Effectiveness Study and Analysis of Infographics in Promoting Cancel Culture Awareness among Batam City Young Generations

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Abstract

Cancel culture has emerged and often appears on social media and has become a form of social phenomenon. Cancel culture itself has also emerged in Indonesia and is used as a form of protest and ostracism against public figures who commit social deviations on social media. As a country with a large number of digital natives, having an understanding of cancel culture can help us use social media wisely. Therefore, the author designed an infographic in the form of a motion graphic regarding the meaning of cancel culture. This is supported with the findings of the study by (Oktanizar & Kurniawan, 2021), which suggest that motion graphics can be an effective educational tool for promoting the shipping industry. Specifically, the study showed that the use of motion graphics in promoting the industry using the EPIC (Engagement, Persuasion, Information, and Call-to-Action) model resulted in increased awareness and interest in the shipping industry among the participants. This implies that the use of motion graphics in promoting complex topics such as cancel culture can be an effective strategy to engage and inform audiences. Furthermore, the EPIC model used in the study can serve as a useful framework for designing effective motion graphics for educational purposes. The author uses the ADDIE method and Adobe After Effects software in creating the motion graphic. The author then assesses the level of effectiveness in the media using the EPIC rate method. The results obtained from this study is that the motion graphic media uploaded on Youtube and are classified as effective.

Keywords: ADDIE, EPIC Model, motion graphic, cancel culture

Introduction

The development of digitalization and also the presence of social media in this era has resulted in a new action which is often referred to as cancel culture. Cancel culture is a term commonly used on social media as a phenomenon in which a group of people excludes individuals that violate social norms, cussstoms, or things that are deviant (Saint-Louis, 2021). This form of exclusion on social media is a form of justice and social punishment for the public against the perpetrator. This is done by highlighting the perpetrator's actions through social media accounts, protesting against the perpetrators in their social media account, or becoming

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the subject of public discussion on social media. Cancel culture also often occurs in Indonesia, as in the case of 2020 where a Youtuber, Indira Kalistha, received protests from the public due to her statement that underestimated wearing masks and maintaining health protocols. This made the YouTuber clarify and apologize for the words that had been said.

The reason of why cancel culture often occurs on social media is in view of the fact that people usually get satisfaction from fighting prepertators in groups. This occured due to the sense of unity that is created in the group. The ephemeral world of social media can be a source of aggression, insults and also rudeness from society. This also became the reason why some members of the public often give inappropriate comments to perpetrators on social media (Bouvier, 2020).

The latest data states that Indonesia, with a total population of 265.4 million, has around 50% of internet users, of which half of them are digital natives. Indonesia also occupies the sixth position as the most internet users in the world. The highest activity of social media users in Indonesia shows that digital natives in Indonesia use smartphones as much as 62%, computers as much as 16%, and tabs as much as 6% (Supratman et al., 2018) This shows that Indonesia has also played a role in creating the cancel culture phenomenon on social media with many internet users and digital natives.

In order to increase the awareness of cancel culture itself in the society, the author provides a solution by creating and designing an infographic as a learning media for the people. Infographic is a media that combines information and graphics into one in order to facilitate readers in receiving information (Mansur, 2020) According to (Arum,2017), the components of infographic itself includes visual, content, and knowledge. About 50% of our brain is dedicated visually, which is why visual has a huge role in understanding certain informations. The research by (Terabe et al., 2020) proves that the awareness of society increase when utilizing infographics as a information media compared to using a regular flyer, since using infographics in transportation project flyers can significantly improve public awareness and interest in the project. Infographics have the potential to make transportation information more accessible, understandable, and engaging for a broader audience in order to effectively convey complex information to the public.

Motion graphic is a visual media which involves the combination of graphic design and film by adding variety of elements such as two dimentional objects, three dimensional objects, animation, illustration, photography, video, music, and typography (Fujianto & Condra, 2020). The implementation of infographic in the form of motion graphics is expected to be effective in raising the awareness of cancel culture for the society. For the infographic, the author have targeted locals in Batam City by using Indonesian language and including information about the impact of cancel culture in certain areas in Indonesia and also basic information about cancel culture in daily lives for Indonesians. This was done to make the infographic more relatable to the local people.

