Jurnal Dinamika Akuntansi dan Bisnis
URL: http://jurnal.unsyiah.ac.id/JDAB/index

Using Social Media as A Legitimation Tool in Sustainability Reporting: Evidence from SOEs Listed on the Indonesia Stock Exchange

Arif Rahmansyah[1], Ratna Mulyany[2*], Teuku Aulia Geumpana[3]
[1.2] *Department of Accounting, Faculty of Economics and Business, Universitas Syiah Kuala, Banda Aceh, Indonesia*
[.3] *Discipline of Computing and IT, School of Information and Physical Sciences, University of Newcastle, Callaghan, Australia*
*Corresponding author: ummuhaziq@usk.ac.id
https://dx.doi.org/ 10.24815/jdab.v10i2.27550

ARTICLE INFO

Article history:
Received date: 24 August 2022
Received in revised form: 07 June 2023
Accepted: 15 June 2023
Available online: 24 August 2023

Keywords:
Instagram, legitimacy, LinkedIn, social media, stakeholders, sustainability reporting, Twitter

Citation:
Rahmansyah, A., Mulyany, R., & Geumpana, T.A., (2023), Using Social Media as A Legitimation Tool in Sustainability Reporting: Evidence from SOEs Listed on the Indonesia Stock Exchange. *Jurnal Dinamika Akuntansi dan Bisnis, 10 (2), 249 – 264*

Kata Kunci:
Instagram, legitimasi, LinkedIn, media sosial, pemangku kepentingan, pelaporan keberlanjutan, twitter

ABSTRACT

The use of social media changes the dynamics of reporting, leading to interactive communication processes where dialogue and engagement with stakeholders can be used to accompany disclosure of information to seek legitimacy. The purpose of this study is to determine the use of social media in the sustainability report in state owned enterprises (SOEs) listed on the Indonesia Stock Exchange as a means of seeking legitimacy from stakeholders. The data obtained can be parsed, checked, and compared with open coding (open coding). The results of data processing are displayed in excel spreadsheet, and processed into diagrams and tables. The results of this study indicate that social media allows companies to build a dialogue about current issues that affect society and the environment. The issues raised on social media by companies from the three platforms mostly consist of community, employees, diversity, gender equality, health, and corruption issues. The findings implicate that social media has been largely used even by SOEs as a legitimation tool for its stakeholders in constructing a dialogue regarding current issues affecting people and the environment.

Penggunaan Media Sosial sebagai Alat Legitimasi dalam Pelaporan Keberlanjutan: Studi* pada *Perusahaan BUMN yang Terdaftar di Bursa Efek Indonesia

ABSTRAK

Penggunaan media sosial mengubah dinamika pemberitaan, mengarah pada proses komunikasi interaktif di mana dialog dan keterlibatan dengan pemangku kepentingan dapat digunakan untuk mengiringi pengungkapan informasi untuk mencari legitimasi. Tujuan penelitian ini adalah untuk mengetahui penggunaan media sosial dalam Laporan Keberlanjutan pada perusahaan BUMN yang terdaftar di Bursa Efek Indonesia sebagai sarana mencari legitimasi dari pemangku kepentingan. Data yang diperoleh dapat diurai, diperiksa, dan dibandingkan dengan pengkodean terbuka (open coding). Hasil pengolahan data ditampilkan dalam excel spreadsheet, dan diolah menjadi diagram dan tabel. Hasil penelitian ini menunjukkan bahwa media sosial memungkinkan perusahaan membangun dialog tentang isu-isu terkini yang mempengaruhi masyarakat dan lingkungan. Isu yang diangkat di media sosial oleh perusahaan dari ketiga platform tersebut sebagian besar terdiri dari isu komunitas, karyawan, keragaman, kesetaraan gender, kesehatan, dan korupsi. Temuan ini berimplikasi bahwa media sosial telah banyak digunakan bahkan oleh perusahaan milik negara sebagai alat legitimasi bagi para pemangku kepentingannya dalam membangun dialog mengenai isu-isu terkini yang mempengaruhi masyarakat dan lingkungan.

1. Introduction

The rapid development of business activities often results in the exploitation of natural resources on a large scale, causing environmental damage. The problem of environmental damage is one of the impacts caused by company's management decisions with shareholders (Lestari & Suardana, 2019). Based on the theory of legitimacy, companies will

Rahmansyah, Mulyany, Geumpana / Jurnal Dinamika Akuntansi dan Bisnis Vol. 10 (2), 2023, pp 265 – 284

voluntarily report their activities if management feels that these activities are needed by the community in which the company operates (Pujiningsih, 2020). The legitimacy of the company will be in jeopardy if it does not uphold values that are consistent with the restrictions and standards that are in place in the neighborhood where it is located, whether the resulting distinctions are actual or hypothetical (Natalia & Soenarno, 2021). According to legitimacy theory, businesses enter into agreements with societies to carry out their business based on the principles of justice and how they respond to various interest groups to justify their actions (Badjuri & Kartika, 2021).

To solve this issue and maintain long-term profitability, businesses need to be able to entail all stakeholders. Stakeholders essentially have the power to influence how the company uses its financial resources (Carroll & Shabana, 2010). Therefore, the company has to be able to build positive stakeholder relationships by fulfilling their needs when stakeholders control significant economic company's resources (Natalia & Soenarno, 2021).

Stakeholders basically have the ability to influence the use of economic resources used by companies. Therefore, when stakeholders control important economic resources for the company, the company must be able to establish good relationships with stakeholders by satisfying stakeholder desires (Natalia & Soenarno, 2021). Likewise, with the formulation of a strategy that must be translated into a strategy into action. Strategic planning processes tend to focus on environmental analysis or competency analysis, or a combination of the two (Bowen et al., 2020) which is important for the company, the company must be able to establish good relations with stakeholders by satisfying the wishes of stakeholders (Natalia & Soenarno, 2021).

Likewise, with the formulation of a strategy that must be translated into a strategy into action. Strategic planning processes tend to focus on environmental analysis or competency analysis, or a combination of the two (Bowen et al., 2020).

In the contemporary time, stakeholders can find out and monitor the activities carried out by the company through social media communication, hence they can assess and influence the company's activities. According to a recent report, the social media users around the world reached 4.54 billion with an increase of 7% per year, that shows that the rate of acceptability and importance of social media is unmatched as compared to its counterpart, the conventional media (Cheng et al., 2021). Using social media can create new possibilities for companies to engage in conversations with their stakeholders and receive real-time feedback about company activities, so that it can be used as a new legitimacy tool for companies (Manetti et al., 2017).

This is consistent with the statement of Adianto et al., (2021) Legitimacy is a broad assumption or perspective that an entity's actions are desirable, coherent, or consistent with a set of societal norms, values, perceptions, and definitions. So, to stay afloat, companies seek some kind of legitimacy or recognition from investors, creditors, consumers, governments, and the surrounding community. To gain legitimacy from investors, the company continues to increase stock returns for investors.

Social media communication is the use of the latest application-based technology to facilitate connectivity between individuals, groups, organizations, countries and the world. This technology has embraced its own patent by creating an online community (Matas-Terrón et al., 2020). Social media has formed a unique view on a borderless world as there are no gulfs in global communication.

