

Twitter as Potential Medium for Organization: Constructing Green Messages on Twitter

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Abstrak

Penelitian ini mengangkat isu mengenai green yang kini telah banyak digaungkan oleh pemerintah maupun organisasi. Terutamanya bagi organisasi, bagaimana mereka menggunakan "green" sebagai upaya melabeli produk atau jasa yang ditawarkan. Pemberian label hijau memiliki peranan penting dalam menciptakan reputasi yang positif bagi suatu organisasi agar dikenali sebagai organisasi yang mendukung kelestarian lingkungan. Penelitian ini melihat lebih lanjut upaya penggunaan konsep hijau tersebut di media sosial Twitter. Metode yang digunakan adalah analisis isi dari tweet yang ditarik melalui aplikasi Netlytic dengan kata kunci "green" atau "lingkungan". Berdasarkan data yang diperoleh, paper ini menunjukkan jika Twitter digunakan sebagai "technological weapon" untuk menciptakan image yang positif bagi organisasi. Dengan mengakomodir jejak digital oleh pengguna di Twitter, peneliti melihat adanya "ruang digital" yang dibentuk untuk dapat dimanfaatkan sebagai ruang bagi organisasi untuk memproduksi konten berbasis komunikasi lingkungan. Informasi tersebut berimplikasi pada pelabelan hijau suatu organisasi dan memungkinkan peningkatan citra yang positif yang menambah nilai bagi organisasi untuk menempatkan diri di peta sebagai pro-environmental organization. Temuan penting dari penelitian ini menunjukkan bahwa Twitter dapat berpotensi untuk dimanfaatkan oleh organisasi sebagai kanal untuk menempatkan diri mereka di peta sebagai organisasi yang peduli lingkungan.

Kata Kunci: organisasi peduli lingkungan, citra organisasi, Twitter, komunikasi lingkungan

Abstract

This study examines the topic of environmental sustainability, which is currently emphasized by governments and organizations. How do organizations, in particular, utilize the term "green" to designate their products and services? A green label plays a crucial role in establishing a favorable reputation for an organization, allowing it to be identified as a promoter of environmental sustainability. This study explores the utilization of the green concept on Twitter deeper. Utilizing the Netlytic program, tweets containing the terms "green" or "environmental" are submitted to a content analysis. This study shows, using collected data, that Twitter is utilized as a "technology weapon" to promote the organization's image. By accommodating digital traces by users on Twitter, researchers see a "digital space" formed to be utilized as a space for organizations to produce content based on environmental communication. This information has consequences for the green labeling of an organization and enables the enhancement of a good image that adds value to the organization's reputation to establish itself as a pro-environmental organization. Important findings from this study suggest that Twitter could be utilized by organizations to improve their status on the map as a green organization.

Keywords: pro-environmental organization, organization's image, Twitter, environmental communication

INTRODUCTION

At present moment, awareness of environmental issues, the convergence of global responsibility, and environmental factors are becoming increasingly essential subjects to discuss (Mravcová, 2019). Climate change is one of the most frequently discussed global issues since it has the greatest impact on people everywhere. In addition, climate change necessitates the worldwide anticipation of activities (Ariestya et al., 2022). At both the individual and global levels, there is a need for knowledge of the significance of sustaining concern for the environment.

Moreover, environmental consciousness conversations continue to develop in contemporary society. Environmental consciousness can be defined as the understanding that communities and individuals have towards the importance of environmental sustainability (Lauwrensia & Ariestya, 2022). The scope of environmental sustainability can include environmental protection, environmental policy, environmental management, and environmental understanding (Sudibyo & Sutanto, 2020). Since the last quarter of the 20th century, the environmental consciousness of the global community, including its organizations, to protect the environment has developed, along with the push of global events such as the 1992 earth conference in Rio de Janeiro. Martin-de Castro et al (2020) show that the increase in environmental awareness of the global community is accompanied by an increase in the interest of management experts and strategies related to the relationship between organizations and their impact on the environment. Sustainability, which encompasses environmental, social, and governance issues, has become a central business issue and a significant organizational strategy challenge (Pritchard & Wilson, 2018).

Multiple organizations have taken an interest in sustainability and environmental protection for a variety of reasons. These include minimizing operating costs by reducing efficiency related to the environment, increasing organizational legitimacy and social responsibility, creating a competitive advantage for environmentally conscious consumer groups, enhancing an organization's image in relation to its environmental performance, reducing production risks related to fewer resources, reducing energy costs, managing pollution, reducing local public health risks, and putting the organization in a better position to attract and retain customers (Stritch & Christensen, 2016).

Increasing environmental awareness is not only a topic of discussion among researchers, but also a concern at various organizational or institutional levels of government and corporates. In this case, the government consistently also plays a role in overcoming environmental problems. This really fulfills the goals of the government's sustainable development goals (SDGs program), in particular goal number thirteen on its website www.sdg2030indonesia.org, which is to take immediate action to combat climate change and its impacts, especially how organizations engage communities to raise awareness of the importance of preserving the environment.