This study contributes in providing evidence of the effectiveness of using motion graphics and infographics in addressing complex topics such as cancel culture by demonstrating the applicability of the EPIC rate method in evaluating the effectiveness of motion graphics and infographics in communicating messages related to cancel culture. This study could also provide

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a template for future researchers who wish to explore the potential of motion graphics and infographics in addressing complex social and cultural issues.

Literature Review

Research (Fujianto & Condra, 2020) was carried out to create promotional media that is able to introduce Zetizen Batam Pos using motion graphics techniques. The effectiveness of motion graphics as a promotional medium for Zetizen Batam Pos was also analyzed using the EPIC model. The results show that the four dimensions of the EPIC model are stated to be very effective with the highest score for communication, namely 4.59.

The research (Mayasari, 2022) conducted aims to explore the phenomenon of cancel culture and the participation of social media users towards public figures through virtual ethnography. The research methodology involves collecting data from various social media platforms such as Twitter, Instagram, and YouTube, using purposive and snowball sampling to select participants. The research contributes to the understanding of the complex phenomenon of cancel culture and its implications for social media users and public figures. The study suggests the need for more nuanced and critical perspectives on cancel culture, and for digital platforms and social media users to be more mindful of their role in promoting ethical and responsible online behavior.

Research (Oktanizar & Kurniawan, 2021) was carried out to be able to create media that promotes knowledge about the shipping industry in the form of motion graphics and re-analyzed the level of effectiveness in the video. Effectiveness measurements are carried out using the EPIC Model (Empathy, Persuasion, Impact, Communication) to find out whether video motion graphics are effective or not. The results of the survey are in the form of an EPIC rate with a result of 4.15 ,which indicates that the research is effective.

The research conducted (Deli & Hendy, 2021) is a study in which the creation of a video profile using the motion graphic technique is carried out on the Information System company profile video for animator graduate profiles. The results of the research are in the form of implementation by uploading videos to Youtube. Through motion graphic video designs for research, the public can get to know the Information Systems major at Batam International University, UIB prospective students can get to know the Information Systems major in the multimedia field, and increase the number interested in the Information Systems study program at Batam International University by becoming a promotional tool.

Research conducted(Tsai et al., 2020)was carried out to be able to develop infographics in the form of motion graphics to assist the classroom learning process. It is believed that motion graphic infographics can help understand lessons from printed books and reduce pressure in understanding the text. The number of subjects in this experiment was 12 elementary school children from 6 to 11 years old with mild disabilities. The conclusion from the results of this study is that motion graphic infographics are proven to be effective in increasing understanding learning and facilitating student learning.

Research conducted by (Mansur, 2020) is research that aims to be able to produce media in the form of infographics and find out the feasibility of infographic-based learning media and the influence of infographic-based learning media on increasing interest in learning. The method used in this research is R&D (Research and Development) with the ADDIE development model (Analysis, Design, Development, Implementation, Evaluation). The results obtained

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through research testing interest in learning based on trials before and after using the media with the results of an interest questionnaire before using the media were 53.33% and after using the media increased to 81.78%. This proves that there is an increase in student learning interest.

Based on the research that has been listed, the researcher will design an infographic media regarding cancel culture (Mayasari, 2022) using the ADDIE (Analyze, Design, Development, Implementation, Evaluation) method (Mansur, 2020) which will measure its effectiveness again using the EPIC analysis model (Empathy, Persuasion, Impact, Communication) (Fujianto & Condra, 2020; Oktanizar & Kurniawan, 2021) Infographics will be created in the form of motion graphics (Tsai et al., 2020) using Adobe Illustrator and Adobe After Effects (Deli & Hendy, 2021)

Research Methods

The method to be used in this research is applied and quantitative research methods. This research was conducted first by developing motion graphic infographics using the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) and quantitative research will be carried out based on the EPIC analysis model (Empathy, Persuasion, Impact, Communication) to measure the effectiveness of motion graphic infographics in promoting information of cancel culture to respondents.

