

Campaign to Reduce Impact of Electronic Waste (E-Waste) Hazard in Bandung

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Abstract. Electronic Waste (e-waste) has become a very dangerous environmental problem in a living things. But, in Indonesia the law on e-waste hasn't been established. This happens because the Government is less concerned with e-waste. However, this problem will continue to grow over time. Bandung, as the city that always get Adipura award still can't resolve the waste problem. Lack of attention from Bandung's Government make this problem is still considered as a small thing. Whereas e-waste belongs to the type of hazardous waste, for that e-waste requires special treatment. Badly, many people who didn't know about e-waste and didn't know what to do with e-waste. This campaign aims to invite the people to reduce e-waste by providing a special e-waste bin, to make it easier to convey the purpose of the campaign, the target audience of this campaign is the citizens of Bandung who have e-waste at home. The process of this campaign research, using qualitative methods, by collecting data through literature studies, interviews, and questionnaires. Then in the analysis by Matrix method, AOI and formulation of strategy of message and medias use Facet of Model Effects. Furthermore, followed by visual execution to perform the expected campaign activities. In this case is expected that the campaign which provides special e-waste bin to be a solution of the issues that have been solved.

Keywords: *Campaign, Campaign, Electronic Waste, Hazardous, Environment.*

1 Introduction

Environment is an absolute thing that is always associated with living things that form the order of elements of the environment and form a balance. Waste, is one of several types of environmental problems. In this case, which will be used as research object is electronic waste (e-waste). Electronic waste can happen because of the increasingly sophisticated technology. Electronic waste includes the type of B3 (Bahan Beracun Berbaya), the impact of hazards that happen will be felt in the future, one of them is the happening of environmental damage. Meanwhile, electronic waste has a special way of handling, included that e-waste can't be mixed with other types of waste, organic or anorganic.

In Indonesia, especially Bandung, that the issue of e-waste is still not to be handled. The unavailability of a special e-waste waste bin makes the people of Bandung don't understand

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how to treat electronic waste properly.

Based on the results of interviews with one of community that has organized similar campaign activities, the results is that people are still unaware of e-waste and they need a special bin so that people can throw away of e-waste properly. Based on the problems, the authors choose to create a campaign that aims to educate and persuade the public with the title "Campaign Reducing Impacts of Electronic waste Hazards (E-Waste) in Bandung"

2 Literature Review

2.1 Basic Design Theory

2.1.1 Campaign

The campaign is an organized organizational communication that has the intention to make an impact to the target audience conducted within a certain time according to Rogers and Storey [1].

2.1.2 Early Adult Psychology

The Middle class can serve as a trigger for economic and social change, increasingly visible along with the increasingly widespread and faster internet coverage, and the social media that keeps the middle class more connected [2]

2.1.3 Advertising

Communication complex that pursue certain intentions and leverage strategies to influence thoughts, feelings, and actions. Advertising refers to the form of communication techniques used by marketers to approach and get consumers and deliver their messages [3].

Advertising is a suggestion for delivering messages / messages products / services messages to message recipients that are "dynamic or static" so that people can be intrigued, interested, hooked, to follow. The delivery of messages is not directly transmitted through mass media or other media that can be reached by the community, resulting in positive reactions and actions[4]. Advertising's models approach is 6 factors that are important for determining goals and evaluating the effectiveness of advertising. An effective advertising will create six types of target audience response: first, hear / see, second feel, third think / understand, fourth believe, fifth connected, six acts / do [3].

2.1.4 Communication

The communication process can make a message from the sender of the message can be received by audiences. Media is required to avoid misdirection. In order for advertising to be targeted, a strategy needs to be made to make it easier to communicate. Pujiyanto [4].

2.1.5 Media

Segmetation means dividing a group by psychographic, geography, behaviour, and demography. In addition to segmenting grouping, it is also necessary to determine the type of media that suitable the interests of the audience [5].

2.1.6 Visual Communication Design

Visual Communication Design is a science that explains about communication concepts presented creatively by using various media to convey messages and ideas visually by managing graphic elements [6].

2.2 Research Methods

The method to be used according to the research of this topic is the qualitative method. This method uses natural objects that are true is happening and the presence of researchers does not affect the object of research. For collecting data then do collect data facts according to existing phenomenon, interview with resourceful data source. From these data, it will get an expected campaign draft [7].

Interview is the exchange of ideas and information between two people through question and answer to get the meaning of a topic. In the process of data collection, the authors conducted in-depth-interviews to target audiences to get their thoughts and habits about e-waste [7].

The analysis method used is AOI analysis method (Activities, Opinion, Interest) and Matrix. AOI analysis is a number of questions that are made to be able to know some relevant aspects about the personality, buying motives, interests, attitudes, beliefs, and consumer values [3]. According the authors of a campaign that raised an important topic of concern is necessary because it can help change big things by doing small things.

3 Methods

Concept design of this campaign has the target audience which is millenials generation, more specific, that is 21 - 35 years old, both male and female, where they are society of Bandung middle social class which have broken electronic goods and left / stored or discarded just like that, and besides that the desired target audience is those who want to live by applying environmentally friendly, modern life, likes to socialize and active in social media.

