

## The Role of Co-Creation in Visual Strategies for Social Campaigns on Food Waste Issues on Instagram: A Case Study of Foodcycle Indonesia

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### Keyword

food waste; kampanye sosial;  
keterlibatan audiens; co-creation;  
media sosial; Instagram

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### ABSTRACT

Food waste is a significant issue in Indonesia affecting social, economic, and environmental sectors, requiring active public participation to address it. Although social media is widely used by organizations to raise awareness, audience engagement remains relatively low. This research aims to analyze the factors influencing audience engagement in FoodCycle Indonesia's Instagram campaigns and develop a visual campaign strategy based on a co-creation approach. This research uses a mixed method approach with quantitative data collection through questionnaires to 166 Instagram audience respondents, as well as qualitative data through semi-structured interviews, Instagram content observation, and a co-creation process involving 10 selected participants. Quantitative data was analyzed descriptively, while qualitative data was analyzed using Miles and Huberman's interactive analysis model. The results show that even though the audience is interested in the issue of food waste and finds the FoodCycle Indonesia campaign message relatively clear, the level of audience interaction with the content is still moderate. Qualitative findings reveal a gap between the campaign's informative visual strategy and the audience's preference for more relevant, participatory, and contextual content. Through a co-creation approach, the audience is actively involved in the campaign's visual design process, resulting in content concepts that are more in line with the audience's needs and expectations. This study contributes by showing that the co-creation approach can be a relevant strategy in increasing audience engagement in social campaigns on social media, especially in the context of food waste issues in Indonesia.

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## INTRODUCTION

Food waste is one of the crucial problems in Indonesia that has a direct impact on social, economic, and environmental aspects (Munir & Fadhillah, 2023; Purnomo et al., 2024; Roka, 2022; Suhartini et al., 2022; Waluyo & Kharisma, 2023). National data shows that the amount of food waste in 2024 will reach 32.8 million tons, which is equivalent to the energy consumption of 61-125 million Indonesians (Primayanti, 2025; Brigitta Raras, 2022). In addition to contributing to food insecurity, food waste also causes significant economic losses, estimated at 500 trillion rupiah per year or around 4-5 percent of the national Gross Domestic Product. The magnitude of this impact underscores the urgency of reducing food waste as part of the sustainable development agenda, particularly in achieving Sustainable Development Goal (SDG) target 12, which focuses on responsible consumption and production patterns.

As awareness of food waste issues increases, various social organizations in Indonesia have begun to utilize social media as their primary means of public campaigning (Angelina et al., 2024; Briandana & Saleh, 2022; Jenkins et al., 2022; Maulidini & Sumarwan, 2022; Susilo et al., 2022; Yuliati & Simanjuntak, 2024). Social media, particularly Instagram, is considered to have great potential in reaching young audiences and encouraging behavioral change through the delivery of persuasive visual and narrative messages (Friedman et al., 2022; Ko et al., 2023; Mulya et al., 2025; Zhang et al., 2026). A number of previous studies have shown that digital media-based social campaigns can contribute to increasing public awareness and knowledge of environmental and social issues. However, the effectiveness of these campaigns is not only determined by the intensity of the message delivery, but also by the level of audience engagement with the content presented (Blake et al., 2023; Bossetta & Schmøkel, 2024; Cappella & Li, 2023; Ko et al., 2023; Qian et al., 2024; Santos et al., 2023).

In practice, many social campaigns on social media face the challenge of low audience engagement, even though the issues raised are of high urgency. Several previous studies have identified that low audience engagement can be influenced by factors such as content visualization, message clarity, theme relevance, and limited audience participation space in social campaigns. However, most studies still focus on descriptive evaluation of content performance or top-down communication strategies, and have not explored participatory approaches that directly involve the audience in the campaign design process.

The co-creation approach offers an alternative strategy in developing social campaigns by positioning the audience not only as recipients of messages, but also as actors who play an active role in the process of ideation and content production. Through co-creation, social campaigns are expected to produce more relevant, contextual, and tailored visualizations and messages that align with the audience's needs and preferences. Although this approach has been widely applied in marketing and design contexts, empirical studies on the application of co-creation in social media-based social campaigns, particularly on the issue of food waste in Indonesia, remain relatively limited.