Communication using social media in the workplace, this technology has a perspective of positive and negative consequences (van Zoonen et al., 2017). Social media is an open and public-oriented system. Therefore, its use definitely has advantages and disadvantages. The use of social media also has an impact on the performance and practices of an organization. Currently, many

Rahmansyah, Mulyany, Geumpana / Jurnal Dinamika Akuntansi dan Bisnis Vol. 10 (2), 2023, pp 265 – 284

organizations use social media communication as an intermediary for organizations and clients because this method has become the latest communication trend. It is very important for organizations to see more benefits from a positive perspective (Tajudeen et al., 2018).

Social media, which is emerging as a new mode of communication, is among the newest legitimacy tools for businesses (Charoensukmongkol & Sasatanun, 2017). Social media uses mobile and web-based technologies to create highly interactive platforms where individuals and communities share, create, discuss, and modify user-generated content (Lodhia et al., 2020). Social media communication is the use of the latest application-based technology to facilitate connectivity between individuals, groups, organizations, countries, and the world. This technology has embraced its own patents by creating an online community.

Organizations can now engage in discussions to one‘s interested parties on social media and get immediate feedback on their general organizational announcements (Manetti et al., 2017). With the help of web-based and social media application areas, this development has transformed the way social and environmental information is disseminated from a one-way transmission interconnection model in the form of annual reports and sustainability reports to linked systems communication (Reilly & Hynan, 2014).

Studies have looked into how businesses use social media to achieve two main objectives, reporting on sustainable development issues and impacts, and engaging stakeholders on issues that affect them using media features (Lodhia et al., 2020). Reilly & Hynan (2014) looked at Facebook, Twitter, and sustainability reports from 16 international companies to evaluate the scope and content of social media as a tool for corporate communication.

Businesses that are environmentally friendly report more sustainability information than non-green businesses, and they use social media significantly more frequently. Manetti et al., (2017) examined the material on official Twitter, Facebook, and YouTube pages of international businesses to determine whether they employ social media as a stakeholder engagement tool for sustainability reporting. examined the material on official Twitter, Facebook, and YouTube pages of international businesses to determine whether they employ social media as a stakeholder engagement tool for corporate sustainability. This study for instance aims to examine the use of social media in the sustainability report of state owned enterprises (SOEs) companies listed on the Indonesia Stock Exchange in seeking legitimacy from stakeholders. Despite the available studies looking at the use of social media as a legitimation tool yet they are mostly carried in the developed countries and perhaps none has been performed within a context of developing country like Indonesia taking the samples of SOEs.

Likewise, with other types of companies, SOEs may be involved with various social and environmental impacts on the community yet they may receive certain support from the government to legitimize their behavior. As improvement to the previous studies, this study additionally takes 2 different social media namely, Instagram and LinkedIn as these two are among most popular social media platforms either for business or personal purposes.

The remaining of this paper is structured as follow. Next section reviews prior literature in the topic followed by the elaboration of research method. Subsequently results and discussion are presented in the following section. The last section concludes.

2. Literature review

Legitimacy theory

Companies are viewed as part of a larger social system in legitimacy theory and do not have rights to resources. Instead, resource rights must be "acquired," and only "legitimate companies" are able to maintain their direct exposure or ("rights") to the necessary resources (Deegan, 2019). When a company fails to comply with the terms of the "social contract," and thus with the aspirations of the society in which it operates, its legitimacy is considered likely to be challenged (creating what is referred to as a "legitimacy gap") (Patten, 2020). Legitimacy also reflects the extent to which the general public or stakeholders regard an administration's policies as appropriate and useful, or when the company's business is deemed socially acceptable and worthy of support (Ching & Gerab, 2017). Societal expectations are considered to be likely to change over time so that "legitimacy" is seen as a concept that is relative to the social system in which companies operate, and is specific to time and place.

Legitimacy is presumed to be based on the perception of the “relevant public”, often interpreted as “society” in general, and not necessarily based on the company's actual behavior (Deegan, 2019). legitimacy might be seen as a key reason for undertaking corporate social behavior and also then using that activity as a form of publicity or influence (Jedynak, 2020). Companies must also voluntarily conform to morals, values and social norms while demanding market-related resources such as information sharing, access to financial and human capital and support from stakeholders, this is important for the survival of companies as it ensures an inflow of resources. external and support from various stakeholders (Achmad, 2012).

However, when society's expectations of company behavior differ from their perceptions of behavior, the community can revoke the company's license to continue operating (Ching & Gerab, 2017). That is why some corporations use strategic CSR, which is a subset of such behavior and includes direct initiatives, such as investing in environmentally friendly operations that reduce emissions and lower costs, and indirect methods like targeted charitable giving that could increase brand reputation and customer loyalty (Bouncken et al., 2019).

Legitimacy is the process by which a company justifies publicly conferring its right to continue operating. A general perception or presumption that an entity's activities are beneficial or appropriate within a certain socially constructed system of values, beliefs, and definitions is referred to as legitimacy (Ching & Gerab, 2017). According to the theory, the greater the likelihood of a negative change in public perception of how socially responsible businesses are, the greater the willingness of companies to use legitimacy tactics to manage progressive reform (Yuliawati & Sukirman, 2015). Legitimacy also refers to the level to which the general public or stakeholders regard the administration's policies as appropriate and useful, or when the company's performance is accepted in society and deemed fair and deserving of support (Ching & Gerab, 2017).

People's perceptions are thought to shift over time, hence "legitimacy" is viewed as a concept comparative to the social structure wherein the company operates, as well as time and place specific. Legitimacy is assumed to be based on the perceived notion of the "relevant public", often construed as "society" in overall, and not inevitably on the perspective of the "relevant public" in particular (Deegan, 2019). Companies also must voluntarily comply to morals, values, and social standards while demanding market-related assets such as sharing of information, access to financial and human capital, and stakeholder support; this is critical for the company's survival because it ensures an influx of foreign of resources. external and multi-stakeholder assistance (Achmad, 2012). Therefore, an approach is needed that can become a forum for companies to gain legitimacy by using “interactive and participatory” social media features so as to create networks to learn and build relationships with their stakeholders (Bellucci, 2016).

According to resource dependence, legitimacy is a "resource" on which the firm depends for survival and which is given to the firm by society (typically assumed to conform to the expectations of a plurality of interests), and it's the resource that firms desire/seek (Deegan, 2019). It is also regarded as a resource that may be strategically manipulated thru various managerial actions, including numerous disclosure strategies. Managers are supposed to be (often implicitly) motivated by preservation or profitability goals, which are eventually connected to the owner's self-interest (Xu & Xi, 2020).

Sustainability report and social media

Integrated reporting is a tool for illustrating sustainability performance when compared to a company's core values, goals, and targets. "The practice of measuring, disclosing, and being accountable to internal and external stakeholders for the company's performance towards sustainable development goals," according to. Lodhia et al., (2020) is what sustainability reporting is. It aims to inform stakeholders about a company's social, environmental, and economic impacts, as well as its beneficial and detrimental contributions (Bowen et al., 2020).

