

THE ROLE OF INSTAGRAM @CERAH_INDONESIAIAKU AS A MEDIA FOR DELIVERING CLIMATE CHANGE MESSAGES TO GENERATION-Z

Tono Purwantoro¹, Resman Muharul Tambunan²

^{1,2} Department of Communication Science, Al Azhar University Indonesia

Email : tono.purwantoro@uai.ac.id^{1*}; resman.muharul@uai.ac.id²

* corresponding author

ABSTRACT

Article history

Received : March 19, 2025

Revised : June 28, 2025

Accepted : June 28, 2025

Keywords:

Climate Change

Digital Communication

Generation Z

Instagram

Climate change is an urgent global issue with increasingly severe impacts on the environment, economy, and public health. In the digital era, social media plays a significant role in disseminating climate-related information, especially to Generation Z, who are digital natives and highly active on platforms like Instagram. This study aims to analyze the role of the Instagram account @cerah_indonesiaku as a medium for delivering climate change messages to Generation Z in Indonesia. Using a qualitative descriptive approach and a case study method, data were collected through interviews, observations, and documentation involving the account's managers. The findings show that Yayasan Indonesia CERAH effectively utilizes Instagram's visual and interactive features to produce attractive, credible, and relevant climate change content. Visual elements, short videos, infographics, and contextual messages help increase engagement and encourage Generation Z to share and amplify information. This study highlights how digital communication strategies through Instagram can strengthen public awareness and promote active participation in climate change mitigation. The results contribute to understanding effective digital communication for environmental campaigns targeting youth audiences.

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1. Introduction

Climate change has become one of the most critical global challenges, with impacts ranging from rising temperatures and extreme weather events to threats to biodiversity and human livelihoods (Poushter 2022). Addressing this complex issue requires not only technological and policy measures but also effective communication strategies that can raise awareness and drive behavioral change. In the digital era, social media platforms provide opportunities to disseminate credible and engaging information widely, especially to Generation Z, who are highly connected to digital technologies and social networks. This phenomenon is not only a matter of increasing temperature changes, but also includes various natural events that occur more frequently and are increasingly extreme. For example,

increasing global temperatures cause longer and hotter summers, while winters become shorter and less stable. In addition, changes in extreme weather patterns such as storms, floods, droughts, and forest fires are occurring more frequently in many countries, causing enormous environmental and infrastructure damage (IPCC, 2021; Tebaldi et al., 2021; Lindsey, 2023).

Another impact that is no less serious is the melting of ice in the polar regions due to increasing global temperatures. The thinning of the ice sheets in the Arctic and Antarctic causes sea levels to rise, which in turn threatens the existence of coastal areas and small islands. Many areas that were previously safe are now at risk of sinking, forcing residents to move to higher ground or even migrate to other areas. This phenomenon also disrupts the marine ecosystem because changes in water temperature cause the extinction of various species of fish and other marine biota, which impacts the livelihoods of fishermen and the fishing industry. Climate change not only impacts the environment, but also the economic, social, and public health sectors (Cromar et al., 2022; Adom, 2024).

Facing the complexity and scale of the threat of climate change that is so large and widespread, it is important for every country and society to adapt to climate change. This adaptation is not only an effort to survive the impacts that have occurred, but also an effort to prepare for greater risks in the future (Sari et al., 2023). In this case, adaptation focuses on actions that can reduce further damage, strengthen the resilience of communities and the environment, and ensure that we can live side by side with inevitable changes.

Adaptation is not only about surviving the impacts that have occurred, but also an effort to mitigate greater risks in the future (Fawzy *et al.* 2020). Adaptation measures can include a variety of actions, ranging from developing disaster-resistant infrastructure, utilizing environmentally friendly technology, sustainable management of natural resources, to increasing public awareness through holistic education (Chen & Lackner 2015).

In facing climate change, an appropriate and effective information delivery strategy is a crucial aspect (Fatkhullah *et al.* 2022). In today's digital era, digital media has become the main tool in distributing information, including messages related to climate change, especially in reaching Generation Z (Novak 2024). This generation is a group that has a great influence on the future because of their significant number and their role as the next generation who have the potential to become agents of change. With their characteristics that are very connected to digital technology and social media, Generation Z has wide access to information, but is also vulnerable to disinformation and inaccurate news.