At the organizational level, they must improve their effectiveness and transparency about their environmental challenges, as well as communicate them to the public in order to increase their positive image. This value will increase the legitimacy of the organization and build a reputation for a positive organizational environment. Martin-de Castro et al (2020) describe an organization's environmental reputation as the perceptions of key stakeholders regarding the organization's past and present environmental initiatives and performance. In

addition, an organization's environmental reputation is tied to its future prospects and its capacity to provide shared value for sustainable environmental preservation.

At the consumer or individual level, as environmental awareness continues to grow, consumer awareness to adopt greener consumption patterns also increases. Consumers are showing their care for the environment through their desire for environmentally friendly products and their participation in global sustainable green activities (Suki, 2016). In addition, organizations that use green to emphasize the importance of consumers also pay attention to environmental sustainability, which has a beneficial effect on their reputation compared to organizations that do not represent concern for the environment or label their products as green. Such green labeling enables organizations to persuade the general public into trusting that consumers care about the organization, as in the case of green building design and environmental service supply for green hotels. This is also evident in the advertisements for products like Wibowo's (2017) and Wijaya et al.'s (2022) papers. These two studies demonstrate how using the green might give the impression that a company's products are all-natural. Additionally, they want to convey the message that their products are very natural through these advertisements. It increases tourists' environmental consciousness and their desire to stay in hotels with green designs (Hou & Wu, 2021). There is a direct correlation between the hotel's green architectural design and environmental consciousness and the growth in the number of prospective visitors. In addition, the green concept applied to green labeling on products (organic food and perfume) affects consumer purchasing interest further (Risyamuka & Mandala, 2015; Wenur et al., 2015). Thus, it is possible to distinguish between a green-labeled product and a non-product with a green label (Boström & Klintman, 2008).

In addition to green labeling, which has a positive impact on organizational reputation, organizations must see new ways, generate new ideas, and devise new strategies to position their green brand in the minds of consumers in order to remain competitive on the market and achieve business sustainability (Suki, 2016). It should be highlighted that the focus of this study on green labeling is not on eco-labeling or the manufacturing of products or services that comply with established ISO green processes, but rather on how organizations express concern for the environment through their channels. The channels described in this paper are those that generate content related to the activities conducted by organizations, particularly on their social media networks.

In this study, labeling refers to how organizations produce or construct messages using the phrases "green" or "*lingkungan*" (environment) and disseminated through their channels. Social media produce, expand, and promote a purposeful online presence and brand, making it an essential medium for companies to communicate with the public (Breakenridge & Solis, 2009). Social media is an important channel since it can be utilized to acquire and retain large audiences as part of content marketing initiatives (Quesenberry, 2006). Some previous studies have shown that social media is an important channel for organizations to consider in creating engagement with their public. The paper outlined next by Zarrabeitia et al. (2022) examines Twitter's role in empowering user conversations about green energy. Twitter conversations can be used as data to research and identify societal trends in a variety of scientific and technological fields, facilitating strategic decision-making. Klassen et al. (2022) also demonstrates how Twitter data can be used to examine shared and intertwining characteristics such as community safety, information sharing, and social justice. Studying communities to comprehend the structure and organization of the green movement is very important because

it offers insight into the anthropological and sociological characteristics of contemporary social movements. As demonstrated by Khonsari et al. (2010), they use data from Twitter and focus on significant keywords. Furthermore, the paper by Palmer and Udawatta, (2019) shows the visual presentation of Twitter data. Visualizations of tweet text provide evidence of a diverse, interactive online community discussing green buildings on Twitter. As a result, Twitter user conversations can be examined to reveal the extent of Twitter users' involvement with the subject under study.

Therefore, this paper aims to demonstrate more generally how green and environment terms are utilized on Twitter. Twitter was chosen because it is a media platform that can only produce text-based communications and has the ability to reach a wider audience through its respond and retweet functions, so that the messages produced are instantly disseminated. This is of course part of environmental communication in the realm of communication science with its strategic function being a campaign and increasing public awareness to care about the environment and to have an awareness of taking part in overcoming environmental-related problems (Dewi & Syauki 2022). Thus, the formulation of the research problem posed in this study is whether Twitter has been effectively used by organizations in the Indonesian context to serve as a medium of public communication regarding environmental issues? This paper aims to expose Twitter can be used to construct message containing green as potential opportunity. This research tries to analyze specific keywords of "green" and "*lingkungan*" (environment) in an effort to enhance organization's reputation as a green organization.

RESEARCH METHOD

This research utilizes a constructivist paradigm. The approach used is qualitative with the nature of descriptive analysis research. In order to achieve a more in-depth evaluation, researchers carried out a qualitative content analysis on a selection of the posts in social media (Forman & Damschroder 2007). Textual data is analyzed as a unit of analysis in social network analysis (Golob et al. 2018). In addition, researchers can use hashtags on social media platforms in order to better understand themes that are emerging from tweets using hashtags (Xiong et al. 2019). Thus, researchers did some steps taken to analyze tweets on Twitter.