Based on this gap, this study aims to analyze the problem of low audience engagement with FoodCycle Indonesia's social campaign content on Instagram and explore the potential of a co-creation approach as a solution in developing social campaign visualizations. Using a mixed method approach, this study not only identifies the factors that influence audience engagement but also formulates audience-participation-based campaign strategies that are expected to increase the relevance and effectiveness of food waste issue communication on social media. This study is expected to provide several important benefits. Theoretically, it contributes to the development of communication and social marketing literature, particularly in understanding the role of co-creation in enhancing audience engagement in digital social campaigns. Practically, the findings can serve as a reference for social organizations, including FoodCycle Indonesia, in designing more participatory, relevant, and effective campaign strategies on social media. In addition, for policymakers and stakeholders concerned with environmental issues, this study provides insights into how digital campaigns can be optimized to encourage public participation in reducing food waste. For future researchers, this study can serve as a foundation for further exploration of co-creation approaches across different social issues and digital platforms.

## **RESEARCH METHOD**

This research used a mixed method approach that combines quantitative and qualitative methods to gain a comprehensive understanding of the problem of low audience engagement with FoodCycle Indonesia's social campaign content on Instagram. This approach was chosen because the issue of audience engagement is not only related to the quantitative performance of the content, but also to the perceptions, experiences, and needs of the audience and the organization implementing the campaign. Therefore, this study was designed not only to identify problems, but also to formulate solutions through a participatory approach in the form of co-creation.

### **Quantitative Data Collection**

Quantitative data collection was conducted by distributing online questionnaires to the Instagram audience of FoodCycle Indonesia. The questionnaire was designed using a Likert scale to measure the audience's perception of the visual quality of the content, the clarity of the campaign message, the relevance of the theme, the call-to-action, and the factors that encourage or hinder audience engagement with social campaign content. A total of 166 respondents participated in the questionnaire. This quantitative data serves as an initial exploratory stage to map general audience perception trends and identify patterns of engagement issues that occur in FoodCycle Indonesia's social campaign content on Instagram.

### **Qualitative Data Collection**

Qualitative data collection was conducted through semi-structured interviews and content observation. Semi-structured interviews were conducted with two groups of informants, with a total of six participants. The first group consisted of two internal representatives from FoodCycle Indonesia, with the aim of exploring their understanding of the organization's vision and mission, the communication strategies that had been implemented, and the challenges faced in delivering social campaign messages. The second group consisted of four audiences selected from questionnaire respondents, with the aim of exploring audience perceptions regarding message clarity, visual appeal, factors driving engagement, and barriers causing low interaction with campaign content.

In addition to interviews, content observation was conducted on all Instagram posts by FoodCycle Indonesia between January and June 2025, totaling 74 posts. This observation aimed to identify the characteristics of campaign content that could potentially influence audience engagement levels. The aspects observed included content themes, narrative style (communication tone), call-to-action, visual format, and audience engagement levels for each post.

### **Co-Creation Participant Selection**

Based on preliminary analysis of quantitative and qualitative data, this study involves a co-creation approach as a strategy for formulating visual solutions for social campaigns in a participatory manner. Ten participants were selected from questionnaire respondents using purposive sampling techniques. Participants were selected based on the criteria of being active Instagram users aged 18-25 who were interested in the issue of food waste and willing to be actively involved in the campaign development process. The co-creation approach was chosen because the initial findings showed a gap between the visual strategies and campaign messages designed by the organization and the preferences and expectations of the audience.

Through the direct involvement of the audience as co-creators, this study aims to produce social campaign visualizations that are more relevant, contextual, and have the potential to increase audience engagement.