The development method that will be used by the authors in this study is the ADDIE method (Analysis, Design, Develop, Implement, Evaluate). The image of the research model can be seen in the following figure:
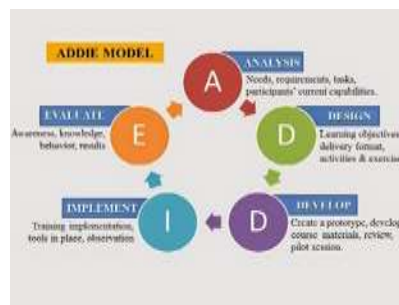

Figure 1 ADDIE Model

a) Analysis

At this stage, the author analyzes by researching and analyzing the problem of cancel culture through journals, academic texts, articles, and online news. The author will also determine the target audience and also the purpose of creating motion design infographics.

b) Design

At this stage, the author determines the design style, color selection, and font selection, storyboard flow, infographic layout, information data regarding cancel culture in the infographic, and creates illustration assets with Adobe Illustrator that are suitable for the infographic.

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c) Develop

In the development stage, the author collects and creates materials that will be used in motion graphic infographics. The author uses hardware in the form of an ASUS A412DA EK551T-EK552T laptop and Adobe After Effects software in making motion graphic infographics.

d) Implementation

At this stage, the authors tested and obtained input from supervisors and media experts regarding the accuracy of the motion graphic infographic information that was made. Through this process, supervisors and media experts will provide input regarding the feasibility of motion graphics.

e) Evaluation

At this stage, the motion graphic infographic will be given to the audience to be evaluated and assessed for its feasibility with infographics uploaded via YouTube. The audience is given a questionnaire in google docs and assessed with Likert scale to evaluate the motion graphic video, which was shared and spreaded by the author from social media platforms such as Instagram, Twitter and Facebook. Author also shared to school and universities since most of the people from those environments are from generation Z. The final results will be determined again to determine the effectiveness of motion graphics using the EPIC Model.

The following questions are available in the research questionnaire:

Table 1 list of questions

No.	Questions
EMPATHY	
E1	The infographic video that has been shown is an effective and popular medium.
E2	The infographic video that has been shown is easy to remember
PERSUATION	
P1	The infographic video that has been shown has the ability to convince the public
P2	The infographic video that has been shown are media that can be trusted.
IMPACT	
I1	The infographic video that has been shown are creative media that can attract attention and get a positive response from the audience.
I2	The infographic video that has been shown is able to provide information to the audience about cancel culture.
I3	The infographic video that has been shown show something different in conveying information
COMMUNICATION	

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C1	The infographic video that has been shown conveys information clearly to the audience.
C2	The message conveyed in the infographic video that has been shown is easy for the audience to understand
C3	The image display on the infographic video that has been shown uses clear symbols and colors, so that the message from the image is conveyed clearly.

Results and Discussion
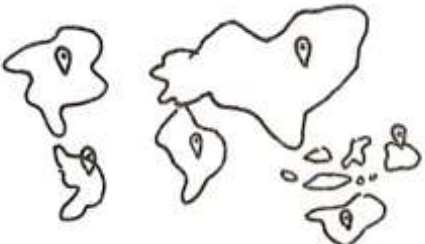
Motion graphic process

a) Storyboard

In this stage, the author generates the idea that has been planned for the motiion graphics by making the storyboard in order to gain a better vision of the plan.

Table 2 Storyboard

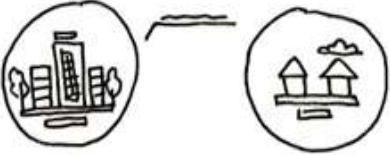| Scene	Informasi
Scene 1	The opening of the video, introduction with the scenario of a public figure who experiences cancel culture.
Scene 2	A person questioning the definition of cancel culture.
Scene 3	The definition of cancel culture, classroom themed background.
Scene 4	

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	Explanation of the group that experienced cancel culture movement the most.
Scene 5	
	Explanation of social media that is most commonly used
Scene 6	
	Explanation of the impact of cancel culture, illustration of a public figure being angry during live session on social media and getting bad comments.
Scene 7	
	Map illustration depicting the spread of cancel culture.
Scene 8	
	Illustration of people expressing their opinion.
Scene 9	
	Social media on cellphones marked with a cross, symbolizing the impact of cancel culture.