Companies use a range of media, including traditional ones like paper-based reports and modern ones like online disclosure regulations and social media, to inform individuals about their sustainability performance (Lodhia et al., 2020). Prior studies have looked at the nature, scope, and trends in corporate environmental reporting practices using a variety of reporting formats, including financial statements, sustainability reports, booklets, advertisements, and website disclosures (Lodhia, 2018). To push information and messages from the company to the recipient, this format, however, only offers one-way "push communication." The reporting format lacks a forum for dialogue between corporations, stakeholders on sustainability-related issues (Lodhia et al., 2020).

Numerous studies have examined how companies use social media to achieve two objectives: reporting on sustainability issues and impacts and engaging stakeholders on issues that affect them (Lodhia et al., 2020). Reilly and Hynan, (2014) examined Facebook, Twitter, and sustainability reports from 16 large international corporations to evaluate the scope and content of social media as a corporate communication tool. Compared to non-green businesses, green businesses report more sustainability data and are significantly more active on social media. Manetti et al., (2017) examined the material on international companies' official YouTube, Facebook, and Twitter pages to determine whether they employ social media as a mechanism for stakeholder engagement for sustainability reporting. The authors found that few companies used social media to interact with stakeholders about sustainability issues. However, despite the fact that these companies' interactions with the "community" online are largely unrelated to their practices and policies for sustainability reporting, they do so on a regular basis. Furthermore, the authors learn that social media sites are primarily used to advertise goods, services, and events, which suggests that businesses have not yet fully realized social media's potential to support efficient stakeholder involvement for sustainability reporting.

In fulfilling the wishes and balancing the needs of stakeholders, companies must distinguish which stakeholders (key stakeholders) provide resources for the company, usually consisting of shareholders, investors, employees, customers, suppliers and the government; which are unnecessary (secondary) stakeholders), they have the ability to mobilize public opinion for or against the company, which consists of regulatory agencies, non-governmental organizations, and the media (Qisthi & Fitri, 2021). The participation of pressured stakeholders will have an impact on the disclosure of the sustainability report.

The pressure given by the main stakeholders is greater than the pressure from the secondary stakeholders, so that the company will try to fulfill its social responsibilities or the main stakeholders (Hillman & Keim, 2001). Therefore, the disclosure of sustainability reports is expected to fulfill the wishes of stakeholders and provide good relations between the company and stakeholders, so that the company's success is achieved in the long term (Qisthi & Fitri, 2021).

Lodhia & Stone (2017) emphasize how social media can be used to enhance effective corporate reporting (including sustainability) and raise stakeholder engagement in corporate reporting by utilizing the interactive communications infrastructure of the media. Eight character traits that can be used to assess the please feel free to contact of information and communications technology, such as social media, are covered in this framework. The innovation diffusion framework places emphasis on how social media and other immersive technologies have the potential to foster communication rather than simply one-way reporting (Zhao et al., 2022).

Despite the fact that web-based technologies like social media make communication more immediate and widespread, a number of issues can limit their dialogic possibility (Lodhia et al., 2020). These factors have included a lack of pervasive stakeholder internet connectivity, slow bandwidth and connection speeds, the propensity of businesses to password-protect stakeholder expansion of online data, and badly designed company sites and social media platforms that restrict user access and obstruct beneficial stakeholder-to-stakeholder (Lodhia, 2018). Lowe et al., (2012:187) accentuate "the sheer challenge of being learned in the web frenzy in which millions of (online) "hits" have been considered necessary to be visible in the crowd" Additionally, some academics have questioned the value of social media platforms in broader stakeholder dialogue, contending that businesses only use them to maintain their credibility and public image (Manetti et al., 2017).

However, web technologies can also be used as an effective tool to extend dialogue interests. Today, many social media platforms and websites have been designed to facilitate dialogue between companies and their stakeholders, by providing open forums for discussion and exchange of ideas (Galiano-Coronil et al., 2021). In addition, web technologies also enable easier access to information and data for stakeholders, thereby helping to strengthen their engagement and participation in the dialogue (Ghezzi et al., 2018).

Recent studies have also shown that web technologies can help increase stakeholder engagement in dialogue and increase business transparency. According to a study conducted by Kaluarachchi, (2022), the use of social media platforms can help increase stakeholder engagement in dialogue business and increase business linkages and accountability. Additionally, the study by Carswell & De Neve, (2022) show that the use of web technologies, including social media platforms, can help strengthen stakeholder participation in decision-making processes, by providing easy access to related information and data.

Social media as a legitimacy tool in sustainability report

Social media use changes the dynamic characteristics of reporting, creating an interactive communication procedure where dialogue and interaction with stakeholders can be utilized to supplement information disclosure in order to gain legitimacy (Lodhia et al., 2020).

One of the things that underlies legitimacy theory is agency theory where agents have equity in the company, they are more likely to embrace the actions desired by the principal as their own actions (Bendickson et al., 2016). Bendickson et al., (2016) went further by theorizing that when the action is outcome-based, agents are more likely to behave in the interests of the principal. However, if there is perceived injustice, the agent is likely to engage in self-serving behavior. When the agent engages in self-serving behavior, information asymmetry is created whereby the principal is unable to properly monitor the agent's behavior (Klein & Dawar, 2004). Measurement thus becomes elusive, leading to another problem - monitoring agent behavior (Ayu et al., 2021).

Given the nature of the two agency problems, governance mechanisms are needed to help align risks and monitor agent behavior, which brings us back to the positivist perspective of agency theory (Fitri et al., 2019). In summary, two perspectives in agency theory have emerged: principal-agent research and positivist agency theory. Principal-agent research identifies two possible agency problems: risk sharing and agent monitoring. The two problems are linked in that differences in the area of risk sharing create information asymmetry, which in turn reduces the principal's ability to monitor agent behavior (Shevchenko et al., 2020). Shifts in risk sharing, whether perceived or actual, make it difficult to create an ideal contract between principal and agent (Beal Partyka, 2021).

The legitimacy theory states that companies will take steps to control one 's social and environmental impacts in order to defend their continued existence in culture (Pellegrino & Lodhia, 2012). The central idea of this theory is company legitimacy, which is defined as "a situation or social standing that exists when the sense of morality of an entity is consistent with the system of values of a larger social structure that is part of the entity" (Lodhia et al., 2020). A legitimacy gap occurs when there is a difference between two value systems, which poses a threat to the entity's legitimacy. Because of this, legitimacy theory argues that businesses should indeed manage social norms and legitimacy gaps in order to survive, a process known as legitimacy planning (Manetti et al., 2017).

A greater standard of legitimacy is required for businesses that are more visible to one 's stakeholders and heavily rely on societal and political support (Lodhia et al., 2020). Businesses operating in industries to safe social and environmental conditions are less likely to demand greater legitimacy from one 's stakeholders than those in environmentally and socially responsive industries (Arora & Lodhia, 2017).

Legitimacy is an ever-changing concept. Changes in company performance and/or societal expectations may result in potential legitimacy gaps (Lodhia et al., 2020). As a result, management must be aware of current societal expectations and potential legitimacy gaps, and manage them by engaging in activities that legitimize the firm's presence to stakeholders (Lodhia & Stone, 2017).

A legitimacy gap may be created as a result of specific events. Companies need to develop strategies to nearer the legitimacy gap after identifying important stakeholders who have the power to affect their legitimacy (O'Donovan, 2002). For instance, the oil spill at BP left the company with a credibility gap that needed to be filled right away. Similar businesses are frequently subject to increasing pressure from their own stakeholders, who demand an explanation of why they exist (Lodhia et al., 2020).