First, the research starts by crawling data from Twitter using the Netlytic application, which creates and summarizes public social media conversations automatically. The researchers included "green" or "*lingkungan*" (environment) as the main keywords in this analysis. The researchers use that keywords to map how labeling is generally practiced by attaching particular organizations. To demonstrate originality, data collecting with the term "green" was conducted from January 2 to January 10, 2023. The researchers obtained 461 Tweets that were posted from public accounts and not private accounts based on this term.

Second, the researchers then applied a filter to the obtained data by mapping the words that appeared most frequently in the obtained posts. Retweet data was another thing researchers gathered: Retweets occur when a user broadcasts a message that was first posted by another user and is shared with his or her followers (see Table 2). Third, in addition, researchers analyzed social media networks using the Gephi application, version 0.10.0, to visualize the networks. This image allows researchers to view the network produced by the interactions that occur in relation to the green topic. Using Gephi, the scientists also produced density, network diameter, and modularity calculations. Last, researchers interpreted and analyzed the filtered data qualitatively and descriptively.

RESULT AND DISCUSSION

Twitter as a "technological weapon" for the organization

Twitter is one of the social media platforms utilized by companies to boost their visibility. When an organization wants to exist and be known by the public, especially in terms of its political interests, the usage of social media is crucial. Twitter can be considered a "technical weapon" for organizations in this instance due to its ability to spread information and influence audiences (Obreja, 2022). Social media can be described as a tremendously disruptive source of information, despite the fact that users can only send and receive tweets of up to 140 characters (Daniel et. al., 2017). This noise is what the organization believes has the ability to influence the audience. The audience can be prompted to act in accordance with the organization's expectations if they are exposed to extensive and persuasive information.

Even with its extremely low character limit, Twitter is commonly utilized by organizations to promote involvement during campaigns. This is because Twitter facilitates the sharing of simple content with speed. In addition, comments can be made rapidly and in real time (Li et al., 2019). This enables Twitter to create shared meaning with its audience, particularly when creating content for action or campaign reasons (Xiong et al., 2019). Typically, such campaigns are part of an organization's efforts to demonstrate its care for society, such as environmental campaigns. However, this cannot be separated from the organization's environment.

Although Twitter is viewed as a "technology weapon" for businesses, its success will depend on their ability to connect with and persuade audiences to take action (Xiong et al., 2019). Due to the growing popularity of social media platforms as a whole, Twitter usage is crucial. This provides a digital social network in which any member can share information or thoughts rapidly and simply (Housley et al., 2018). In the digital world, organizations leverage the power of interaction that connects one user to another. With this contact, a previously obscure topic or piece of information can become more common. Consequently, they have the ability to draw the audience's attention to their organization and influence the audience's behavior.

Using the audience's emotions to influence them on Twitter can be an effective organizational strategy. Mathioudakis and Koudas (in Roberts et al., 2019). The emotional response of each individual changes depending on the surrounding environment. This can be understood by an organization by utilizing what issues are currently busy in society. By comprehending these concerns, organizations as content producers are capable of providing information that arouse the emotions of their audience. It is comparable to an organization's campaigning on environmental issues.

Organizations also utilize Twitter as a "technology weapon" to advocate for greening activities. The public's awareness of an organization's care for the environment is crucial for organizations. Organizations might exploit the concept of "green" (environmentally conscious) to enhance their image. By promoting this problem on social media, organizations can demonstrate social responsibility, particularly in the management of pollution, energy prices, and health concerns (Stritch & Christensen, 2016). Efforts to show responsibility are important, especially on social media to build branding that the organization concerned is friendly to the environment and has a commitment to the environment (Bashir et al., 2020).

Defining Green on Twitter

All over the world, especially in Indonesia, green issues have been echoed by many activists and organizations to achieve a better environmental condition. This desire is often articulated in the form of environmentally friendly values packaged through effective forms of communication (Olsen et. al., 2014). Green messages are always packaged by every organization, especially those whose work area intersects with the environment. This is because they can directly damage the environment, so the best way to prevent a decline in reputation due to this work is to build effective communication related to green campaigns. The green campaign phenomenon can be seen through various tweets on Twitter. Twitter is no longer seen as an application in the context of digital technology. But it is a space for expression and conveying opinions to build certain discourses, especially on green issues. Through this space, each user who writes his opinion in the form of a tweet will slowly form an interaction network. This network is formed as a result of the process of writing original tweets, retweets, quotes, and replies. All of these activities carried out by Twitter users have contributed to the increasing green issues in public discussion on social media. The network that is formed from these interactions can be seen in Figure 1.

