

Social Marketing Strategy Through Digital Campaigns as an Effort to Reduce Plastic Waste in Kupang City

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Abstract

Through changing public perception in reducing the use of single-use plastics through the digital campaign "Plastic Efficiency." The campaign aims to increase awareness and encourage changes in people's behavior in the use and management of plastics more responsibly. This research focuses on designing digital campaigns using the 5A Kotler model consisting of Aware, Appeal, Ask, Act, and Advocate. This approach is a modern marketing strategy that is relevant to the connectivity era because it is able to build audience engagement while increasing public awareness of plastic issues. This campaign is also expected to support the government's "Kupang Green and Clean 2025" program. The 5A Kotler model is used by incorporating messages that have emotional appeal to build audience response and engagement. The research uses qualitative methods through in-depth interviews, questionnaires, and Focus Group Discussions (FGDs). The campaign content is then integrated through social media and evaluated using engagement metrics and surveys to identify changes in people's behavior.

Keywords: *Social Marketing; Digital Campaigns; Plastic Waste; Emotional Appeal.*

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INTRODUCTION

The waste problem has now developed into a form of national crisis that continues to unfold. Waste management that has not been carried out optimally can trigger various problems, ranging from environmental pollution, floods, disturbances to public health, damage to marine ecosystems, increased greenhouse gas (GHG) emissions, to wider consequences for economic growth. Muhammad Reza Cordova, Principal Expert Researcher at the BRIN Oceanographic Research Center, said that Indonesia occupies a position as the second largest contributor of plastic waste in the world (Detik.com, 2024). This problem is also seen in East Nusa Tenggara Province (NTT), especially Kupang City, which faces a fairly complex waste problem and once received the title of one of the dirtiest cities in Indonesia in the Adipura assessment. Based on data from the Kupang City Environment and Hygiene Agency in 2024, the amount of waste produced will reach around 233 tons every day. Of the total volume, only about 60-70% can be handled, while the rest are still found piling up in residential areas, rivers, beaches, and various public spaces (rri.co.id, 2024). Waste management conditions are also not fully supported by an

adequate final processing system. Final processing sites (TPAs) in Kupang City still use an open dumping system, which is a waste management method by flattening waste and leaving it in an open area without a proper closing process (Meilani, 2024). On the other hand, Kupang City only has one landfill and a number of temporary disposal sites (TPS) whose capacity and availability are still limited. This situation causes several points along the roads of Kupang City to be used by the community as temporary disposal locations. The waste that has been collected at the TPS is then transported by the cleaners to the Alak Landfill to be accommodated, but the transportation process is still carried out without going through the waste sorting stage first (timexkupang, 2025).

Various efforts have been made by the government to reduce waste in the city of Kupang, including:

No	PROGRAM	TAHUN
1	"Kota Kupang Bebas Sampah"	2018
2	TPS 3R (reduce, reuse, recycle) di enam kecamatan	2018
3	Kerjasama dengan komunitas lingkungan dan bank sampah	2018
4	Memperketat PERDA Nomor 3 Tahun 2011 tentang Penanganan Sampah Rumah Tangga dan Sampah Sejenis Sampah Rumah Tangga, serta PERDA Nomor 4 Tahun 2011 tentang Pengurangan Sampah	2018
5	Kampanye "Zero Waste" di Sekolah dan Pasar untuk mengurangi penggunaan plastik	2019
6	Gerakan "Kupang Diet Kantong Plastik"	2020
7	Aplikasi "Si Sampah Pintar"	2023

Figure 1. Kupang City Waste Management Government Program

The limited waste management infrastructure and the low level of public awareness are two main factors that hinder the success of various waste management programs that have been implemented. This condition can be seen from the large amount of plastic waste that accumulates and is scattered in residential areas, coastal areas, vacant land, and road shoulders. In addition to infrastructure problems, people's habits that are still highly dependent on the use of plastic are also one of the fundamental problems in increasing the amount of waste. The Directorate General of Pollution Control and Environmental Damage (PPKL) explained that plastic waste has the potential to interfere with the absorption process and availability of groundwater because microplastic particles can clog soil pores. This condition can ultimately affect the availability of clean groundwater sources that are suitable for use by the community (WHO, 2018). This situation can be a serious threat to environmental sustainability in East Nusa Tenggara, especially Kupang City, considering that the area is an area that still faces the problem of limited and scarcity of water resources. If the waste problem is not immediately handled in a more systematic and sustainable manner, the impact will not only worsen environmental conditions, but also have the potential to hinder the achievement of sustainable development. A polluted environment can increase the risk of various public health problems, including stunting problems that are related to sanitation conditions, environmental health, and quality of life (Rosha et al., 2019). Based on the results of previous observations and surveys, it was found that public awareness of waste