The "illegitimacy" of a company may lead to financial, legal, and social repercussions. Economic sanctions can take the form of a production boycott, a work stoppage, or a refusal to extend credit. Examples of legal penalties include fines or civil lawsuits (Du et al., 2010). Knowledge picketing, media advertising, and refusal to work for the company are examples of social sanctions (Lodhia et al., 2020).

One method to increase business legitimacy is by providing stakeholders with social and environmental data (Pellegrino & Lodhia, 2012). Therefore, social and environmental revelation is a method that businesses can employ to defend their existence to their different customers, according to the fundamental tenet of legitimacy theory (Lodhia et al., 2020).

Previous research has revealed that companies employ a variety of legitimacy strategies because once trying to conduct sustainability reporting (Lodhia, 2018). These tactics can be practical as well as metaphoric (Savage et al., 2002). A substantive strategy involves making an effort to improve the performance of the company and attempting to close legitimacy gaps with tangible measures. Contrarily, symbolic strategies involve manipulating or trying to change beliefs and expectations, and they are frequently linked to assumption management strategies (Lodhia et al., 2020).

The disclosures in reports like annual and sustainability findings, which appear to be regularly static and recurrent in nature, had also been the main focus of legitimacy theory (Lodhia et al., 2020). As was already mentioned, the utilization of electronic media, including such websites and social media, is more dynamic and enables adjustments to sustainable development strategies. In essence, dialogue as well as the disclosure of information has taken the place of reporting thanks to the engaging potential of technology (Lodhia, 2018). As a result, businesses will start disclosing corporate social and environmental as well as starting to interact with their stakeholders through social media's interactive capabilities in order to establish credibility. Corporate websites are used by businesses for lawful purposes, according to prior research (Lodhia & Stone, 2017). Because of this, it is important for academics to look into just how social media is employed to legitimize social and environmental problems, as well as whether these strategies are actual or merely symbolic (Lodhia et al., 2020).

3. Research method

This study utilizes content analysis. Content analysis is a methodology that examines the contents of written or printed knowledge in the mass media in depth. According to Sumarno (2020) the content analysis method is a technique for drawing conclusions by identifying various special characteristics of a message in an objective, systematic, and generalist manner. In qualitative research, content analysis is commonly used. The pioneer of content analysis is Harold D. Lasswell, who pioneered the symbol coding technique, which is to record symbols or messages systematically, then interpret them.

So, this study sees that social media sustainability communication in SOEs focuses on legitimacy strategies, which lead to company management so that it can give the impression of stakeholders and control communication with them. Based on the approach used, this study uses a qualitative content analysis method. Qualitative content analysis research is influenced by the naturalistic-interpretive paradigm (Gusti Yasser Arafat, 2018). Company tweets, blog posts, and videos regarding the environment and society make up the data collection unit.

Additionally, every stakeholder response in the shape of likes, comments, shares, and retweets, in addition to actually effective company responses, are tracked in order to evaluate the dialectical effectiveness of social media.

Source of data used in this research is secondary data. Secondary data is data obtained indirectly because the data collected comes from sources of information that are already available in the media (Sekaran & Bougie, 2017: 130). The data sources used are Instagram, Twitter, and LinkedIn. According to Rahmadani, et al (2020) Instagram has more than 61 million active social media users in Indonesia, and the number of Twitter users in Indonesia reached 14.05 million in January 2021. The Director of LinkedIn Asia Pacific said that LinkedIn gained 500 million users worldwide, while Users LinkedIn active users in Indonesia reached 18.86 million or around 6.8% in July 2021 (Candra et al., 2020).

Data collection units are in the form of posts, tweets and videos posted by companies related to social and environmental issues. Furthermore, any stakeholder responses in the form of likes, comments and shares/retweets and subsequent replies by the company are monitored to assess the dialogic potential use of social media (Lodhia et al., 2020).

This analysis aims to document corporate social and environmental disclosures and responses posted by their stakeholders such as comments, likes, and shares/retweets (McKenna et al., 2017)

In the is study, the data analysis process was carried out using the following steps:

1. Disclosure classification – social environment (social environmental).
2. The topics covered in the posts/tweets employ thematic analysis to generate an inductive list of the major themes raised in this disclosure, such as water, waste, global warming response, employee satisfaction, and civic engagement.
3. The use of social media's conversational tools by stakeholders (likes, comments, as well as shares/retweets).

For initial data collection, open coding was also used, namely by using web scrappers, including the process of trying to describe, examining, comparing, conceptualizing, and categorizing data, which results in a data axis known as axial coding (Lodhia et al., 2020).

The process of using scrapping through a web scrapper, one of which is using Rapidminer, the scrapper process is described in Figure 1 below:

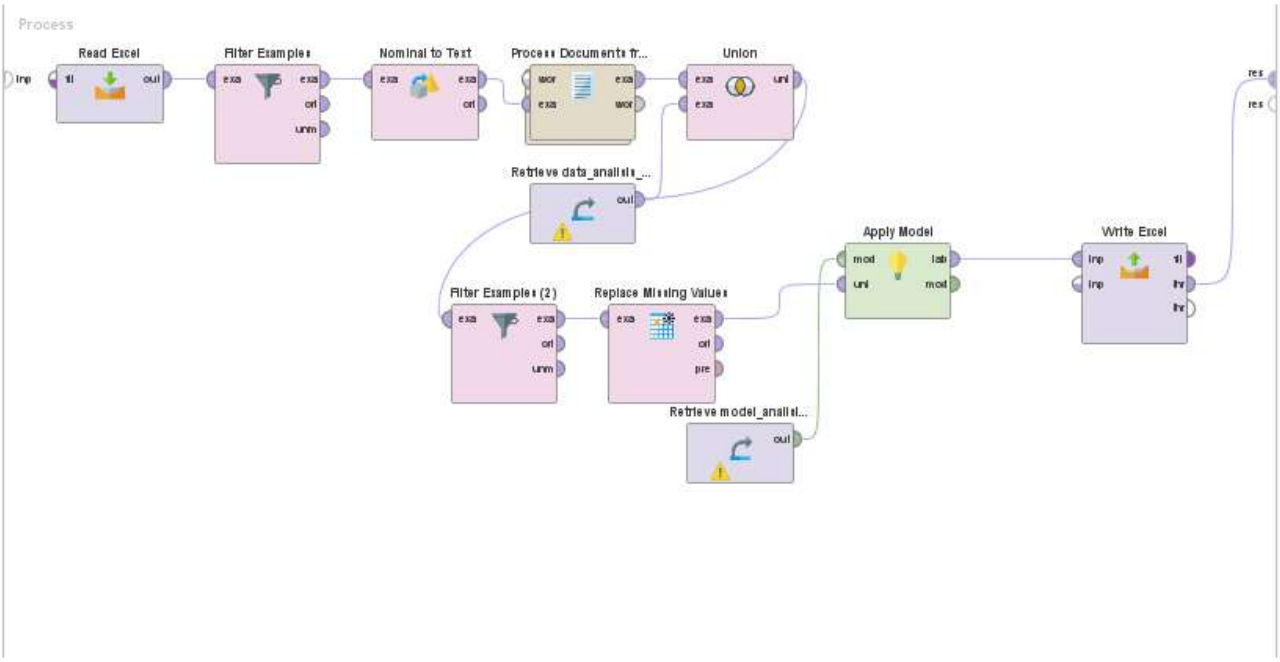

Figure 1. The process of using scraping
Source: Rapidminer (2022)

Inputting only those sociocultural1, physical2, and social environmental problems3 that the business posts on the three social platforms into an excel spreadsheet (Lodhia et al., 2020). To assess how effectively the three platforms for social media facilitate dialogical accounting, the total number of stakeholder comments posted is also tallied and recorded. To ensure the validity of the process, researches carried coded posts on social media and reactions.