### **Data Analysis Techniques**

Qualitative data obtained from interviews and content observation were analyzed using Miles and Hiberman's interactive analysis model, which includes data reduction, data presentation, and conclusion drawing. This analysis aims to identify key themes related to audience engagement factors, visual communication barriers, and audience and organizational needs in social campaigns. Meanwhile, quantitative data from questionnaires were analyzed using descriptive analysis techniques to describe audience perceptions of FoodCycle Indonesia's social campaign content. The results of the quantitative and qualitative analyses were then integrated as the basis for the design and implementation of co-creation, so that this participatory approach did not stand alone, but rather departed from previously identified empirical findings.

## **RESULTS AND DISCUSSION**

This section of the research presents findings obtained from the collection and analysis of quantitative and qualitative data. The presentation of results aims to describe the characteristics of respondents, identify factors that influence audience engagement with FoodCycle Indonesia's social campaign content on Instagram, and formulate key insights that form the basis for implementing a co-creation approach.

### **Characteristics of Respondents and Research Participants**

Respondents in this study were predominantly young people who are active social media users. The majority of respondents were in the 21-25 age range (51.8%), followed by the 25 age group (24.1%) and the 15-20 age group (23.5%). This age composition shows that most respondents belong to the productive age group, which has a high level of exposure to social campaign content on Instagram. Based on their occupational background, most respondents were students (39.8%), followed by employees (34.3%). The dominance of this group shows that respondents have the characteristics of an audience that is relatively accustomed to consuming digital content and has the potential to be involved in social media-based social campaigns.

In terms of social media usage intensity, most respondents accessed social media for 1-3 hours per day (46.4%), while 24.1% of respondents used it for 4-6 hours per day and 9% for more than 6 hours per day. These findings indicate that the majority of respondents have a fairly high level of interaction with social media, so the chances of being exposed to FoodCycle Indonesia's campaign content are relatively high. In addition to demographic characteristics, respondents were also asked to identify aspects that FoodCycle Indonesia needs to improve in order to increase audience engagement. The results show that 60.8% of respondents consider the need for more interesting campaigns on social media, while 39.8% of respondents emphasize the importance of transparency and impact reporting, and 36.7% of respondents expect more alternatives to involvement besides donations. These findings indicate that the audience not only evaluates the visual aspects of campaigns, but also expects more participatory and meaningful forms of engagement.

**Table 1.** Respondent Characteristics

Characteristics	Category	Percentage (%)
Age	15-20 years old	23,5
	21-25 21-25 years old	51,8
	>25 years old	24,1
Occupation	Student	39,8
	Employee	34,3
	Entrepreneur	17,5
	Other	8,4
Daily social media usage duration	>1 hour	20,5
	1-3 hours	46,4
	4-6 hours	24,1
	>6 hours	9,0

Source: Questionnaire data processed by the authors (2025)

### Descriptive Analysis Results of the Questionnaire

The descriptive analysis results show that the majority of respondents have a fairly high level of interest in social organizations that focus on managing food waste. As many as 50.6% of respondents stated that they quite often to often seek information related to this issue (scores of 4-6), although there are still 28.3% of respondents who show a low frequency of seeking information (scores of 1-3). Regarding the clarity of the FoodCycle Indonesia campaign message, most respondents considered the message to be clear enough, with 59% of respondents giving a score of 4-5 and 27.8% giving a high score (6-7). These findings indicate that the campaign message is generally understandable to the audience, although the level of clarity is not yet optimal for all respondents.