management in Kupang City is still at a relatively low level. This condition can be seen from several behaviors that are still found in the community, namely 1) the use and dependence on single-use plastics is still quite high, 2) children have not received adequate habituation and education regarding waste sorting activities in the school environment, and 3) there is still a view in the community that the waste problem is entirely a matter as well as the responsibility of the government. The low level of public concern for the waste problem in Kupang City then became the basis for formulating a research problem, namely "How to design a digital campaign with the 5A Kotler model to be a solution to reduce plastic waste in Kupang City". Based on these problems, this research is directed to build synergy with the Kupang City Government in supporting the realization of the "Kupang Green and Clean" 2025 program through increasing public awareness and concern for the use and management of plastic waste. These efforts are also related to the central government's policy that places public awareness as an important part of solving the waste problem. Agus Harimurti Yudhoyono as the Coordinating Minister for Infrastructure and Regional Development said that one of the main steps in dealing with the waste problem is to build public awareness and concern for more responsible waste management practices (Presidential Secretariat, 2025).

METHODOLOGY

This study applies qualitative data analysis as the main approach in processing and interpreting data obtained during the research process. Qualitative analysis is a process that has many dimensions because it focuses on understanding the patterns, themes, meanings, and relationships that emerge from nonnumerical data. This approach is specifically used to gain a deeper understanding of human behavior, experience, and reality that have complex characters and cannot always be explained through numbers (Khan, 2018). In the campaign design process, this study uses the 5A framework approach developed by Philip Kotler, namely *Aware, Appeal, Ask, Act, and Advocate. The 5A framework is used as a strategic foundation in designing effective digital campaigns by paying attention to the stages of audience engagement from the emergence of awareness to the formation of advocacy behavior. This model places audience involvement as an important element in the preparation of campaign strategies so that the message conveyed does not stop at the stage of gaining attention, but can encourage action and advocacy from the audience (Kotler, 2017). In this study, the approach is directed as one of the efforts to encourage changes in public perception and behavior towards the use of plastic. The qualitative analysis approach was chosen because it is able to provide a wider space to understand human behavior contextually so that the research can obtain a more detailed picture of the problem being studied. The formulation of the problem regarding the low public concern for the problem of waste departs from an empirical phenomenon in the form of a build-up of waste in residential areas, road shoulders, and a number of vacant lands in Kupang City. Based on the literature study that has been conducted, one of the alternatives that can be applied to help minimize this problem is through social campaigns. Therefore, this study designed a social campaign that is not only oriented towards the delivery of information, but also includes psychological aspects as one of the bases in building messages and influencing people's behavior. Before entering the analysis and design stage of the

campaign, the research first determines the target audience which includes various groups and age ranges who live in Kupang City. The determination of the relatively broad target is based on the similarity of the geographical context and the view that behavioral changes in waste management need to be formed early and should not be limited to only certain age groups. Thus, the campaign is expected to reach the people of Kupang City more broadly while fostering more responsible waste management habits in daily life. The research data was then collected through several techniques, namely observation, interviews, and focus group discussions (FGD) conducted with the audience and related resource persons. The use of several data collection techniques is intended to obtain more comprehensive information about field conditions, public perception, audience experience, and various factors that can be the basis for the preparation of digital campaign strategies.

The design of this campaign goes through three processes, namely 1) Pre-production, where at this stage the preparation of scenarios, scripts, storyboards, data collection through interviews and FGDs with sources and target audiences, and taking pictures. 2) Production, this stage includes the creation of posters, infographics and videography. 3) Post-production, editing, manipulating, subtitles, titles, illustrations and effects are carried out. Which is then brought back to the FGD forum. After going through the second FGD and receiving criticism and suggestions from the target audience, the campaign content then enters the finalization stage for launching on social media. The campaign content was then evaluated using page views, video views and sharing metrics parameters to measure the audience's interest in the campaign content, in addition to an increase in healthy living behaviors as seen from the reduction in the use of single-use plastics.