4. Results and discussion

Description and data analysis

Of the 21 SOEs listed on the Indonesian stock exchange, only eight consistently report on how they use social media sites like Instagram, twitter, and LinkedIn. These eight businesses published a total of 7,635 social media and environmental posts between 2019 and 2021. An in-depth examination of eight SOEs' use of social media channels revealed their regular use to communicate and disseminate sustainability information. On three social media platforms, PT Jasa Marga (Persero) Tbk people posting the most about social and environmental issues, while financial and mining companies also have a strong presence. 17.6 percent of all posted jobs were made by finance industry companies, 45.3 percent by construction sector companies, and 25,6 percent by mining sector companies and 11.5 percent from the health sector.

Sector analysis shows that sustainability issues raised by companies in the infrastructure sector have a higher percentage of presentation. On the other hand, financial sector companies have lower posting presentation rates. This finding reflects the proposition that companies in socially and environmentally sensitive industries are more likely

[1]The ideas, customs, skills, arts, and tools that characterize a particular group of people at a particular time.

[2] The social environment is the area where various activities take place, namely social interactions between various groups and their institutions with symbols and values.

[3]Environmental problems are negative aspects of human activity on the biophysical environment.

to engage in sustainability reporting to legitimize their existence to stakeholders.

Previous studies have also shown a relationship between industry type and company repayment reporting. A study conducted by Kolk et al., (2013) found that companies operating in sectors that are at high risk of environmental and social impacts tend to be more active in sustainability reporting. However, research conducted by Afzal & Lim, (2022) show that internal company factors such as pressure from management and commitment to social responsibility also influence the company's tendency to finance.

Table 1. Total social and environmental posts from 8 SOEs

Sector	Twitter			Instagram			LinkedIn			Total
	Social	**Environment**	**Total**	**Social**	**Environment**	**Total**	**Social**	**Environment**	**Total**	
PT. Various Mines	88	134	222	287	365	652	-	1	1	875
PT. Indonesian Cement	18	16	34	336	657	993	19	30	49	1.076
PT. Bank Negara Indonesia	50	193	243	189	191	380	-	2	2	625
PT. Wijaya Karya	131	130	261	18	25	43	2	5	7	311
PT. Jasa Marga	140	125	265	1,456	1,428	2,884	-	1	1	3,150
PT. Pharmaceutical Chemistry	219	356	575	54	248	302	-	-	-	877
PT. State Savings Bank	193	50	243	40	35	75	8	14	22	340
PT. Mandiri Bank	65	135	200	97	82	179	1	1	2	381
			2,043			5,508			84	

Sources: Twitter, Instagram and LinkedIn

Table 1 shows that companies consciously address social issues, as they specifically mention issues or concerns such as community, diversity and inclusion, gender, employees, welfare, poverty, and sustainability in their posts. most of the third platforms are related to issues, employees, social diversity such as gender community, health and safety, in this case companies use social media space to communicate their contribution to local communities and charities.

This finding shows that social media supports companies to build a dialogue about current issues that affect society and the environment (Table 2).

For example, regarding climate change which received media attention during the period, and finally, the Indonesian government reduced the use of coal as a source of electrical energy and disabled several steam power plants and sought the use of renewable energy for the environment. Therefore, it can be concluded that there are internal and external factors that affect a company's propensity for sustainability reporting and the differences between types of industries can also affect the level of involvement of companies in sustainability reporting.

Rahmansyah, Mulyany, Geumpana / Jurnal Dinamika Akuntansi dan Bisnis Vol. 10 (2), 2023, pp 265 – 284

Table 2. Social media posts from –2019 - 2021

Social and environmental problem	**Twitter**		**Instagram**		**LinkedIn**	
	No.	**(%)**	**No.**	**(%)**	**No.**	**(%)**
Public	441	17.07	817	14.83	13	15.48
Diverse	36	1.39	120	2.18	2	2.38
Employee	73	2.83	262	4.76	3	3.57
Gender	8	0.31	4	0.07	1	1.19
Safety	40	1.55	282	5,12	0	0.00
Supply	26	1.01	11	0.20	1	1.19
Corruption	10	0.39	7	0.13	0	0.00
Peace	12	0.46	17	0.31	0	0.00
community	15	0.58	30	0.54	2	2.38
Human rights	0	0.00	0	0.00	0	0.00
Ethics	4	0.15	10	0.18	0	0.00
Customer	63	2.44	98	1.78	0	0.00
Technology	100	3.87	113	2.05	2	2.38
Sustainable Finance	51	1.97	32	0.58	3	3.57
Poverty	4	0.15	0	0.00	0	0.00
Inflation	0	0.00	5	0.09	0	0.00
Well-being	24	0.93	63	1.14	0	0.00
Security	209	8.09	221	4.01	0	0.00
General	53	2.05	385	6.99	3	3.57
Total social problem	**1,169**	**45.24**	**2477**	**44.97**	**30**	**35.71**
Environmental problems						
Partnership	22	0.85	32	0.58	1	1.19
Climate	6	0.23	12	0.22	0	0.00
Energy	108	4.18	73	1.33	0	0.00
Finance	34	1.32	132	2.40	6	7.14
Rubbish	101	3.91	230	4.18	8	9.52
Water	59	2.28	317	5.76	2	2.38
Award	157	6.08	371	6.74	16	19.05
Environment	211	8.17	470	8.53	11	13.10
Health	472	18.27	988	17.94	3	3.57
Forestry	11	0.43	33	0.60	0	0.00
Pollution	5	0.19	15	0.27	0	0.00
Disaster	37	1.43	154	2.80	2	2.38
Erosion	3	0.12	18	0.33	0	0.00
Reclamation	14	0.54	42	0.76	3	3.57
Covid	31	1.20	20	0.36	0	0.00
Technology	100	3.87	113	2.05	2	2.38
Ethics	4	0.15	10	0.18	0	0.00
Reporting	40	1.55	1	0.02	0	0.00
Total environmental problem	**1,415**	**54.76**	**3,031**	**55.03**	**54**	**64.29**

Sources: Twitter, Instagram and LinkedIn

Instagram, Twitter, and LinkedIn are favourite social media platforms by businesses for reporting on sustainability issues. Instagram is the most popular social media platform for business owners to interact social and environmental problems. Based on the results of sentiment analysis in this study as many as 22,630 sentiments were obtained, from three platforms it showed that Twitter had the largest number with 15,987 sentiments. Instagram is in second place with 6,516 sentiments, and lastly LinkedIn with 127 sentiments. Twitter is also the platform with the most negative sentiments with 3,872 reactions, with a proportion of 89%. With PT Bank Tabungan Negara (Persero) as the company with the most negative sentiments with 1,098 reactions, then PT Bank Mandiri (Persero) Tbk with the second most negative sentiment, which was 700.