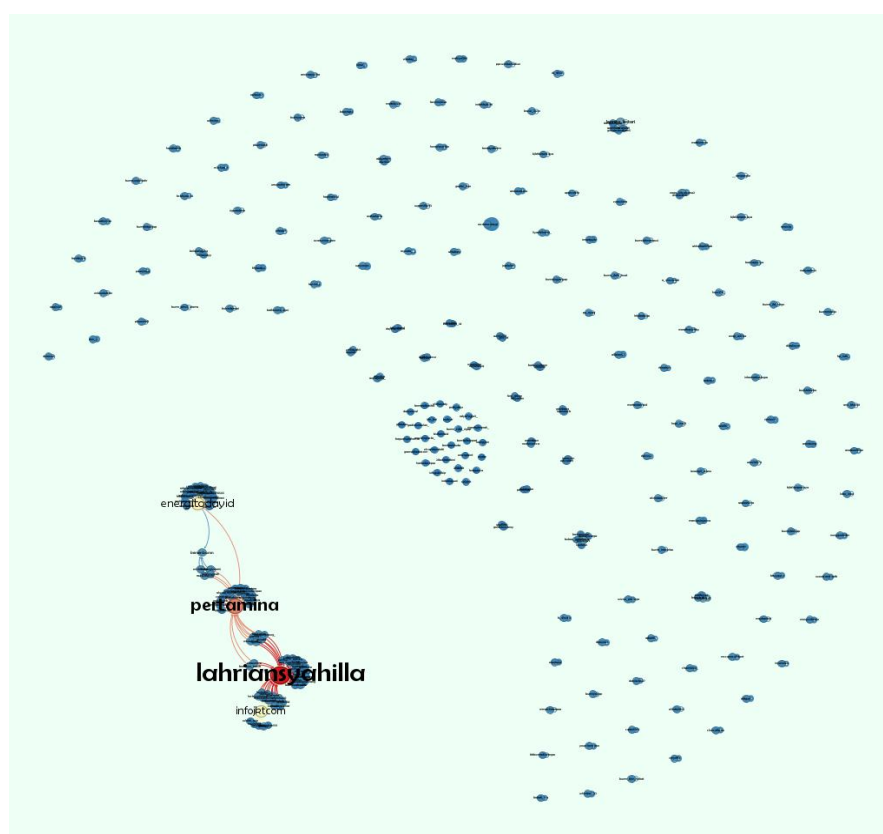


Figure 1. Visualization of Social media network

Source: Researchers (2023)

The Twitter user interaction network is visualized using the Gephi application version 0.10.0. The layout used is Force Atlas to get a visualization which is divided into 2 network structures. The first network focuses on nodes that are close to each other and connected via emerging edges. The second network is a group of nodes that are not connected to each other

through edges, or in other words, these nodes stand alone without interacting with other nodes. Even though in this second network the nodes in the visual are not connected to each other via edges, there are also several groups of nodes that have close proximity. The statistical calculation data obtained from the network distribution can be seen on the Table 1.

Table 1. Network distribution with the keyword "green"

Description	Amount
Density	0.004
Network Diameter	2
Modularity	0.693

Source: Researchers (2023)

According to statistical data obtained from the network, there are fairly comprehensive clusters there. This is represented by the modularity index of 0.693%. This indicates that the established clusters are representative of the communities participating in the green conversation. This is possible because to the high volume of retweets and replies conducted by internet users. It is known that 120 retweets and 277 replies were made by Twitter users during this interaction. Currently, there are 49 content creation activity and 15 quotations. fewer than tweet replies and retweets. This is what drives the formation of dense clusters in the dialogue.

Although statistical data demonstrates a high degree of modularity, the network's density and width are quite low. Even the density of the interaction approaches zero with a value of 0.004. This indicates that the relationship between Twitter users about this subject is quite weak. In this instance, it is evident that the link and closeness between users is nearly nonexistent. In this interaction, users are nearly separated from each other. This is also evident in the visual representation of the preceding social media network, which depicts numerous independent nodes. Consequently, the diameter of the network is likewise small.

In addition, the visualization of data collected between 2 to 10 January 2023 for a total of 461 posts reveals that three major actors are frequently cited by internet users. The three actors are LahrianSyahilla with 38 points, Pertamina with 25 points, and EnergitodayID with 18 points. However, the existence of the three actors was revealed through the retweets of Internet users. Table 2 displays the retweets.

In Conversation Analysis (CA) each action in a conversation is shaped by previous interactions, and also provides context for the remaining interactions (Meredith et. al., 2021). Both the LahrianSyahilla, Pertamina, and energitodayID accounts, the three of them initiated the formation of information to attract public attention. The three accounts become communicators regarding information retweeted by netizens so that they can start conversations with a wider public. This retweet effort is made so that the content created by the first communicator can be heard and read by the public.