Campaign content is designed using Kotler's 5A model which consists of five stages, this design uses the 5A model because it is based on connectivity between audiences, so that it can produce campaign content that affects individual perceptions (Polat, 2022). The five stages are:

1. **Aware:** This stage is a campaign introduction phase with the hashtag #EfisiensiPlastik, to the audience, this stage is carried out in the FGD forum, this stage also determines information based on "emotional appeal" that will be used in the content, by exploring the experiences of individuals who are considered to have a great influence on the impact of plastic waste, so that the audience is aware of the importance of the existence of a plastic waste reduction campaign. This stage is included in the pre-production process.
2. **Appeal:** At this stage, it is hoped that the audience is already interested in the content design of the "Plastic Efficiency" campaign and can compare it with similar content, so that it can provide input for the perfection of the content. This stage enters the pre-production process.
3. **Ask:** At this stage, the audience will seek more information by asking friends and family about the content and automatically build connectivity proactively that can strengthen the appeal of the content. This is evidenced by the increasing number of criticisms and suggestions. This stage is included in supporting the production and post-production process

4. **Act:** The audience takes action, where they have used and posted campaign content that has been created on various social media (facebook, whatsapp, instagram, tiktok).
5. **Advocate:** Active audiences support #EfisiensiPlastik campaign content that has already been posted and recommend to others with the use of tags and shares.

With design through these stages, the delivery of content is felt without coercion and becomes the awareness of each individual, because the involvement of the target audience in determining the content makes the audience feel owned and obliged to be recommended. With the occurrence of Advocate, a product is declared successful because it is accepted and shared by the public (Mawarni, et.al, 2019).

In the Aware stage, it is determined which emotional appeal message will be used, namely messages based on emotional touches, because emotional appeal in campaigns is one of the effective advertisements that can change human perception (Choirunnisa, et.al, 2019). The process of determining emotional appeal-based messages is determined from the FGD which conveys a statement about the state of emotional feeling due to the use of plastic, with indicators of metaphor, hyperbole, rhetorical questions, emotional triggers of happiness, fear, nostalgia, and aspiration (Sattorov, 2024). The content will be applied to social media and using SEO strategies, SEO is used with the aim of ensuring that web pages are easily found by users (Sultan, 2024). To validate the content of the campaign, triangulation methods such as interviews with multiple informants, document studies and observations are used, in order to verify through cross-results, leading to more specific conclusions and insights.

The data collection techniques carried out included literature reviews, FGDs, and in-depth interviews. This study used a triangulation credibility test, and used reference materials (Siregar, et al., 2023). Triangulation was carried out involving three cross-check techniques and the results of the study included interview techniques conducted in different settings, different sources, using related references.

Table 1. List of Research Informants

No	Sumber	Keterangan
1	Walikota Kupang	Informan Kunci
2	Masyarakat dari tiga kelurahan (Nefonaek, Oesapa Barat, Lasiana)	Informan Kunci
3	Pegiat Lingkungan	Informan Triangulator
4	Kelurahan	Informan Triangulator
5	Psikolog	Informan Triangulator

Interview data is processed through the process of data reduction, data display, and conclusion drawn. In data analysis, there is a data identification process by compiling the first data, compiling the second data, and compiling the third data. The first stage of data reduction or compilation is the researcher selecting the data from the interview results that are not in accordance with the research. The second

stage of display or data preparation is the researcher grouping or creating data categories by making a table for the interview data. The conclusion drawing stage Based on the results of the interview data, the researcher analyzes and confirms the data with theories relevant to the phenomenon being studied. The purpose of using this data analysis technique is that the researcher tries to describe or analyze the phenomenon being studied. In this case, the researcher can interact deeply with the informants to obtain factual data.