From the results of the sentiment analysis conducted, it can be seen that social media Twitter is the main platform for conveying sentiment towards banking companies in Indonesia. This is in line with previous research which states that Twitter is the platform most often used to express opinions related to a topic or issue (Aral & Walker, 2012). In addition, the results of this study also show that PT Bank Tabungan Negara (Persero) has the most negative sentiment compared to PT Bank Mandiri (Persero) Tbk. This can be indicated that PT Bank Tabungan Negara (Persero) has a bad image in the eyes of the public. A previous study also showed that company image greatly influences consumer perceptions of the products or services offered (Keller, 1972). Previous studies have also shown that sentiments expressed on social media can affect company reputation (Kietzmann et al., 2011). Therefore, companies need to pay attention to sentiments expressed on social media and companies make efforts to improve their image and respond to unfavorable sentiments (Thelwall et al., 2013).

This shows that the large number of posts on social media is directly proportional to the number of positive and negative sentiments owned by the company, with positive sentiment greater than negative sentiment (Thelwall et al., 2013). So, it can be said that the company is able to use social media as a tool of legitimacy to stakeholders (Peslak, 2017).

This finding also shows that stakeholders can put pressure on every company activity, especially regarding social and environmental issues, by looking at the many reactions and sentiments given by stakeholders.

Twitter

Twitter emerged as one of the most commonly used social media platforms with a total of around 1410 social and environmental tweets posted in the year from 2021 to 2019. Of the total tweets, 44.2 percent related to social issues and 55.8 percent related to environmental issues. PT Kimia Farma (Persero) Tbk has the most tweets on Twitter. Research conducted by Lee & Shim (2019) shows that companies often use Twitter to disseminate information about sustainability and interact with stakeholders. They found that companies tend to use tweets to express their appreciation for successful launches, environmentally friendly products, and announcing various coaching programs. In addition, companies also often use Twitter to invite stakeholders to participate in the sustainability of programs or events related to environmental or social issues (Papaoikonomou, Kostaras, & Siomkos, 2021). Community support, diversity, gender equality, employees, health, ethics, and corruption are some of the social issues raised or shared on twitter.

Climate change, nature conservation partnerships, sustainable finance, water, and waste are just a few of the environmental issues that the company addresses on twitter. Environmental issues are most likely to be tweeted about by companies in the facilities and mining sectors.

Rahmansyah, Mulyany, Geumpana / Jurnal Dinamika Akuntansi dan Bisnis Vol. 10 (2), 2023, pp 265 – 284

Table 3. Total stakeholder reactions on twitter social media

Company name	Retweets	Like	Comment	Total reaction
PT Aneka Tambang (Persero) Tbk	506	640	356	1,502
PT Semen Indonesia (Persero) Tbk.	2,975	3,472	1,568	8,015
PT Bank Negara Indonesia (Persero) Tbk.	252	754	587	1,593
PT Wijaya Karya (Persero) Tbk.	6,636	4,581	2,497	13,714
PT Jasa Marga (Persero) Tbk.	6,641	4,389	3,573	14,603
PT Kimia Farma (Persero) Tbk	344	230	385	959
PT Bank Tabungan Negara (Persero)	1,983	467	359	2,809
PT Bank Mandiri (Persero) Tbk.	80	149	94	323
Total	**19,417**	**14,682**	**9,419**	**43,518**

Source:www.twitter.com

Further analysis of twitter usage due to the interactions companies receive for their tweets (Table 3). From 2021 to 2019 there were 2043 tweets overall and 43,518 reactions by stakeholders on Twitter PT Jasa Marga (Persero) Tbk received the highest number of reactions with 14,603 reactions per tweet. PT Wijaya Karya (Persero) Tbk received the second highest number of reactions with 13,714 reactions per tweet. The volume of stakeholder engagement on facebook vis-à-vis twitter and LinkedIn is consistent with Bellucci & Manetti's (2017) findings that facebook users react positively to invitations to interact online with organizations.

According to twitter sentiment analysis (Figure 2), PT Bank Tabungan Negara (Persero) has the most sentiment, with 3,140 reactions, followed by PT Bank Negara Indonesia (Persero) Tbk with 2,644 reactions.

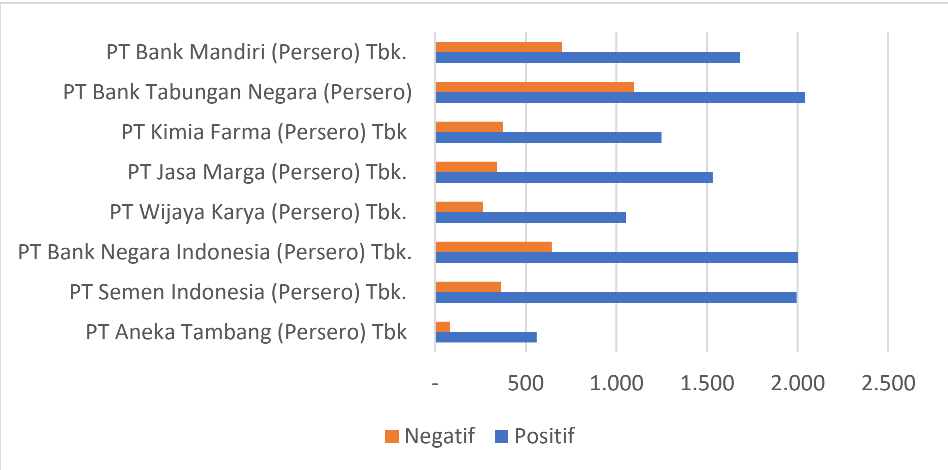

Figure 2. Twitter sentiment analysis

Source:www.twitter.com

Instagram

Around 5,508 social and environmental posts were observed on Instagram from 2019 to 2021. Of the total social and environmental posts, 45 percent related to social issues and 55 percent related to environmental issues. The company posts various social issues on Instagram such as community, diversity, employees, gender equality, health and safety. PT Jasa Marga (Persero) Tbk. posted the most social and environmental issues on instagram, with 2884 photo uploads.

Recent studies show that Instagram has become a popular social media platform for sustainability reporting for companies. In a study conducted by Russo et al., (2022) there has been a significant increase in the use of Instagram to report corporate sustainability, with more than 500 companies reporting their sustainability on this platform. In the context of environmental issues, Instagram is an effective social media platform for increasing public awareness and participation in environmental conservation efforts (Budiwarman, 2021). The study conducted by Pavelle & Wilkinson, (2020) show that Instagram can be used to generate greater awareness about environmental issues and mobilize collective action.

Apart from that, Instagram also facilitates open dialogue between companies and the community about sustainability issues. The study conducted by Nurjanah, (2021) show that Instagram can be used to facilitate open dialogue between companies and communities about sustainability issues, especially through the use of hashtags and other interactive features. Sustainability reporting on Instagram is still relatively new and not yet standardized.

Therefore, greater efforts are needed to ensure that sustainability reporting on Instagram is carried out in a transparent and accountable manner (Bryła et al., 2022). The study conducted by Geraldo & Pinto, (2020) emphasize the importance of developing a standardized sustainability reporting framework for Instagram.

