



# Digital Content Management of Twitter for Climate Change Using Hashtag

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**Abstract.** Environmental issues have become a big issue in the last few decades. Environmental damage, changes in natural resources caused by human activities. This study aims to identify the activity of spreading #Iniaksiku by using the *Social Network Analysis* (SNA) method on the Twitter social media network. This research method uses qualitative analysis with N'Vivo 12 plus analysis tool. Based on the analysis of information content provided by @earthhourjogja by the community with social media activities through twitter earthhourjogja about concern for climate change. The results of this study are to educate and invite the public to take care of the environment such as reducing plastic waste, saving on electricity, protecting the earth, protecting the earth, and protecting the environment, clean garbage in rivers and seas using the hashtag #iniaksiku. According to the frequency of words that often appear in the hashtag #iniaksiku in the @earthhourjogja account, 122 tweets appear. The hashtag #iniaksiku also ranks first at the top and is often on the @earthhourjogja twitter account timeline. The results of data analysis which is an invitation to identify the existence of information in the content of @earthhourjogja that is packaged in an attractive way so that it can be accepted by the public.

**Keywords:** Digital content management · Twitter · Social media · Information

## 1 Introduction

The development of technology and information is increasingly advanced, making the world's nations very literate in developing information to meet their needs [1]. Progress technology development of digital forms of communication and socialization can be called social media. New ways of communicating and socializing by looking at new people to interact with people and audiences [2].

Media management is studied from different perspectives ranging from communication and journalism [3]. Social media has exploded in recent years, as Facebook, Twitter, and youtube are the most visited communication platforms [4]. Social media is an essential part of life, which is relatively and widely accessible to broadcast news information, and knowledge and establish new relationships [5]. A community manages alternative media as a diversity of ownership and the antithesis of mainstream media [6]. Digital content can unleash further creative potential by being creatively more attractive [7].

Digital content is one of the information-driven concepts for engagement with exchanging ideas [8]. Twitter as a platform for discussion and activity on various social issues. Twitter engages in conversation, sharing resources with the community [9]. The community has researched other online social movements, such as #Iniaksiku. To access social representations related to hashtags [10]. Twitter has spread throughout the world and has become one of the major social networks [5].

It has been confirmed that human activities in the environment have a major impact on the climate [11]. The environment has an essential role in supporting human life. A global environmental crisis includes forest destruction, pollution (soil, water, air), climate change, biodiversity extinction, loss of energy resources, and other environmental damage. All the damage is mainly caused by human activities [12]. Environmental issues that are widely exposed trigger Indonesian citizens to prevent the impact of losses caused by environmental damage [13].

Environmentally friendly is harmony between humans and the environment. It is hoped that this activity can invite the public to be aware of protecting the environment and saving energy. Therefore, it will make content-aware of human behaviour that often ignores the environment and does not save energy by using the hashtag #iniaksiku. So that many people know the importance of protecting the environment and saving energy, it is necessary to have content about an environmentally friendly lifestyle using the hashtag #iniaksiku through the @earthhourjogja twitter account.

## 2 Literature Review

The rapid development of internet technology provides users with unlimited access to a wide range of information. Management of the planning, organization, direction, and use of organizational resources to achieve the goals set [6]. Content management is a system that provides access to all types of digital content files [14]. Content management is changing or creating, controlling, organizing, compiling, and making accessible digital objects [16]. As a global conversation lately, climate change has confirmed that environmental activities have a profound impact on the environmental climate [11]. The environment is increasingly threatened when there is a world environmental crisis, such as the destruction of forest pollution, pollution (soil, water, air), climate change, biological diversity, and the loss of energy and environmental damage caused by humans [13]. This content management system is used to manage content. This content management can help and solve usability problems, and the concepts that have been implemented into it are shown to users [18].

Social media is a personal communication channel with the capacity to create a conversation with an audience or interact with an audience [19]. Information and communication technology devices and tools are used to communicate, create, manage, store, and disseminate information. Digital content is created and developed using several technologies that increase access [20]. The development of communication and information technology has led to competition in the digital world. Digital uses information technology tools to access, produce and distribute information. Digital content is becoming the current media information [21]. This digital content is related to the speed production process by emphasizing activities in presenting the work to the audience. Messages

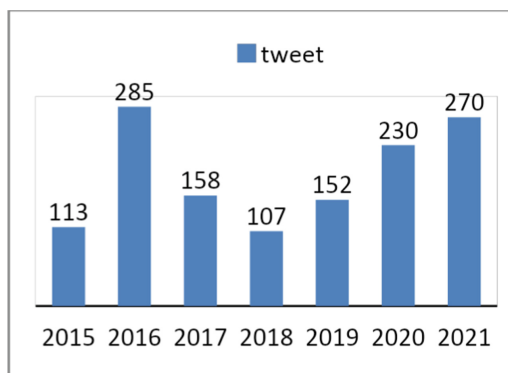
and information are conveyed that contain important values and must be factual to be interesting for consumption by the audience. Some require efficient and precise stages of production execution [22].

### 3 Method

To answer the research question, this study uses a qualitative approach to determine the function of social media @erathhourjogja. This method uses the Nvivo 12 Plus tool to describe social media data. The data collection process uses N-capture capturing by retrieving data from the @earthhourjogja social media account. According to [23], Nvivo can translate unstructured data by dividing it into several types according to research needs; in addition, [24] assessing the gradual data translation process helps describe it clearly.

### 4 Results and Discussions

Content management makes information more interesting so that information affects the audience, in view [16]. This study categorizes several findings that describe the form of digital content from social media Twitter @earthhourjogja. See Fig. 1; the social media account @earthhourjogja provides information with different intensities, in the last seven years the intensity of information from 2015–2017 has increased even though it is fluctuating.