Therefore, it is important to ensure that Generation Z receives credible, relevant information that is delivered in an attractive format and in accordance with their media preferences. In this context, social media such as Instagram is a very relevant tool for conveying climate change information (Hodson *et al.* 2018). As a popular platform among Generation Z, Instagram allows the delivery of messages through visual formats such as infographics, short videos, and stories that are not only informative but also aesthetically appealing. Interactive and shareable content also encourages Generation Z to act as information "amplifiers", spreading it to their networks. Yayasan Indonesia CERAH, through its Instagram account @cerah_indonesiaku, has utilized this platform to educate Generation Z about climate change. Relevant campaigns, accurate data, and engaging visual approaches are key to reaching the attention and influencing the behavior of Generation Z.

Effectively delivering climate change information to Generation Z is not only important to raise their awareness, but also to create a collective movement that is effective in mitigating and adapting to climate change. This study aims to examine the role of Instagram @cerah_indonesiaku as a medium for delivering climate change messages to Generation Z. This study will explore how digital communication messages are implemented by Yayasan Indonesia CERAH to deliver climate change information to Generation Z.

Climate change is a change in the average weather patterns and climate conditions in a region or globally over a long period of time, usually decades or longer. These changes can

involve fluctuations in temperature, precipitation, wind patterns, and extreme weather events (EPA 2010). Climate change refers not only to natural variations in climate, but also to changes influenced by human activities, especially since the Industrial Revolution (Zarsky, 2010; Stern, 2012). Scientifically, climate change is often associated with increasing concentrations of greenhouse gases in the atmosphere, such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), which are largely caused by the burning of fossil fuels, deforestation, and industrial activities.

Climate change is a global challenge that affects many aspects of life on earth. Collective action by individuals, communities, and countries around the world is essential to mitigate its adverse effects. Understanding the causes, impacts, and solutions is the first step to creating a more sustainable future. Delivering climate change information through digital media is a very relevant strategy in this modern era (Boykoff, 2020; Mayika et al., 2016). By utilizing digital technology, environmental messages can reach a wider audience, increase understanding, and encourage collective action to protect our planet (Dupar *et al.* 2019). Digital media is not only a communication tool, but also a medium for building global awareness and driving sustainable change (Boestam & Derivanti 2022). Through communication, communicators can construct messages to reach common understanding and create agreements (Tambunan et al., 2023; Sidharta et al., 2024; Sidharta et al., 2024).

Digital communication is the process of exchanging information through digital technology-based media, such as computers, the internet, smartphones, and other electronic devices (Gallager, 2006).). In the modern era, digital communication has become an important part of everyday life, covering various forms and platforms (Uzuegbunam 2021). Digital media enables real-time delivery of climate change information, providing updates on the latest events or research, such as reports of extreme weather disasters or innovations in environmentally friendly technology. This information helps the public understand the urgency of climate change issues and encourages rapid and coordinated action.

Delivering information through digital media to Generation Z, especially about climate change, is very important because this generation grew up in an era of digital technology and has a major influence in shaping public opinion. Generation Z, who are digital natives, tend to rely on digital platforms such as social media to get information, communicate, and voice their opinions (Kullolli & Trebicka 2023).

Unlike the millennial generation, Generation Z is a generation born amidst the rapid advancement of digital technology, which makes them grow up with almost unlimited access to information through the internet and smart devices. If the millennial generation is considered a transition generation from analog to digital technology, Generation Z are true digital natives, who since childhood have been accustomed to the existence of social media, applications, and cloud-based technology (Porral & Sanchez 2020).

Aspect	Millennial (Gen-Y)	Gen-Z
Technology	Adaptive, experiencing the transition from analog to digital	Digital native, born in the era of technology
Social Media	Facebook, Twitter, LinkedIn	Tik Tok, Instagram, Sbnapcahat

Table 1. Gen-Z social media technology adoption. Source processed

These characteristics make Generation Z quicker to adopt technological innovations and tend to be more comfortable communicating through digital platforms than conventional methods. Thus, an effective communication approach to Generation Z, including on global issues such as climate change, must utilize digital media that is relevant to their lifestyle. Yayasan Indonesia CeraH is a non-profit organization in Indonesia that has a mission to

encourage the transition to clean and sustainable energy and support policies that are responsive to climate change. As part of its efforts, the foundation focuses on disseminating information, education, and advocacy to create public awareness about the importance of environmental sustainability and the need for concrete steps in dealing with the climate crisis.