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Scene 10 	The illustration of a community
Scene 11 	Comparison of city and village image.
Scene 12 	Illustration of a person pondering on how to deal with cancel culture.
Scene 13 	Illustration of a person using a magnifying glass, signifying precision.
Scene 14 	Public figures perform live, but this time without anger. Symbolizing positive content.

b) Assets illustration

Author creates the assets that is needed for the motion graphics. The assets itself is created in the form of vector illustration by using Adobe Illustrator 2021. The assets is created seperately in accordance to the layer to ease the animating process in the next step.
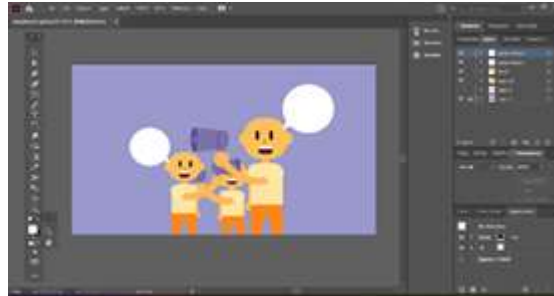
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Figure 2 Illustration process

c) Animation and rendering

Animation process is created in Adobe After Effects. In this stage, the author animates by utilizing the features such as scale, position, keyframe, and puppet pin to create movement. The usage of shape layer, expression loop, and expression wiggle is also done in some scenes of the motion graphic. After the motion graphic is done, the rendering process is done to be uploaded to Youtube.

Figure 3 Animation process

d) Implemetation

The video that has been created is then uploaded by using the author's personal account. The video is also attached in the google form to be evaluated by Batam community.
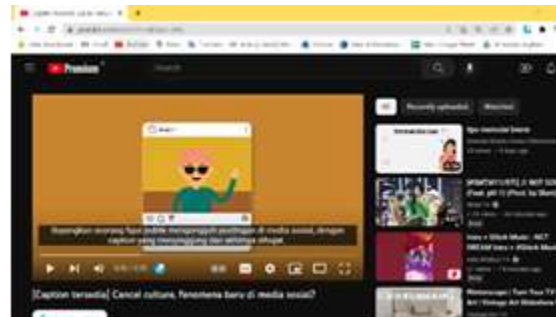
Figure 4 Video has been uploaded to Youtube

Result on effectiveness evaluation of infographic

Measuring instrument of the analysis is done by using a questionnaire that is distributed with the help of Google form. The target for the respondents in this study was aimed to the young society in Batam City that is a part of Generation Z. According to the census statistics of Batam City Residents (BPS Kota Batam, 2021), Generation Z was born at the year of 1997-2012 with an estimated age of 8-23 years. The amount of generation Z residents in Batam has

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reached 27,12% of the total population with the amount of 324,000 people. The number of sampel that is needed for this research is 399 by using the Slovin formula. In this research, the author spreads the questionnaire to university students and school-aged childrens in Batam City and has obtained 404 respondents. The sampling strategy that is conducted was mostly by sharing the questionnaire to public platforms on Twitter, Instagram, Facebook and also online communities.The author also reached out people from schools in order to obtain younger respondents, and also reached out people from universities. The amount of respondents include 263 people from the age of 19-23, 105 people from the age of 14-18, and 36 people from the age of 8-13.
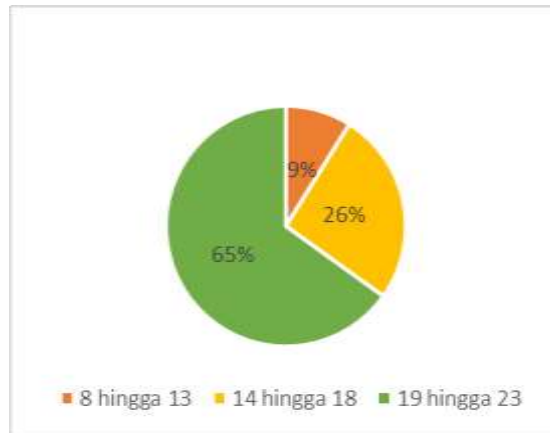
Figure 5 Respondent age distribution