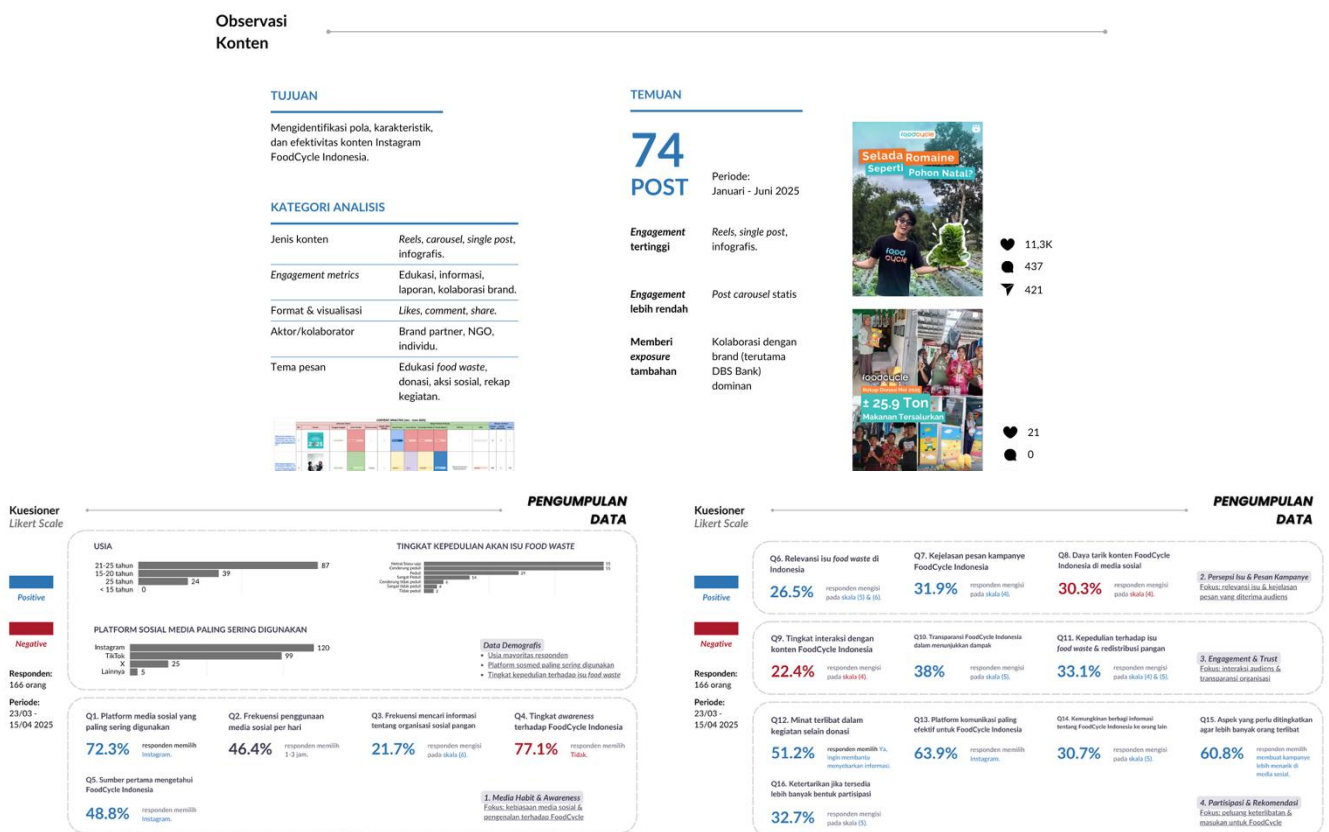
The assessment of the appeal of FoodCycle Indonesia's social media content also shows a similar trend. A total of 57% of respondents gave a moderate rating (score of 4-5), and 30.4% rated the content as interesting to very interesting (score of 6-7). However, the level of audience interaction with the content is still moderate, with 43.6% of respondents giving a score of 4-5 and 37% giving a low to moderate score (1-3). On the other hand, the majority of respondents showed a positive tendency towards increased participation, with 58.2% of respondents stating that they would be more interested in getting involved if FoodCycle Indonesia provided more participation alternatives in addition to the existing forms of engagement. These findings indicate the potential for audience engagement that has not been fully facilitated through the current campaign strategy.

### Qualitative Analysis Results (Miles & Huberman Model)

Qualitative analysis was conducted on data from semi-structured interviews with FoodCycle Indonesia internal representatives and audiences, as well as observations of FoodCycle Indonesia's Instagram posts. Through data reduction, data presentation, and conclusion drawing, several main themes were obtained that describe the factors that influence audience engagement in social campaigns. The analysis results show that low audience engagement is not solely caused by a lack of posting intensity, but is more related to the clarity of the message, visual relevance, and the audience's emotional connection to the campaign content.

