <https://doi.org/10.31098/tsdr.v2i1.32>
- Zakharova, V. A., Chernov, I. V., Nazarenko, T., Pavlov, P. V., Lyubchenko, V. S., & Kulikova, A. A. (2020). Social health and environmental behavior of students in the digital age. *Cypriot Journal of Educational Sciences*, 15(5), 1288–1294. <https://doi.org/10.18844/cjes.v15i5.5167>
- Zorell, C. V. (2022). Central Persons in Sustainable (Food) Consumption. *International Journal of Environmental Research and Public Health*, 19(5), 3139. <https://doi.org/10.3390/ijerph19053139>