Table 5. Total stakeholder reactions on Instagram social media

Company name	**Like**	**Comment**	**Total reaction**
PT Aneka Tambang (Persero) Tbk	622,341	23,833	646,174
PT Semen Indonesia (Persero) Tbk.	631,602	11,863	643,465
PT Bank Negara Indonesia (Persero) Tbk.	246,427	29,005	275,432
PT Wijaya Karya (Persero) Tbk.	6,551,113	93,825	6,644,938
PT Jasa Marga (Persero) Tbk.	2,335,743	87,338	2,423,081
PT Kimia Farma (Persero) Tbk	191,488	11,708	203,196
PT Bank Tabungan Negara (Persero)	1,696,419	129,133	1,825,552
PT Bank Mandiri (Persero) Tbk.	913,875	118,859	1,032,734
Total	**13,189,008**	**505,564**	**13,694,572**

Source: www.instagram.com

Further analysis of Instagram posts revealed approximately 225,000 stakeholder reactions, with an average of 13,694,572 post reactions, 13,189,008 likes from total posts, and 505,564 comments (Table 5). This makes Instagram social media the largest number of posts made by the company. PT Wijaya Karya (Persero) Tbk. received the highest number of reactions, with 6,644,938 reactions in its post.

Sentiment analysis obtained from Instagram shows that PT Jasa Marga (Persero) Tbk has the most sentiment, namely 1,636 reactions, then PT Bank Tabungan Negara (Persero) Tbk with 1,083 reactions. In the sentiment analysis, it can be concluded that PT Jasa Marga (Persero) Tbk has a good reputation among Instagram users with a total of 1,636 positive sentiments. This can be an indication that the company's performance is considered good by the community, or maybe it is because of positive news or campaigns carried out by the company (Kharde, 2016).

Meanwhile, PT Bank Tabungan Negara (Persero) Tbk also had a fairly high number of positive sentiments with 1,083 reactions. This shows that the company also has a good reputation in the eyes of the public (Kharde, 2016). However, PT Bank Negara Indonesia also had 184 negative sentiments. This can indicate that the company may face some problems or controversies that make people respond with negative sentiments (Lee & Weder, 2021). In this case, PT Bank Negara Indonesia needs to take the right actions to improve their reputation so that they can regain the trust and support of the community (Hao et al., 2019).

Overall, the sentiment analysis carried out can be input for these companies to improve their image in the eyes of the public, as well as to find out what is considered good or bad by consumers or Instagram users (Singh et al., 2020).

Rahmansyah, Mulyany, Geumpana / Jurnal Dinamika Akuntansi dan Bisnis Vol. 10 (2), 2023, pp 265 – 284

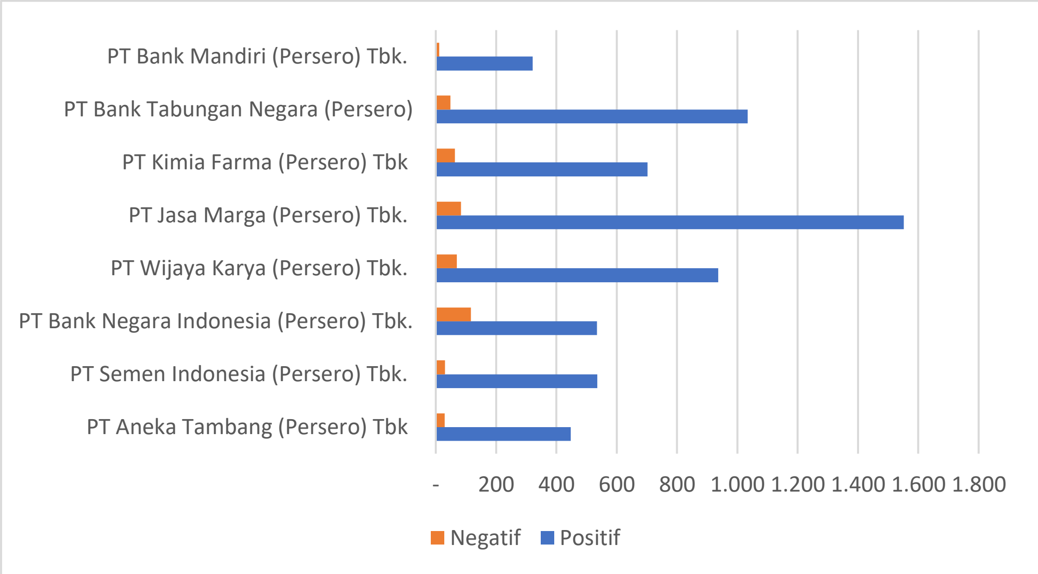

Figure 3. Instagram sentiment analysis
Source: www.instagram.com

LinkedIn

LinkedIn is the least used social media platform for sustainability reporting, with approximately 84 social and environmental posts from 2019 to 2021. Social issues account for 54% of total LinkedIn social and environmental posts, with environmental issues accounting for 36% (Table 7). LinkedIn not only reports on their contributions to the local community, but also demonstrates their support for workplace diversity and inclusion. Renewable energy, climate change, sustainable finance, conservation partnerships, water, and covid-related issues are among the key environmental issues discussed on LinkedIn.

Based on an analysis of reporting on the LinkedIn social media platform, it can be concluded that LinkedIn is the platform that is most rarely used for financing reporting compared to other platforms such as Facebook, Instagram, and Twitter. According to a study conducted by Jha & Verma (2022), LinkedIn has low usage rates in training reporting, with only about 7% of companies hosting their training on the platform.

Nonetheless, social and environmental posts on LinkedIn tend to focus more on social issues than environmental issues. The study conducted by Jaffar et al., (2019) show that around 54% of total social and environmental posts on LinkedIn are related to social issues, while 36% are related to environmental issues. In building awareness about environmental issues, LinkedIn also facilitates open dialogue between companies and communities, and generates collaborative initiatives that lead to better sustainability solutions. The study conducted by Jose & Lee (2007) show that LinkedIn can be an effective platform for facilitating open dialogue between companies and communities on coaching issues.

Overall, although LinkedIn is less used for training reporting than other social media platforms, it still makes an important contribution to awareness about sustainability issues, both in terms of social and environmental issues (John & De'Villiers, 2020). Therefore, it is important for companies to consider using LinkedIn in their efforts to raise awareness about sustainability issues (Kujala et al., 2022).

Table 7. Total stakeholder reactions on LinkedIn social media

Company name	Like	Comment	Total reaction
PT Aneka Tambang (Persero) Tbk	1,229	25	1,254
PT Semen Indonesia (Persero) Tbk.	1,798	39	1,837

Rahmansyah, Mulyany, Geumpana / Jurnal Dinamika Akuntansi dan Bisnis Vol. 10 (1), 2023, pp 265 – 284

Company name	Like	Comment	Total reaction
PT Bank Negara Indonesia (Persero) Tbk.	15,607	1,389	16,996
PT Wijaya Karya (Persero) Tbk.	7,443	251	7,694
PT Jasa Marga (Persero) Tbk.	2,410	66	2,476
PT Kimia Farma (Persero) Tbk	270	3	273
PT Bank Tabungan Negara (Persero)	6,111	419	6,530
PT Bank Mandiri (Persero) Tbk.	27,228	514	27,742
Total	**62,096**	**2,706**	**64,802**

Source: www.LinkedIn.com

An analysis of the interactions the company received on LinkedIn showed around 64,802 reactions, with 62,096 likes from each post, 2,706 comments from each post, which is significantly lower than the stakeholder reactions from Instagram and Twitter (Table 7). PT Bank Mandiri (Persero) Tbk received the highest number of reactions, with 27,742 reactions to each post.