The first theme that emerged was the gap between the campaign's objectives and the audience's perceptions. From interviews with internal parties, the FoodCycle Indonesia

campaign was designed to raise awareness and encourage concrete action on the issue of food waste. However, audience interviews and content observations show that campaign messages are often perceived as too informative and not visually communicative, making it difficult for audiences to understand the urgency of the message or the role they can play. In addition, the second theme relates to the limited space for audience participation, where most of the content is still one-way and does not consistently invite the audience to be more actively involved. These findings indicate the need for a more participatory and collaborative campaign approach so that the campaign message can be more relevant and encourage sustained audience engagement.



**Figure 1.** Gap Between Campaign Objectives and Audience Perceptions in FoodCycle Indonesia's Instagram Campaign

Source: Interview and content observation data processed by the authors (2025)

### Synthesis of Findings and Key Insights as the Basis for the Co-Creation Approach

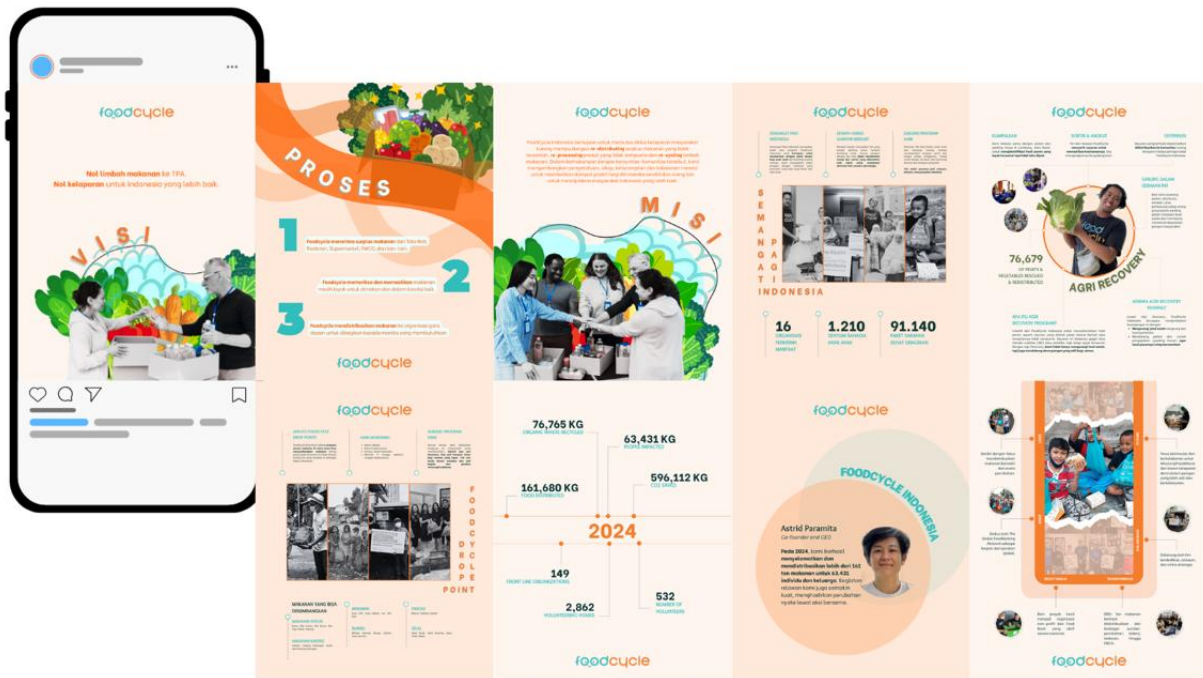
The results of quantitative and qualitative data analysis show a gap between FoodCycle Indonesia's social campaign strategy and the needs and preferences of its audience on social media. Quantitatively, the questionnaire results indicate that although the audience considers the campaign message to be relatively clear and the content to be quite interesting, the level of audience interaction with the content is still moderate. In addition, the majority of respondents expressed a higher interest in getting involved if FoodCycle Indonesia provided more diverse forms of participation, not limited to donations. These findings indicate that the

problem of audience engagement does not lie solely in the visual aspects or clarity of the message, but rather in the limited space for audience participation in the social campaign.