Table 2. Retweet message containing green keyword

No	Description	Retweet	Account
1	<i>Pertamina layak mendapatkannya, karena berkomitmen dalam menjalankan usaha berbasis pada lingkungan dan menerapkan konsep green industry. Congrat! Diserahkan Wapres, Pertamina Borong 20 PROPER Emas dan Raih Green Leadership https://t.co/RK1tKgAvAc #EnergizingYou</i>	38	LahrianSyahilla
2	<i>Penghargaan Proper Emas ini makin lengkap dengan Nicke Widyawati raih penghargaan Green Leadership Utama atas kepemimpinannya membawa Pertamina Group berkelanjutan dalam pengelolaan lingkungan dan pemberdayaan masyarakat hingga mendominasi Proper Emas. #EnergizingYou</i>	23	Pertamina
3	<i>Direktur Utama PT Pertamina (Persero), Nicke Widyawati menyabet penghargaan sebagai Green Leadership Utama dari Kementerian Lingkungan Hidup dan Kehutanan (KLHK). @pertamina @KemenBUMN #Pertamina #EnergyToday #EnergyTodayID #TheEnergyToday</i>	18	energitaldayID
4	<i>Melangkah berkelanjutan untuk kelestarian lingkungan dan masyarakat yang berdaya. Semangat ini mengantarkan Pertamina meraih 20 Proper Emas 2022 dari @KementerianLHK Cek peraih Proper Emas 2022 dari Pertamina Group di link berikut https://t.co/YDqOXN5UMM #EnergizingYou</i>	2	Pertamina

Source: Researchers (2023)

Green campaigns are used by organizations to increase their popularity as well as their reputation. Organizational concern through various awards, achievements, and concrete actions in shaping the green industry concept can be of added value in the eyes of the public. But what needs to be considered in the current green campaign is the interest that is in it. The green spirit about changing the environment for the better on Twitter is oriented towards labeling green towards certain organizations. This can be seen from several keywords that often appear from the data obtained by researchers, as in Table 3.

Table 3. Organization and the use of green keyword

Keywords	Amount	Keywords	Amount
<i>Lingkungan</i>	461	<i>Nicke Widyawati</i>	47
<i>Green</i>	453	<i>Penghargaan</i>	47
<i>Petrokimia</i>	246	<i>Pemerintah</i>	38
<i>Gresik</i>	246	<i>Bisnis</i>	33
<i>Pertamina</i>	146	Indonesia	28
<i>Perusahaan</i>	104	<i>Pencemaran</i>	22
<i>Air</i>	72	<i>Udara</i>	20
<i>Melindungi</i>	59	<i>Arab</i>	14

Source: Researchers (2023)

There are two main keywords that predominate green-related tweets. However, it was followed by company keywords, namely Petrokimia Gresik and Pertamina. The two companies whose work crosses directly with the environment and nature. This demonstrates that the two companies have a high level of concern for the environment, as they continue to display their achievements in this issue. Additionally, water, pollution, and air are three significant keywords that feature in this topic. Water and air are terms directly associated with the environment, whereas pollution is a sort of environmental degradation that exists today.



Figure 2. Visualization of Green keywords

Source: Researchers (2023)

The Membership Categorization Analysis (MCA) provides a lens through which to view the relationships surrounding this topic. MCA focuses on allowing members to categorize the world or display their understanding of it, such as conversations focusing on environment, pollution, achievement, and more (Meredith et. al., 2021). Concerning this green campaign, there are associated keywords that arise frequently over the course of nine days. These

keywords are about the Environment, Petrochemical, and Water. Although there are still other keywords that appear, these three words point to a specific organizational topic accompanied by environmental issues related to water. The simple keyword visualization can be seen in Figure 2.

Table 4. Reproducing messages containing green

No	Description	Additional information
1	<i>Bandara Blimbingsari Banyuwangi, Jawa Timur, digadang-gadang sebagai bandara ramah lingkungan ("green airport") pertama di Indonesia. Infrastruktur yang dikelola PT Angkasa Pura II ini memiliki desain modern dan efisien. https://t.co/sFGO4YSLD1 #Nusantara #AdadiKompas</i>	Original
2	<i>Bandara Blimbingsari Banyuwangi dicanangkan sebagai green airport pertama di Indonesia. Bandara ini ramah lingkungan, dengan desain modern dan efisien di berbagai aspek. https://t.co/Jrl8N8lD4l #Nusantara #AdadiKompas</i>	Original
3	<i>Konsep Green Port juga diimplementasikan melalui peningkatan kualitas kebersihan daratan dan perairan kolam daerah lingkungan kerja. Yaitu meminimalisir pencemaran limbah cair. Begitu juga dengan kualitas udara dijaga dengan mengurangi kebisingan #PetrokimiaGresik2023</i>	Reply
4	<i>Selain efisiensi sumber energi, konsep Green Port juga diimplementasikan melalui peningkatan kualitas kebersihan daratan dan perairan kolam daerah lingkungan kerja. Makin mantap 🤝. #PetrokimiaGresik2023</i>	Reply
5	<i>maksimal 1.5mm, serta bisa digunakan untuk berbagai area basah dan area terendam. Weber.Dry SS-10 juga memiliki sertifikat green label Singapore yang menyatakan produk ini lebih ramah lingkungan dan dapat kontak dengan air untuk dikonsumsi.</i>	Reply