RESULTS AND DISCUSSION

Social campaigns on digital media aim to encourage social change through digital activities, which are expected to influence individual attitudes and behaviors. One way to use digital campaigns is to use hashtags in a content, to engage user activities. Campaigns are said to be successful if the target audience understands the message conveyed and does what is conveyed in the campaign.

Based on the results of literature studies through scientific journals, and previous research on waste campaigns, the negative impact of plastic waste, and the human psychological aspect of viewing campaign content, it was found that designing a social campaign about reducing plastic waste will be more effective if it contains psychological messages or "emotional appeal" messages that evoke the feelings and emotions of the audience after seeing a content (Kunze Li, 2024). The type of emotional appeal used in this study is the emotion of fear and affection or social connection. Fear shows the consequences or negative impacts that will be faced if you do not apply the message in the campaign seen (Ratnasari, 2020). Affection or social connection shows relationships between people, especially in family relationships. Therefore, it is determined that the campaign content to be created contains a persuasive message that contains fear by showing the possibility of bad things happening to family members if they do not apply the message in the campaign.

The campaign with an emotional appeal message that contains emotions of fear and affection is aimed at all circles and genders. Based on primary data through observations, surveys and interviews that have been conducted with environmental activists and psychologists, it was determined that the target audience is aimed at the general public of all ages who live in the city of Kupang. Aimed at all ages because the campaign content will be disseminated through social media that can be accessed by all ages, in addition to that I Made S Putra said that awareness of managing waste must be applied to early childhood children, in order to create good habits (Interview with the Head of LPM I Made S. Putra, September 10, 2025). The target audience is also intended for all people who live in the city of Kupang because the state of the environment of Kupang City which is filled with waste really needs public awareness in managing its waste (Interview with environmental activist Ina Ungirwalu, September 10, 2025). This study took data on three villages, namely Nefonaek Village, Lasiana Village and West Oesapa Village, Nefonaek Village was chosen because it is in the center of Kupang city which is full of trading activities because it is close to the Oebobo market, one of the largest and busiest traditional markets in Kupang. This village is a very dense residential area, houses that are squeezed together, many street vendors and shops, but this village has implemented

local waste management independently so that it becomes one of the villages that excel in the Kupang City cleanliness competition. Lasiana Village is an area that not only stands as a residential area, but also as a mainstay tourist area in Kupang city. Lasiana Village, which has Lasiana Beach, has become a recreational lung for the people of Kupang city. However, having a fairly concerning environmental situation, the accumulation of garbage in settlements and beaches has become a common sight. For this reason, information from the local community is needed to get a view of how effective campaign content is for the people of Lasiana village. West Oesapa Village, is a rapidly growing peninsular area, because it is directly adjacent to the city center and campuses. Having a traditional market area and a very dense residential area, in addition to residential housing, Oesapa Village also has many boarding houses and rented houses for students and migrant workers.

This village also has Paradiso beach which consists of several spots on the coast that are culinary attractions with sea views. The problem of domestic waste and plastic waste on the coast is still a serious problem in this village. Interviews were conducted with key informants, namely the government, environmental activists, psychologists, and the community who were taken by representatives from three villages.

Table 2. Daftar Depth Interview

1	Depth interview 1	It was carried out with the Kupang city government, which produced information on the urgency of the waste problem in Kupang city and the programs that have been implemented, as well as adding a perspective on the use of plastic waste in Kupang City.
2	Depth interview 2	It was carried out with environmental activists and the waste bank community, which generated information on the future impact of plastic waste as well as the activities and campaign programs that have been carried out.
3	Depth interview 3	It was carried out with the target audience of the community in three villages, by producing information about the habits and behavior of the target audience towards plastic waste and the impact that the target audience fears the most if they do not handle plastic waste properly, as well as information about habits in the use of social media.
4	Depth interview 4	It was carried out with psychologists, who produced information on how the use of emotional appeal messages in garbage campaigns can arouse the target audience.
5	Depth interview 5	It was conducted with campaign experts, who generated information related to campaign content designed using

	emotional appeal messages.
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In addition to in-depth interviews with informants, the distribution of questionnaires was also carried out to explore the behavior habits of the target audience towards the use and processing of plastic waste, The distribution of this questionnaire was carried out directly, the target audience filled out the questionnaire at their respective locations. The results of the questionnaire were used as the basis for determining campaign content on digital media.