These quantitative findings are reinforced by the results of qualitative analysis from interviews and content observation. Interviews with the audience revealed that campaign content tends to be perceived as informative, but does not fully encourage active engagement because the audience feels they have no direct role in the campaign being delivered. Meanwhile, observations of FoodCycle Indonesia's Instagram posts show that the visual and call-to-action strategies used are still top-down in nature, with a primary focus on conveying information and encouraging donations. This situation highlights the need to shift the campaign approach from one-way communication to a more participatory and collaborative approach.

Based on a synthesis of these findings, the co-creation approach was chosen as a solution strategy to bridge the gap between organizations and audiences. Co-creation in this study is understood as a collaborative process that actively involves audiences as co-creators in the visual design of social campaigns, rather than merely as recipients of messages. This approach is considered relevant because it allows for the integration of the audience's perspective from the initial ideation stage to content design, so that the resulting solutions are more contextual and have the potential to increase the audience's engagement with the campaign. The co-creation process was carried out with ten selected participants representing the Instagram audience of FoodCycle Indonesia. Participants were actively involved in exploratory discussions to formulate campaign ideas, determine key messages, and develop visual concepts for Instagram content. These discussions included an exchange of views on food waste issues, visual style preferences, narrative approaches, and forms of call-to-action that were considered more relevant and encouraged audience participation. Audience involvement in this entire process enabled the creation of a two-way dialogue between the organization and the audience, which had not previously been involved in one-way campaign strategies.

The results of co-creation show a shift in the visual approach and campaign message compared to previously produced content. Co-created content tends to feature simpler yet communicative visuals, narratives that are closer to the audience's experience, and calls to action that focus not only on donations but also on other forms of participation such as changing daily behaviors and engaging in the dissemination of campaign messages. These changes reflect the audience's needs identified in the previous analysis stage, while also demonstrating the audience's direct contribution to the social campaign design process. Thus, co-creation in this study not only serves as a method for developing visual content but also as a strategic approach to increasing audience engagement in social campaigns. This approach enables FoodCycle Indonesia to design campaigns that are more relevant to the target audience, while strengthening the relationship between the organization and the audience through a collaborative process. These findings confirm that audience involvement in the campaign design process is an important factor in increasing the effectiveness of social campaigns on social media.



**Figure 2.** Example of Co-Creation Results

Source: Co-creation results conducted by the authors with research participants (2025)

## CONCLUSION

The co-creation approach is relevant as a response to the complexity of audience engagement issues. By directly involving the audience in the process of ideation to campaign content design, co-creation enables an exchange of perspectives between the organization and the audience. This process not only results in campaign visuals that are more in line with audience preferences, but also strengthens the sense of ownership of social campaigns. Thus, co-creation functions not only as a design method, but also as a participatory communication strategy that has the potential to increase audience engagement on an ongoing basis. This study shows that low audience engagement with FoodCycle Indonesia's social campaign content on Instagram is not caused by low awareness of food waste issues, but rather by a gap between the visual strategy and campaign message and the preferences and needs of the audience. Quantitative analysis results indicate audience interest and potential for participation, while qualitative analysis results reveal obstacles in the form of a lack of visual relevance, limited variety of participation forms, and a communication approach that is still one-way. These findings confirm that increasing audience engagement requires a more participatory and contextual approach. Although this study provides empirical and practical contributions, there are several limitations that need to be considered. First, this study focuses on one social campaign organization, so the results cannot be generalized to other social campaign contexts. Second, the involvement of co-creation participants is limited to a certain age group and a relatively small number of participants, in accordance with the characteristics of the participatory approach. Furthermore, this study did not measure the longitudinal impact of implementing co-creation content on increasing audience engagement in the long term. Based on these limitations, future research could expand the context of the study by involving various types of social campaign organizations and different social media platforms. Future research is also recommended to examine the effectiveness of co-creation not only as a

participatory design approach but also as a sustainable and empirically based social campaign communication strategy.

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