Source: Researchers (2023)

In addition, based on findings from conversations on Twitter, this environmental issue is inseparable from the airport construction carried out by PT Angkasa Pura II. The organization is trying to build messages in the form of environmentally friendly campaigns by forming messages related to green airports or green ports. In order for the campaign through messages on Twitter to run well, the organization raises green issues by focusing on energy, water and air issues. Some of these tweets can be seen in Table 4.

Apart from original tweets and replies, there are other activities, namely retweets. However, based on the analysis obtained, the replies made by this organization are only limited to completing incomplete information in the original tweet that was made. This is done because of character limitations on Twitter when users want to make a post. In terms of engagement, this makes the post seem busy because of the reply and retweet activity.

Twitter and Green messages

In general, the results that have been shown show that there are nodes that are not connected to each other by edges. This means that there is not much interaction between organizations and netizen accounts. That is why, organizations can use this finding as a chance to make messages that use green and provide netizens to engage with them or communicate to them. So, organizations can use Twitter to spread information about being green or to put themselves on the map as a company that cares about the environment and is green. Based on the results, the top two keywords using "green" or "*lingkungan*" place Petrokimia Gresik and Pertamina on the map as green companies. In a way, these two companies are at the forefront of the pack when it comes to the use of Twitter to communicate knowledge about being green, which is good for their green reputation. Even so, not many organizations have used Twitter as a medium to influence the public.

In addition, the use of the word "green" or "environment" can also be used to label a green place, as in the example of PT Angkasa Pura II which labels Blimbingsari Banyuwangi Airport, East Java as an environmentally friendly airport or green port. With the green labeling of this airport, of course, it can attract curious visitors to the airport. This can be seen in the connection between products (as well as places, buildings, and services) that are labeled green and the number of people who buy, use, or visit these places.

That is why, organizations need to build a good "green identity" to show that they care about the environment and make people more aware of the benefits of buying green products (Suki, 2016). Organizations can use social media (Twitter) as a channel that is used to disseminate information and build personality for business people. This effort also involves how the organization can disseminate facts that will contribute to the development of a positive image (Wibowo et al., 2022). Content distributed through social media channels is part of a marketing strategy that focuses on distributing information that is relevant, interesting, consistent and to communicate with the audience (Quesenberry, 2006). (Reilly & Hynan (2014) demonstrate how organisations can use Twitter as a tool to learn more about social media strategy and sustainability communication. Additionally, verified social media is a crucial channel for businesses to minimize consumer misinformation on social media.

Paper from Lim et al. (2018) examined the green "space" built through social media, Twitter, by examining the digital footprints left by Twitter users. "Digital space" through Twitter can improve the welfare of urban users towards green awareness. Lim et al. (2018) are able to determine the level of sentiment among users in a region to express general feelings about green spaces through digital traces left by users on Twitter. Thus, the findings of this paper show that "digital space" created through the Twitter channel has not been widely used by organizations in Indonesia. Only two companies put it to good use through producing messages regarding green on Twitter. Utilization of the use of the keywords "green" or "environment" requires a long journey consisting of green, greener, and greenest, which ultimately leads to awareness of the importance of environmental sustainability (Wibowo et

al., 2022). As a concept, green makes a promise to the audience that an organization's products or services are more desirable than those that are not green. Therefore, green can position organizations that have concern for the environment (Wibowo et al., 2022) and Twitter can become an authoritative channel to become a reference for netizens that these organizations have positioned themselves as green organizations on social media, Twitter.

CONCLUSION

Environmental issues are frequently brought up in public discourse, particularly on Twitter. The conversation led to active interaction from netizens as producers and consumers of information. However, this can be utilized for efforts to enhance reputation when an organization can participate the discourse. Green or environmental issues are viewed in this context as a good issue that may be leveraged to preserve the organization's reputation. This study has demonstrated that organizations utilize social media, specifically Twitter, as a channel for disseminating data about their operations. Additionally, organizations use tweets to create messages that imply they are environmentally friendly organizations. In addition, organizations can use Twitter as a medium to increase public involvement in information about the activities carried out by the organization. Through the building of green messages on Twitter, this can be interpreted as an effort to utilize the Twitter channel to "locate" organization on a green map. Therefore, this can be a potential for organizations to increase public or audience awareness related to green and position the organization as a green organization.

The limitation of this study is that it primarily explores and discusses how organizations use the terms "green" or "*lingkungan*" (environment) on their Twitter accounts. This study is open to additional discussion on the topic of green, particularly at how organizations, social media, and green are connected through qualitative research. Next, future research can examine the possibility of using Twitter as a channel that can influence audiences in creating a measurable green image by using quantitative research.