In this digital era, Yayasan Indonesia CERAH utilizes social media platforms, especially Instagram through their account @cerah_indonesiaku, as a strategic tool to reach a wider audience, especially the younger generation. This account is the main means to convey various information related to the projects, initiatives, and campaigns they run. The content uploaded includes education about the impacts of climate change, the benefits of the clean energy transition, and steps towards a sustainable green economy.

Instagram



Figure 1. Instagram account of Yayasan Indonesia CERAH

Through Instagram, Yayasan Indonesia CERAH uses an engaging and informative visual approach such as infographics, short videos, and interactive stories to explain complex issues in a simple and easy-to-understand way. This strategy is designed to increase audience engagement, especially Generation Z, who are known as a group that is very familiar with digital technology and tends to care more about social and environmental issues.

2. Method

This study adopts a qualitative descriptive approach Creswell (2018), with a case study design Yin (2018), to explore in depth how Yayasan Indonesia CERAH utilizes Instagram @cerah_indonesiaku to deliver climate change messages to Generation Z. The research focus is on understanding the communication strategies, visual message design, and audience engagement practices developed by the account managers. Informants were selected using purposive sampling: two key individuals were involved, namely the Digital Manager (BAJ) and the Social Media Officer (DSK). To maintain ethical research standards, informants were fully informed about the research purpose, provided consent, and their names were anonymized to protect privacy.

Data were collected through in-depth semi-structured interviews, direct observation of the Instagram account activities, and documentation analysis of content such as posts,

reels, stories, captions, and audience interactions. The interview process focused on how messages are crafted, how visual strategies are chosen, and how the content aligns with trending issues relevant to Generation Z. Observation and documentation served to validate the interview findings and provided concrete examples of communication practices used by Yayasan Indonesia CeraH in engaging the audience through visual storytelling and interactive features.

The data were analyzed using a thematic coding strategy following Miles, Huberman, and Saldaña's (2014) model. First, all interview transcripts were read thoroughly and coded openly to identify key phrases and patterns related to communication strategies. Next, codes were organized into broader thematic categories such as relevance, visual design, platform choice, and audience response. To ensure validity, the findings were triangulated by comparing interview data with observations and documentation. Peer debriefing was conducted to review the coding and interpretations, and conclusions were drawn by synthesizing the thematic patterns to explain how Instagram functions effectively as an educational medium for climate change awareness among Generation Z.

3. Results and Discussion

The delivery of information about climate change by Yayasan Indonesia CeraH through the Instagram account @cerah_indonesiaku is maximized by utilizing the potential of social media as an interactive, visual communication tool that can reach a wide audience. Social media, especially Instagram, was chosen as the main platform because of its ability to convey messages effectively through interesting, easily accessible content that is very relevant to the digital lifestyle, especially for the younger generation. Instagram allows Yayasan Indonesia CeraH to not only share information, but also to build a community that cares about global issues, one of which is climate change.

This communication strategy is designed with the aim of increasing public awareness, especially among Generation Z, about crucial issues related to climate change and the importance of transitioning to sustainable clean energy. Generation Z is known as a group that is very active on social media and tends to have a greater concern for environmental issues. Therefore, by utilizing the platforms they use every day, Yayasan Indonesia CeraH hopes to reach them directly and inspire them to care more about sustainability and climate-related issues.

According to informant BAJ, who also serves as the Digital Manager of Yayasan Indonesia CeraH, creating effective communication content requires a focus on the relevance of the message to current issues that are of concern to the wider community. The relevance of this message is very important to ensure that the content produced not only attracts the attention of the audience but also remains current, contextual, and able to encourage deeper discussions. With this approach, Yayasan Indonesia CeraH is able to convey educational messages that not only inform but also invite the audience to actively participate in efforts to address climate change. The approach that prioritizes content related to issues that are trending among Gen-Z, as conveyed by BAJ, aims to ensure that the message delivered can be more easily accepted and in demand.