**Fig. 1.** Twitter account activity @earthhourjogja. (source Nvivo 12 plus Software)

Figure according to M. Kumar and A. Nath [17] The @earthhoujogja account had the highest activity in 2016 which then decreased in 2017 and 2018 after which it rose again in 2019–2021. Account @earthhourjogja every year up and down. This finding shows that digital content and content management are being used to launch a campaign for awareness of climate change with the hashtag #iniaksiku. This content management system is used to manage content. This kind of content management system provides

**Table 1.** Twitter Account Interaction @earthhourjogja. (source Nvivo 12 plus Software)

Community	Percentage	Campaign team
ehjogja	62%	Non Government
Organitacionehindonesia	19%	
wwf_id	6%	
respiration	6%	
ehbalikpapan	2%	
twse_jogja	2%	
earthhour	2%	
fighter	1%	
unisifmyk	100%	Media
warkopbardiman	27%	Local development
playon_jogja	25%	
sheratonjogja	25%	
Malamuseum	23%	

procedures for organization to manage workflow. This step is a form of public awareness with concern for climate change (Table 1).

Table according to Sulianta [21], and it has three interactions: nongovernment organization, media, and local development. The highest level of interaction is in nongovernment organizations, and the lowest is in the media. The non-government organization section mentions the @erthhourjogja account with the highest level of interaction with digital content. The content created when mentioning the @earthhourjogja account is content that is concerned with climate change. Meanwhile, other mentions, such as media and local development, interact and collaborate by using these mentions. The findings above show that digital content focuses on mentioning the @earthhourjogja account.

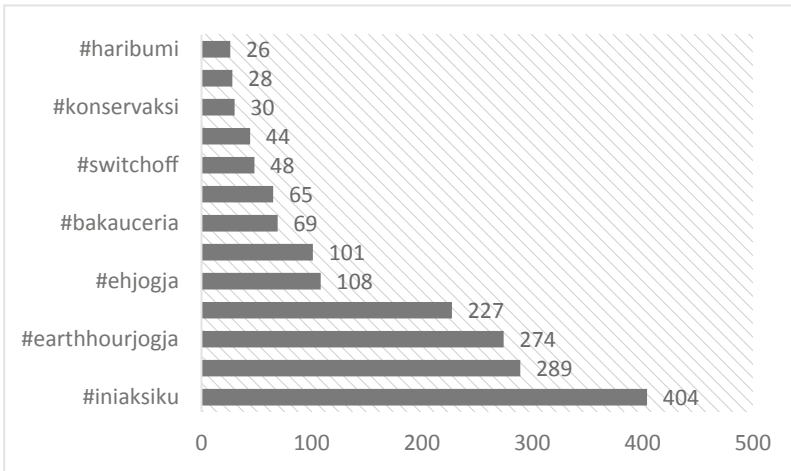
Information and communication technology tools used to communicate, create, manage, store, and disseminate information. Digital content is created and developed in digital using several technologies that increase access [20].

**Table 2.** Account communication Twitter@earthhourjogja. (source.Nvivo12 plus Software)

Hashtag	Category communication @earthhourjogja		
	Content	Information	Media
iniaksiku	✓	✓	✓
jogjapetengan	✓	✓	✓
earthour	✓	✓	✓
connect2earth	✓	✓	✓

Management and digital content use, #jogjapetengan, #earthhour, and #connect2earth for each of their content that discusses climate change concerns. The four hashtags used can influence the audience to make climate change, produced by content management. The function of the following table is to find out which one is more in the use of hashtags.

The information category has the intensity in Table 2 according to E. Cuevas-Molano [19], which is often used to categorize climate change concerns. Social media is a personal communication channel with the capacity to create a conversation with the audience or interaction with the audience. The environment is increasingly threatened when there is a world environmental crisis such as the destruction of forest pollution, pollution (soil, water, air), climate change, biological diversity and the loss of energy and environmental damage caused by humans [13]. This research answers about information. The word that is often used shows the amount of digital content on the @aerthhourjogja account that climate change is often discussed.



**Fig. 2.** Hashtag Twitter account @earthhourjogja. (sourceNvivo 12 plus Software)

Figure 2 according to J. A. Ottuh [11]. The image above shows that the category of information can be seen from the hashtag, earthhoujogja provides campaigning on the issue of climate change. Hashtag categories like #iniaksiku, #earthhour, #bakauceria, #haribumi. The most used hashtag is #iniaksiku. Climate change has become a global conversation. Lately, it has been confirmed that human activities on the environment profoundly impact the environmental climate. The environment is increasingly threatened when there is a world environmental crisis such as the destruction of forest pollution, pollution (soil, water, air), climate change, biological diversity and the loss of energy and environmental damage caused by humans [13].



**Fig. 3.** Word frequency about climate change

Figure 3 according to Gordo-Molina Social media is a personal communication channel with the capacity to create conversations with the audience or interact with the audience [19]. The picture above shows that there are still many who use the hashtag, the most important of which is the hashtag #iniaksiku; not only that, there are still many who use the hashtag for climate change movements such as #earthhour, #jogjapetengan. This is one of the movements by using hashtags so that people care about environmental changes.

## 5 Conclusion

Based on the results of research on the social media Twitter account @earthhourjogja with the hashtag #iniaksiku, it can be concluded that @earthhourjogja has implemented an important aspect in presenting climate change information using the hashtag #iniaksiku. So far, the community has started by doing climate change by going directly in the field by creating content through Twitter social media accounts using the hashtag #iniaksiku, but this has not been able to touch all circles. The content is made consistently using the hashtag #iniaksiku. In managing hashtags, @earthhourjogja is quite good at targeting the community and all walks of life. In managing social media, Twitter @earthhourjogja is enough to manage climate change issues.

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