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REFERENCES

- Ariestya, A., G. Paramitha, & M. A. G. Elmada. 2022. "Climate Change Awareness of Gen Z: The Influence of Frame and Jargon on Online News." *Jurnal Studi Komunikasi* 6(3):753–70. doi: 10.25139/jsk.v6i3.5287.
- Bashir, Shahid, Muddasar Ghani Khwaja, Yasir Rashid, Jamshid Ali Turi, & Tariq Waheed. 2020. "Green Brand Benefits and Brand Outcomes: The Mediating Role of Green Brand Image." *SAGE Open* 10(3). doi: 10.1177/2158244020953156.
- Boström, M., & M. Klintman. 2008. "Labelling and Green Consumerism."
- Breakenridge, D., & B. Solis. 2009. *Putting the Public Back in Public Relations: How Social Media Is Reinventing the Aging Business of PR*.
- Daniel, Mariana, Rui Ferreira Neves, & Nuno Horta. 2017. "Company Event Popularity for Financial Markets Using Twitter and Sentiment Analysis." *Expert Systems with Applications* 71:111–24. doi: 10.1016/j.eswa.2016.11.022.
- Dewi, W. W. A., & W. R. Syauki. 2022. "Pesan Kampanye Non-Government Organization Terhadap Permasalahan Sampah Plastik." *Jurnal Riset Komunikasi* 5(2):159–71. doi:

- 10.38194/jurkom.v5i2.428.
- Forman, J., & L. Damschroder. 2007. "Qualitative Content Analysis." Pp. 39–62 in *Empirical methods for bioethics: A primer*. England: Emerald Group.
- Golob, U., S. Turkel, L. Kronegger, & E. Uzunoglu. 2018. "Uncovering CSR Meaning Networks: A Cross-National Comparison of Turkey and Slovenia." *Public Relations Review*.
- Hou, Huiying, & Hao Wu. 2021. "Tourists' Perceptions of Green Building Design and Their Intention of Staying in Green Hotel." *Tourism and Hospitality Research* 21(1):115–28. doi: 10.1177/1467358420963379.
- Housley, William, Helena Webb, Meredydd Williams, Rob Procter, Adam Edwards, Marina Jirotko, Pete Burnap, Bernd Carsten Stahl, Omer Rana, & Matthew Williams. 2018. "Interaction and Transformation on Social Media: The Case of Twitter Campaigns." *Social Media and Society* 4(1). doi: 10.1177/2056305117750721.
- Khonsari, Kaveh Ketabchi, Zahra Amin Nayeri, Ali Fathalian, & Leila Fathalian. 2010. "Social Network Analysis of Iran's Green Movement Opposition Groups Using Twitter." *Proceedings - 2010 International Conference on Advances in Social Network Analysis and Mining, ASONAM 2010* 414–15. doi: 10.1109/ASONAM.2010.75.
- Klassen, Shamika, Sara Kingsley, Kalyn McCall, Joy Weinberg, & Casey Fiesler. 2022. "Black Lives, Green Books, and Blue Checks." *Proceedings of the ACM on Human-Computer Interaction* 6(GROUP):1–22. doi: 10.1145/3492846.
- Lauwrensia, Anastasia Pratiwi, & Angga Ariestya. 2022. "The Green Storytelling Marketing: Influencing Consumer Purchase Decision through Environmental Consciousness." *Jurnal Komunikasi Profesional* 6(1):39–55. doi: 10.25139/jkp.v6i1.4390.
- Li, Xin, Qianqian Xie, Jiaojiao Jiang, Yuan Zhou, & Lucheng Huang. 2019. "Identifying and Monitoring the Development Trends of Emerging Technologies Using Patent Analysis and Twitter Data Mining: The Case of Perovskite Solar Cell Technology." *Technological Forecasting and Social Change* 146(January):687–705. doi: 10.1016/j.techfore.2018.06.004.
- Lim, Kwan Hui, Kate E. Lee, Dave Kendal, Lida Rashidi, Elham Naghizade, Stephan Winter, & Maria Vasardani. 2018. "The Grass Is Greener on the Other Side: Understanding the Effects of Green Spaces on Twitter User Sentiments." *The Web Conference 2018 - Companion of the World Wide Web Conference, WWW 2018* 275–82. doi: 10.1145/3184558.3186337.
- Martín-de Castro, Gregorio, Javier Amores-Salvadó, José E. Navas-López, & Remy M. Balarezo-Núñez. 2020. "Corporate Environmental Reputation: Exploring Its Definitional Landscape." *Business Ethics* 29(1):130–42. doi: 10.1111/beer.12250.
- Meredith, J., D. Giles, & W. Stommel. 2021. *Analysing Digital Interaction*. Switzerland: Palgrave Macmillan.
- Mravcová, Anna. 2019. "Environmental Awareness and Environmental Citizenship Dimension." *Slovak Journal of Political Sciences* 19(2):32–48. doi: 10.34135/sjps.190202.
- Obreja, Dragoş M. 2022. "Mapping the Political Landscape on Social Media Using Bibliometrics: A Longitudinal Co-Word Analysis on Twitter and Facebook Publications Published Between 2012 and 2021." *Social Science Computer Review* 0(90):1–17. doi: 10.1177/08944393221117749.
- Olsen, Mitchell C., Rebecca J. Slotegraaf, & Sandeep R. Chandukala. 2014. "Green Claims and Message Frames: How Green New Products Change Brand Attitude." *Journal of Marketing* 78(5):119–37. doi: 10.1509/jm.13.0387.
- Palmer, Stuart, & Nilupa Udawatta. 2019. "Characterising 'Green Building' as a Topic in