"When creating communication content, the main thing is to ensure that the message is 'related' to what is currently on the minds of most Gen-Z, or to the hottest issues that are currently being widely discussed and trending topics. That way, the content created will be more easily accepted and in demand by the audience, because it is directly related to what they care about or pay attention to at that time"

Meanwhile, according to informant DSK, who serves as a social media officer, in determining topics and materials to convey information related to climate change on Instagram social media, the creator team prioritizes creating attractive and easy-to-understand visualizations. They often use illustrations or create visuals in the form of dynamic reels. The purpose of this approach is so that the information conveyed can be understood quickly and easily by the audience, especially Generation Z, who are known to be very responsive to visual and moving content. With the use of reels and illustrations, information that is often complex can be presented in a more interesting and easily accepted way. However, the selection of social media platforms to share information related to climate change is not done carelessly. The creator team ensures that each social media channel used is adjusted to the type of content to be conveyed. Each platform has different audience characteristics and the way they consume content is also different.

For example, content shared via Instagram can be different in format or delivery when compared to other platforms such as Twitter or Facebook. This is because each platform has a different style and purpose in reaching the audience. Instagram, with its visual and dynamic nature, is better suited to content that utilizes images and short videos, while Twitter is more appropriate for short information or textual updates, and Facebook can be better for longer content or more in-depth discussions.

In this way, the message remains relevant and effective, even though it is distributed through different channels. The decision to choose the right platform based on the type of content allows Yayasan Indonesia CeraH to reach a wider and more diverse audience, and ensures that the message about climate change can be conveyed optimally to various groups.

"After the process of determining the topic of the material, the creator team creates the visualization whether using illustrations or visual reels. "We use Instagram social media as a communication channel besides TikTok, and YouTube and it depends on the content because the selection of social media channels is very dependent on the content created and each content created will be different for its social media channel, especially related to developing issues"

The communication messages uploaded on the Instagram account @cerah_indonesiaku are designed with a strong educational nature, aiming to increase public understanding, especially Generation Z, regarding important issues related to climate change, such as increasingly frequent hot weather anomalies. The content presented prioritizes a simple yet informative scientific approach, so that the message is easy to understand and accept by Generation Z, who are known to be more interested in relevant facts and data. By utilizing the platform they often use, Yayasan Indonesia CeraH hopes to provide in-depth insights and raise awareness about the real impacts of climate change.

The scientific explanations presented cover various factors that cause weather anomalies, such as the influence of increasing greenhouse gas emissions, decreasing forest areas due to deforestation, and increasingly uncertain changes in global weather patterns. In addition, this educational content also clearly reviews the impact of hot weather anomalies on various aspects of life, including the environment, public health, and the economy. The public is invited to understand how climate change can affect their daily lives, both in the short and long term. Not only that, this content also provides guidance on mitigation steps that can be taken both individually and collectively, such as reducing carbon emissions, managing natural resources wiser, and implementing an environmentally friendly lifestyle.

These messages are delivered in a visual format that combines attractive images with short and concise sentences, so that they can attract the attention of the audience, especially Generation Z who tend to be more responsive to dynamic and visual content. The images

used are not just illustrations, but also function to describe scientific concepts or facts in a simple way. For example, an illustration depicting the phenomenon of global warming accompanied by a short caption such as, "Maximum and minimum temperatures are much higher than normal conditions in certain locations," provides a visual image that makes it easier for the audience to understand the often complex scientific data.

In addition to images, the sentences used in the content are carefully designed to be short, clear, and motivating. Each message is accompanied by a call to action or reflection on the impacts of climate change, with the hope that the audience will not only understand, but also feel compelled to participate in actions that can reduce the impacts of climate change. This combination of evocative images and inspiring sentences creates a very effective format in conveying complex and often technical information to the wider community.

In this way, the information conveyed becomes easier to understand, even for those without a scientific background. More than just providing information, this content also encourages interaction with the audience, builds awareness, and creates an emotional connection to the topic at hand. These visual elements and motivating messages are designed to not only increase knowledge, but also to encourage the younger generation to act more caringly towards the future of the earth and their environment.