a.) Alpha testing

The analysis of this research is divided into two stages, which are alpha testing and beta testing. In Alpha testing, validity and reability test is done by the author. The research is deemed as valid if it corresponds with the Pearson Product Correlation test, and the reability test by using Cronbach's Alpha Test. In the beta testing stage, the author uses the EPIC Model analysis in evaluating and obtaining a conclution for this research.

Table 3 Validation test

No. item	Pearson correlation	Sig. (5%)	Hasil
Empathy			
C1	0,552	0,113	valid
C2	0,560	0,113	valid
Persuasion			
P1	0,601	0,113	valid
P2	0,632	0,113	valid
Impact			
I1	0,584	0,113	valid
I2	0,553	0,113	valid
I3	0,599	0,113	valid
Communication			

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C1	0,702	0,113	**valid**
C2	0,614	0,113	**valid**
C3	0,585	0,113	**valid**

The first stage in the implementation of alpha testing is a validity test using the Pearson Correlation method. The results obtained from this measurement tested valid on all items listed.

Table 4 Reliability test

Reliability Statistics	
Cronbach's Alpha	N of Items
0,801	10

The questionnaire is declared as reliable if it gets a value greater than 0.60. By using the Cronbach's Alpha method on the reliability test, consistency in the questionnaire was tested and obtained a value of 0.801 so that it was valid.

Table 5 EPIC Model scale table

Kagetori	Skala
Strongly agree	4,21 – 5,00
Agree	3,41 – 4,20
Neutral	2,61 – 3,40
Disagree	1,81 – 2,60
Strongly disagree	1,00 – 1,80

b.) Beta testing

The next step after conducting validity and reliability tests and obtaining valid data is to evaluate the effectiveness of the motion graphic that has been designed. This process is done by calculating the EPIC rate and looking at the level of effectiveness through the EPIC model. The following is the value of the scale on the EPIC rate, which consists of categories of strongly agree, agree, neutral, disagree, and strongly disagree.

The following frequency distribution of the EPIC dimension indicator is used to evaluate the value of the EPIC rate.

Table 6 EPIC Dimention Frequency Indicator Distribution

DIMENTION	1(STS)	2(TS)	3(N)	4(S)	5(SS)	TOTAL
EMPATHY						
E1	1	1	23	185	194	404
E2	0	4	30	183	187	404
PERSUATION						

P1	0	7	47	175	175	404
P2	2	5	34	185	178	404
IMPACT						
I1	2	2	15	170	215	404
I2	2	2	19	172	209	404
I3	1	1	22	160	220	404
COMMUNICATION						
C1	4	4	25	161	210	404
C2	0	10	24	179	191	404
C3	1	2	20	157	224	404

Furthermore, the EPIC Rate is then be calculated with the following procedure:

1. *Empathy*

$$E1 = \frac{(1\times1)+(2\times1)+(3\times23)+(4\times185)+(5\times194)}{404} = \frac{1,782}{404} = 4,20283019 = 4,2$$

$$E2 = \frac{(1\times0)+(2\times4)+(3\times30)+(4\times183)+(5\times187)}{404} = \frac{1,765}{404} = 4,36881188 = 4,3$$

$$E = 4,25$$

2. *Persuasion*

$$P1 = \frac{(1\times0)+(2\times7)+(3\times47)+(4\times175)+(5\times175)}{404} = \frac{1,730}{404} = 4,28217822 = 4,2$$