- Twitter.” *Construction Innovation* 19(4):513–30. doi: 10.1108/CI-02-2018-0007.
- Pritchard, Mark, & Theresa Wilson. 2018. “Building Corporate Reputation through Consumer Responses to Green New Products.” *Journal of Brand Management* 25(1):38–52. doi: 10.1057/s41262-017-0071-3.
- Quesenberry, Keith. 2006. *Social Media Strategy: Marketing, Advertising, and Public Relations in the Consumer Revolution*.
- Reilly, Anne H., & Katherine A. Hynan. 2014. “Corporate Communication, Sustainability, and Social Media: It’s Not Easy (Really) Being Green.” *Business Horizons* 57(6):747–58. doi: 10.1016/j.bushor.2014.07.008.
- Risyamuka, I. Ketut, & Kastawan Mandala. 2015. “Pengaruh Green Marketing Terhadap Keputusan Pembelian Produk Hijau Di Restoran Sari Organik Ubud.” *E-Jurnal Manajemen Universitas Udayana* 4(2):524–43.
- Roberts, Helen, Jon Sadler, & Lee Chapman. 2019. “The Value of Twitter Data for Determining the Emotional Responses of People to Urban Green Spaces: A Case Study and Critical Evaluation.” *Urban Studies* 56(4):818–35. doi: 10.1177/0042098017748544.
- Stritch, Justin M., & Robert K. Christensen. 2016. “Going Green in Public Organizations: Linking Organizational Commitment and Public Service Motives to Public Employees’ Workplace Eco-Initiatives.” *American Review of Public Administration* 46(3):337–55. doi: 10.1177/0275074014552470.
- Sudibyo, Yvonne Augustine, & Karel Adam Sutanto. 2020. “Environmental Consciousness and Corporate Social Responsibility as Drivers of Green Intellectual Capital.” *International Journal of Innovation, Creativity and Change* 13(4):716–26.
- Suki, M. N. 2016. “Green Product Purchase Intention: Impact of Green Brands, Attitude, and Knowledge.” *British Food Journal* 118(12):2893–2910. doi: 10.1108/BFJ-06-2016-0295.
- Wenur, Christy, Silvya Mandey, & Willem A. Tumbuan. 2015. “Pengaruh Strategi Green Marketing, Citra Merek, Dan Kualitas Produk Terhadap Kepuasan Konsumen Pengguna the Body Shop, Manado Town Square.” *Emba* 3(2):283–93.
- Wibowo, T. O. 2017. “Green marketing and representation of the other (an analysis of green image ad represented by teh kotak ad, ‘persembahan dari alam’ version).” *Profetik: Jurnal Komunikasi* 10(2):5. doi: 10.14421/pjk.v10i2.1332.
- Wibowo, T. O., Candrasari, S., Parlindungan, D. R. & Haloho, H. N. Y. 2022. “‘The Real Green’ or Just Gimmick : The Implementation of Green Concept in Inagro’s Instagram.” *Komunikatif: Jurnal Ilmiah Komunikasi* 11(2):231–41. doi: 10.33508/jk.v11i2.4253.
- Wijaya, B. S., T. O. Wibowo, D. Kania, A. R. Dedeas, & H. D. Vida. 2022. “The Politics of Representation in Green Brand Communication: A Social Semiotics Approach.” *Social Sustainability in Economic, Social, and Cultural Context* 18(2):31–45.
- Xiong, Ying, Moonhee Cho, & Brandon Boatwright. 2019. “Hashtag Activism and Message Frames among Social Movement Organizations: Semantic Network Analysis and Thematic Analysis of Twitter during the #MeToo Movement.” *Public Relations Review* 45(1):10–23. doi: 10.1016/j.pubrev.2018.10.014.
- Zarrabeitia-Bilbao, E., J. Morales-i-Gras, R. Rio-belver, & Garechana-Anacabe, G. 2022. “Energía verde : Identificación de tendencias en la sociedad mediante la minería de datos aplicada a twitter para la toma de decisiones estratégicas.” *Profesional de La Información* 31(1):1–17.