According target audience, then get the message "Do not keep your electronic waste at home" by providing solutions to provide a special waste bin electronic. In order for the campaign message to be easily delivered, it takes the name of the campaign that can represent the purpose of the campaign and it's easy to remember by the target audience. Campaign Title : We-Box (E-waste Dropbox) Tagline: LAGOM (LAngsunG ka we-bOx, Mangga) The purpose of the campaign name is to give the name of e-waste electronic trash bin. Then, the tagline intends to invite the target audience to save electronic waste (e-waste) in We-Box. Lagom itself also has a meaning as a lifestyle application from Sweden which aims to live balance the environment for sustainable living or sustainable living.

Creative concept that is used is a communication strategy that uses a rational approach, emotional approach to the target audience. The method used in this case is the Facet of Model Effect, including:

- Perception, with target audience response is view / hear, using media: poster.
- Emotions, with the target audience response to feel, using the media: animated video.
- Cognition, with target audience response that is understand, use media: daily content via social media, x-banner, event, carousel ad.
- Association, with target audience response that is feel connected, using media: ambient media, merchandise.
- Persuasion, with target audience response to believe, using media: poster event, poster apps, transit ad.

- Behavior, with the target audience response act, using media: apps, events, ambient media.

What does advertising do?

Providing public education about electronic waste and encouraging people to reduce the impact of hazards from electronic waste.

What are the attitudes and perceptions that exist today?

People still do not know what electronic waste is, and they prefer to keep their electronics instead of being thrown away or sold.

Insight?

“nggak tahu harus dibuang kemana”, “dibuang sayang”,

Big idea :

We-Box (*E-Waste Dropbox*)

4 Result and Discussion

Based on the method used then got the result of designing campaign as follows:

4.1 Logo

The concept used is to take the form of ambient media from this campaign and use the iconic electronics of the circuit. In addition, this logo can also be shaped SD Card, which has the same purpose that is to "save". In this case it is intended to store electronic waste in a special waste bin that has been provided by the campaigner. The color selection used is adjusted to the color that shows living environment. The use of the font used is adjusted to the specified visual style, ie sans serif.



Fig. 1. Logo and font

4.2 Typography

Choosing typography that will be adjusted by the visual style then the authors choose the type of font sans serif so as not to look rigid and modern, and facilitate the target audience to read clearly.

4.3 Colors

Selected colors adjusted to the campaign theme that is related to the environment, electronic waste, and color selected also shows the spirit, active, and healthy. The main target in this campaign is the students who care about the environment. Then selected some colors that can describe for visual to be displayed.



Fig. 2. Colors

4.4 Media Concept

4.4.1 Posters

Some of the poster designs are made in according with the references used by illustrations to representation of e-waste. The language used is to the target audience using basic language commonly used. Adjusted for the purpose of target audience response to be achieved and poster placement in accordance with Point of Contact target audience. So here is the result of poster design:



Fig. 3. Perception Poster



Fig. 4. Persuasion Poster



Fig. 5. Cognition Poster

4.4.2 Animated Video

Animated video created has a story that is expected to touch the feelings of the target audience and is expected to change the mindset of the target audience about electronic waste. Here is a storyboard of the animated video that will be created.



Fig. 6. Storyboard and Carousel Ad

4.4.3 Carousel Ad

In delivering information about We-Box applications, authors use a carousel in order to persuade the target audience to download applications and dispose of their e-waste to We-Box.

4.4.4 Mobile Apps

Mobile apps is used as a media linked between target audience with campaign activities to better facilitate the target audience to save of electronic waste. In this mobile apps also target audience will get reward in the form of voucher or merchandise and also balance that can be used to buy pulse internet / electricity or shopping in certain minimarket.



Fig. 9. Mobile Apps and GUI

4.4.5 Ambient Media

Ambient Media was created to attract the attention of the target audience and also the ambient media served as a trash can for electronic waste collection. Each opening of the trash must use apps, and from electronic waste collected it will earn points to be redeemed by certain gifts or merchandises.



Fig. 10. Ambient Media

4.4.6 Social Media

To make it easier to provide information, seen from AOI target audience who often use social media every day. So, the selection of this medium is very easy to convey a campaign message. Social media used is Instagram and Twitter.



Fig. 11. Instagram and Twitter



Fig. 12. Transit Ad and X-Banner

4.4.7 Event

Events are used to make the target audience feel directly about the purpose of the campaign activity. In a series of events there will be talk shows, entertainment, e-waste art exhibitions and other booths. Executed at National Earth Day as a form of support to balance the life of the earth by reducing electronic waste.



Fig. 16. Mockup 3D Event

4.4.8 Merchandise

Merchandise is used as an additional media in campaign activities for the target audience because it already participate with electronic waste campaign activities. So the target audience will remember about the campaign message. Here are merchandises that will be used in campaign activities.



Fig. 17. Merchandise

5 Conclusion

From the design of social campaigns with the topic of this electronic waste problem then got the conclusion:

1. This campaign is a campaign that will help people to understand what electronic waste is and can change the perception of how to treat electronic waste properly.
2. Bandung's Government still not aware about the existence of electronic waste in Bandung.
3. Selection of media used adapted to the behavior of the target audience so as to facilitate the campaigner to deliver the message. And this is considered quite effective.
4. With the design of this campaign is expected that the public will not be confused again with a place that has never been provided. With the ambient media and applications, making it easier for the public to reduce the impact of electronic waste hazard in the future.

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