Pre-Production

Pre-production is all activities from the preparation of scenarios to image searches and poster drafts. In pre-production activities, ideas and ideas are poured into scripts, formatting and drafting poster designs. Pre-production is an activity from discussing initial ideas to determining images and videos (Morissan (2019). In this stage, there is a process of interaction between human thoughts and ideas with supporting equipment that produces creativity. In the pre-production process, there are Aware and Appeal stages.

a. Aware

The Aware stage is a phase of introduction to the campaign with the hashtag #EfisiensiPlastik, to the audience, this stage is carried out in the FGD forum, this stage also determines information based on "emotional appeal" used in the content, by exploring the experiences of individuals who are considered to have a great influence on the impact of plastic waste, so that the audience is aware of the importance of the existence of a plastic waste reduction campaign. From the results of the FGD, several discussion points were obtained and collected some information as follows:

Table 3. Results of FGD

No	ISU	SOLUSI
1	The garbage campaign is organized using #EfisiensiPlastik hashtags, with information that contains emotional appeal. What kind of emotional-based information do you think can arouse people to be able to implement plastic efficiency?	The public has seen many campaigns about waste in various media, but the content provided is less provocative and less persuasive to change the behavior of handling plastic waste. The public believes that a waste campaign is needed that provides a negative impact message for the future of the next generation.
2	What kind of main message is considered easy to remember and can be embedded so that it can be implemented immediately in handling plastic	Information that is considered easy to remember and evocative after the audience sees the digital campaign is information related to family affection such as a picture of children with a garbage sorting order for

	waste?	the future.
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b. Appeal

At the Appeal stage, the audience is already interested in the content design of the "Plastic Efficiency" campaign and can compare it with similar content, so that it can provide input for the perfection of the content. At this stage, the content design has been made and the audience gives input and suggestions about the design. The content is created in three types of images that will be uploaded on Facebook, IG and WhatsApp.

Production

After the pre-production process of planning and preparing for content design, the production process is the next activity, in this stage the determination of the planning of the content to be created, this process includes determining images and creating content that has been planned. Content is made in three types of images uploaded on 3 types of social media, namely, Instagram, Facebook and Whatsaap.

c. Ask

In this production process, there is an Ask stage, where at this stage, the audience will seek more information by asking friends and family about the content and automatically build connectivity proactively that can strengthen the appeal of the content. It is evidenced by the increasing number of criticisms and suggestions. This stage is included in supporting the production and post-production process.



Gambar 2. Campaign Content on Instagram



Gambar 3. *Campaign Content on Facebook***Gambar 4.** *Campaign Content on Whatsapp*

Post-Production

Post-production is a process that has been declared complete and ready to be broadcast or uploaded on social media. In the post-production process, it is editing, manipulating, subtitles, titles, illustrations, effects, and others.

d. Act & Advocate

In the Act stage, the audience takes action, where they have used and posted campaign content that has been created on various social media that they have. It can be seen from the content and shares that they have, that the audience responds to the campaign content that has been seen.

Campaign content, get a lot of likes and shares from audiences with demographics domiciled in the city of Kupang and at least 21 years old.

CONCLUSION

A #EfisiensiPlastik campaign with an emotional appeal message is an effective campaign message to be used in Kupang City based on the waste problem. This is because the campaign is based on emotional messages related to family affection that can target all groups and ages. This research contributes in the form of new campaign recommendations regarding emotional appeal as an alternative tactic for social campaign message designers. Emotional-themed campaigns related to families, especially children, can affect individuals and ultimately bring social change.

A social campaign that aims to persuade the public to change their behavior in managing plastic waste with a message strategy that contains emotional appeal and hashtags #EfisiensiPlastik get a fairly positive response from the audience, based on the provision of likes and shares on content that has been updated for 24 hours. The use of campaign messages that cause negative feelings in the form of fear of the impact experienced by family members in the future, is considered quite effective, judging from the audience's response to the content. This campaign is used as an information medium to foster public awareness of the importance of processing plastic waste by sorting plastic waste. Through this design, it is hoped

that it can provide education and new knowledge to the public about the dangers of plastic waste for the sustainability of the next generation.

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