Figure 2. Climate change message weather anomalies Source. @cerah_indonesiaku

According to BAJ informants, delivering climate change communication messages through attractive visualizations and easy-to-understand sentences is considered a very effective strategy, especially for Generation Z audiences. Generation Z is known as a group that is very connected to technology and social media, so delivering messages that prioritize visual aspects and messages that are straight to the point is very important. This strategy is designed to ensure that the message conveyed feels relevant and directly related to the daily experiences they face, such as the increasing hot temperatures that have become a real issue in everyday life. One of the visualizations used clearly depicts the condition of the earth trapped by industrial smoke pollution, which shows how severe air pollution is and how it affects the quality of the environment around us. In this way, the audience is not only shown the effects of climate change, but is also given a deeper understanding of how these impacts change the world we live in.

The visualizations presented in the content are not only intended to attract attention, but also to clarify scientific concepts that are sometimes difficult for laypeople to understand.

For example, an image depicting air pollution that threatens the sustainability of life on earth can immediately show its impact on the quality of the air we breathe every day. With a clear message delivery and easy-to-understand visuals, it is hoped that the audience can understand more quickly and be more motivated to play a role in climate change mitigation efforts.

In addition, the narrative used in this visual content is adjusted to a contemporary style that is close to the daily lives of Generation Z. The use of relaxed but informative language, as well as modern and aesthetic design elements, makes this content more interesting and easily accepted by young audiences. By composing messages in a style that is relatable to them, this content also builds a stronger emotional connection. Generation Z, who tend to look for content that is more personal and connected to their lives, can feel more motivated to understand, support, and act in climate change mitigation efforts. They not only see the problem as something far beyond their reach, but also feel that they can do something about it.

According to DSK informants, to ensure that this communication message can be read, enjoyed, and understood well by the target readers, their content is deliberately uploaded via the Instagram platform. This is done because Instagram is one of the most frequently used social media platforms by Generation Z, so they can easily access and download the information. Furthermore, by utilizing Instagram, this content can be easily re-shared by users to their followers, expanding the reach of the message and its impact. This social media sharing feature is very important to spread information more widely and motivate more people to take real action.

The main goal of this effort is for Generation Z to not only understand the impact of climate change caused by the lack of attention to environmental conservation, but also so that they feel compelled to take real action. This action includes mitigation and prevention measures that can help prevent further natural disasters, such as reducing pollution, recycling, saving energy, and switching to more environmentally friendly energy sources. By utilizing the potential for virality that social media has, it is hoped that this information will be able to create a wider collective awareness among the community. Through massive and consistent message dissemination, the younger generation can become stronger and more active agents of change in dealing with climate change.

In discussing the issue of climate change, the visual content displayed is very carefully designed to attract the attention of a wider audience. The images used are in accordance with the theme of climate change and the relevance of the topic being discussed. Each image is designed to convey the message in the most effective and easy-to-understand way. In addition, the visual template used is made uniform and consistent over time, thus building a recognizable visual identity. With this consistency, the audience can quickly recognize content related to climate change and feel more connected to the message being conveyed. The end goal is to create a campaign that is strong, sustainable, and easily accessible to all groups, especially the younger generation who are key to changing the future of our world.

The message about climate change delivered by Yayasan Indonesia CeraH through the Instagram account @cerah_indonesiaku is a very strategic means to educate the public, especially Generation Z, about the importance of maintaining environmental sustainability. This account not only focuses on presenting information about the phenomenon of climate change that is occurring throughout the world, but also encourages the audience to better understand the real impacts of this problem, such as increasing global temperatures, worsening air pollution, and the threat of more frequent natural disasters. In this way, Yayasan Indonesia CeraH not only provides knowledge, but also raises awareness of the urgency of the changes we are experiencing.

The content uploaded via Instagram adopts a very relevant and easily accessible approach, utilizing attractive visual media to clarify the issues being raised. The visualizations used, such as images, graphs, and videos, are designed to illustrate the impacts of climate

change in a direct and easy-to-understand way, without sacrificing scientific accuracy. The narrative used is also adjusted to the communication style of Generation Z, who prefer information presented in a relaxed manner, but still informative and data-based. This makes the content more interesting, relevant, and easy to understand for young audiences who are very connected to the digital world.