$$P2 = \frac{(1\times2)+(2\times5)+(3\times34)+(4\times185)+(5\times178)}{404} = \frac{1,744}{404} = 4,31683168 = 4,3$$

$$P = 4,25$$

3. *Impact*

$$I1 = \frac{(1\times2)+(2\times2)+(3\times15)+(4\times170)+(5\times215)}{404} = \frac{1,806}{404} = 4,47029703 = 4,4$$

$$I2 = \frac{(1\times2)+(2\times2)+(3\times19)+(4\times172)+(5\times209)}{404} = \frac{1,796}{404} = 4,44554455 = 4,4$$

$$I3 = \frac{(1\times1)+(2\times1)+(3\times22)+(4\times160)+(5\times220)}{404} = \frac{1,809}{404} = 4,47772277 = 4,4$$

$$I = 4,46452145 = 4,4$$

4. *Communication*

$$C1 = \frac{(1\times4)+(2\times4)+(3\times25)+(4\times161)+(5\times210)}{404} = \frac{1,781}{404} = 4,40841584 = 4,4$$

$$C2 = \frac{(1\times0)+(2\times10)+(3\times24)+(4\times179)+(5\times191)}{404} = \frac{1,763}{404} = 4,36386139 = 4,3$$

$$C3 = \frac{(1\times1)+(2\times2)+(3\times20)+(4\times157)+(5\times224)}{404} = \frac{1,813}{404} = 4,48762376 = 4,4$$

$$C = 4,4199666633333 = 4,4$$

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After calculating the EPIC rate for each indicator, the author calculates the overall EPIC rate using the following formula:

$$\text{EPIC rate} = \frac{4,25+4,25+4,4+4,4}{4} = 4,325 = 4,3$$

The value of the EPIC rate obtained is 4.3. This indicates that the designed infographic video in the form of motion graphics is effective and able to raise awareness of cancel culture in society based on the values from the EPIC model scale table.
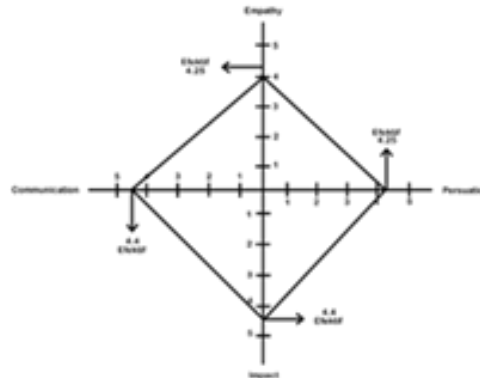

Figure 6 EPIC Rate model results

The use of motion graphics in communicating social issues is effective in engaging with audiences and promote understanding, which is supported by the EPIC rate obtained. The score shows that the infographic has been proven as effective in explaining cancel culture among the people in Batam City. This is similar as the study by (Oktanizar & Kurniawan, 2021) in measuring the effectiveness in understanding the promoting movement for the shipping industry and also (Fujianto & Condra, 2020)in measuring the effectiveness of motion graphic as a promotional media. The studies use the same approach in assessing the effectiveness of a certain topic in utilizing infographics, and in this case the author approaches to a more social oriented topic and measuring the effectiveness of the Batam people in understanding cancel culture by using motion graphic as the media of the infographic.

Conclusions

The conclusion drawn from this research is that the media created by the author, namely infographics in the form of motion graphics made using the ADDIE method (Analyze, Design, Develop, Implementation, Evaluation) is able to impact the awareness of young people in Batam who come from generation Z. This is supported by the EPIC method which states that the EPIC rate on motion graphics is quite effective, with an EPIC rate of 4.3. Motion graphic design can help people to recognize and increase awareness of the social phenomenon of cancel culture. Study limitation is also occured in this study, such as limited sample size which only targeted generation Z people of Batam, and also the limited scope which only focuses on the usage of motion graphics. And since this study was conducted in Batam, the results could be different if conducted in different regions. The author recommends for future researchers in relation to this topic by including other forms of communication media, examining the impact of different usages of design elements in the motion graphic, or examine long-term effects of the motion graphic.

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