Figure 3. Climate change impact message. Source: @cerah_indonesiaku

This communication strategy leverages the power of Instagram as an interactive platform with a very wide reach. As one of the most widely used social media platforms by Generation Z, Instagram allows these messages to be more easily accessible to a larger audience, not only in Indonesia but also abroad. The use of Instagram also provides an opportunity for the audience to interact directly with the content, such as by commenting, sharing posts, and spreading information to their friends. This broadens the reach of the message and makes it easier to understand by various levels of society, both those who have prior knowledge of climate change and those who do not yet have a deep understanding.

In addition, by consistently uploading content and focusing on current issues that are of concern to the world, Yayasan Indonesia CERAH not only provides relevant information but also creates opportunities to build greater public engagement. This regular and up-to-date content also encourages the audience to continue following this account, forming ongoing awareness of climate change, and inviting them to discuss and share their views. This is an effective way to create a community that cares and is ready to take action.

Generation Z, which is a group that is very familiar with digital technology and social media, has enormous potential in driving positive change. They are not only consumers of information, but can also be active agents of change in overcoming the challenges of climate change. Through platforms such as Instagram, they can more easily share knowledge, invite others to care, and encourage real action. For example, they can participate in carbon emission reduction campaigns, support environmentally friendly policies, and introduce more sustainable living habits in everyday life.

Thus, the main goal of this effort is for Generation Z not only to be passive recipients of messages, but also to play an active role as agents of change who lead the movement to maintain the sustainability of the earth. Through information that is packaged in a way that is easy to understand and based on accurate data, Yayasan Indonesia CERAH hopes to inspire the

younger generation to care more about their environment and encourage changes that can reduce the negative impacts of climate change. As a generation that has the power and platform to act quickly, they are expected to be the main drivers in overcoming this climate crisis.

4. Conclusion

This study concludes that Instagram, through the @cerah_indonesiaku account managed by Yayasan Indonesia CeraH, plays a significant and strategic role as an educational medium for disseminating climate change information to Generation Z. The research findings highlight several key points. First, visual and interactive content formats such as infographics, short videos (reels), and contextual storytelling are proven to attract the attention of young audiences who prefer dynamic and visually engaging information. Second, the selection of topics that align with current issues and trending discussions increases the relevance and resonance of the messages delivered. Third, the use of simple, relatable language and contemporary design elements strengthens message comprehension and fosters emotional connection, motivating Generation Z to actively participate in environmental campaigns.

Practically, this research shows that digital media, especially Instagram, is not only an effective channel for raising awareness but also for building communities that share, amplify, and contextualize climate change information. The findings reinforce the idea that social media can transform Generation Z from passive recipients into active agents of change by encouraging them to take concrete mitigation and adaptation actions such as reducing carbon footprints, adopting sustainable lifestyles, and advocating for pro-environmental policies in their networks. The main practical implication is that non-profit organizations, environmental activists, and policymakers need to develop more innovative, engaging, and audience-tailored digital content strategies to maximize the power of social media as an educational and mobilization tool. Instagram's features stories, reels, comments, and shareability should be leveraged to expand message reach and sustain public engagement over time.

However, this study has several limitations. The scope was limited to a single case study focusing on one Instagram account managed by a specific foundation. Therefore, the findings may not fully represent other climate change campaigns using different platforms or targeting other demographic segments. The study also did not measure the long-term behavioral impact of the messages on Generation Z's concrete actions beyond online engagement. Future research is recommended to conduct comparative studies involving multiple social media platforms, such as TikTok, YouTube, or X (Twitter), to examine their effectiveness in delivering climate change messages to different audience groups. In addition, longitudinal studies that evaluate the behavioral changes and civic actions inspired by online campaigns would provide deeper insights into the sustainability and real impact of digital climate communication. Overall, the study underscores the potential of digital media, particularly Instagram, as an impactful tool to educate, engage, and empower Generation Z in the collective effort to tackle the climate crisis. By continuously optimizing content relevance, visual creativity, and interactive strategies, environmental organizations can strengthen their contribution to building climate-resilient societies through youth-driven movements.

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