This could indicate that the company has a good reputation with employees, customers, or LinkedIn users. Furthermore, PT Bank Tabungan Negara (Persero) received positive sentiment with 21 reactions. This indicates that it also has a good reputation among LinkedIn employees, customers, or enterprise users (Mäntylä et al., 2018). However, PT Bank Negara Indonesia has the most negative sentiment with 13 reactions. This can indicate that it is facing problems or controversies that affect the company's image and reputation in the eyes of the corporate community (Lee & Weder, 2021).

The results of sentiment analysis on the LinkedIn platform can help companies improve their image and reputation in the eyes of employees, customers or social media users (Golder & Macy, 2011). Companies can take appropriate actions to improve their image and increase public trust in the company (Omuya et al., 2022).

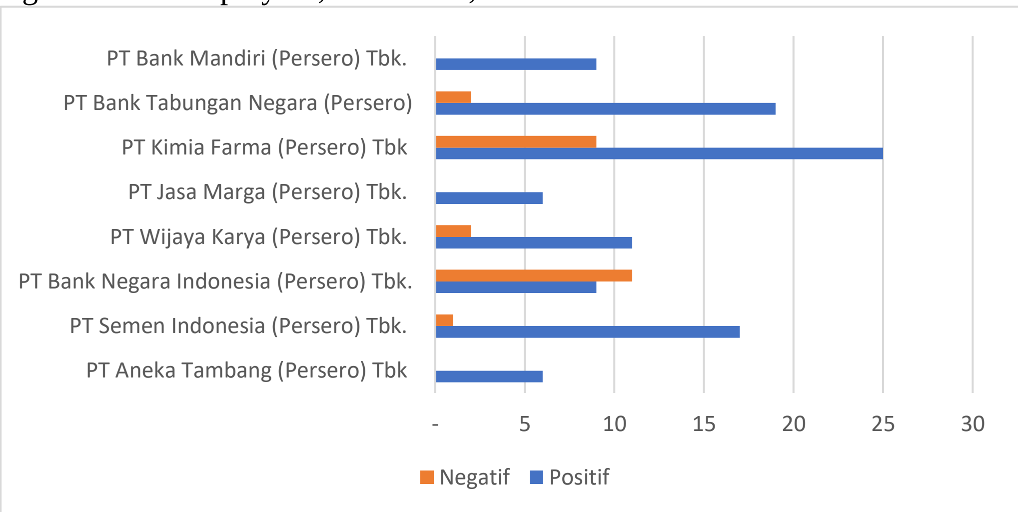

Figure 3. LinkedIn Sentiment Analysis
Source: www.LinkedIn.com

Sentiment analysis obtained from LinkedIn shows that PT Kimia Farma (Persero) Tbk has the most sentiments, namely 34 reactions, then PT Bank Tabungan Negara (Persero) with 21 reactions.

5. Conclusions

This study was set to investigate the use of social media in the sustainability report of Indonesian SOEs listed on the Indonesia Stock Exchange as a means of legitimacy seeking from stakeholders. It was found that the issues raised on social media by companies from the three platforms mostly consist of issues of community, employees, diversity, gender equality, health, and corruption, in this case companies use their social media space for stakeholders and interested stakeholders to communicate contributions. With a great number of posts on facebook, the company is quite adept at using it as a tool of legitimacy, with positive sentiment outweighing negative sentiment.

So, it can be said that the company is able to use social media as a tool of legitimacy to stakeholders. The company has done a good job of attempting to make social media a legitimate tool for its stakeholders, as evidenced by its use of social media to construct a dialogue regarding current issues affecting people and the environment. This approach is performed to reassure stakeholders that the business is concerned about the environment as well as profit.

Nevertheless, this study only focuses on SOEs listed on the Indonesian Stock Exchange and does not cover various business sectors. Researchers only use social media as a source of data as a research tool, so there are still many factors that can be a tool for company legitimacy. It is hoped that future researcher can add other variables in the sustainability report research, so that they can see further the factors that influence good corporate governance. Future researchers can use social media sources as a tool to communicate sustainability issues from various other theoretical perspectives.

References

Achmad, T. (2012). Pengaruh kinerja lingkungan terhadap corporate financial performance dengan corporate social responsibility disclosure sebagai variabel intervening (studi empiris pada perusahaan manufaktur di BEI periode tahun 2009-2011). *Diponegoro Journal of Accounting*, *1*(1), 94–108.

Adianto, R. F., Ali, M., & Mulyana, R. (2021). Analisis legitimasi publik pada bank syariah di indonesia: studi kasus bank syariah mandiri. *Al-Infaq: Jurnal Ekonomi Islam*, *12*(1), 1–23.

Afzal, F., & Lim, B. (2022). Organizational factors influencing the sustainability performance of construction organizations. *Sustainability*, 14(16). https://doi.org/10.3390/su141610449

Arafat, G.S (2018). Membongkar isi pesan dan media dengan content analysis Gusti Yasser Arafat UIN Antasari Banjarmasin. *Jurnal Alhadrah*, *17*(33), 32–48. https://jurnal.uin-antasari.ac.id

Aral, S., & Walker, D. (2012). Identifying influential and susceptible members of social networks. *Science*, *337*(6092), 337–341. https://doi.org/10.1126/science.1215842

Badjuri, A., & Kartika, A. (2021). Peran corporate social responsibility sebagai pemoderasi dalam memprediksi profitabilitas dan ukuran perusahaan terhadap agresivitas pajak di indonesia: kajian teori legitimasi. *Bisnis Dan Ekonomi*, *28*(1), 1–19.

Bellucci, G. M. M. (2016). The use of social media for engaging stakeholders in sustainability reporting. *Accounting, Auditing & Accountability Journal*, *29*(6), 1–5.

Bouncken, R. B., Barwinski, R., Kraus, S., & Roig-Tierno, N. (2019). A case of the Volkswagen emissions scandal. *International Journal of Environmental Research and Public Health*, *16* (3).

Bryła, P., Chatterjee, S., & Ciabiada-Bryła, B. (2022). The impact of social media marketing on consumer engagement in sustainable consumption: a systematic literature review. *International Journal of Environmental Research and Public Health*, *19*(24). https://doi.org/10.3390/ijerph192416637

Budiwarman, C. (2021). Instagram and sustainability-how Instagram users make sense of their engagement within the sustainability context on the platform. https://stud.epsilon.slu.se/17480/1/budiwarman_c_220120.pdf

Carroll, A. B., & Shabana, K. M. (2010). The business case for corporate social responsibility: A review of concepts, research and practice. *International Journal of Management Reviews*, *12*(1), 85–105. https://doi.org/10.1111/j.1468-2370.2009.00275.x

Carswell, G., & De Neve, G. (2022). Transparency, exclusion and mediation: how digital and biometric technologies are transforming social protection in Tamil Nadu, India. *Oxford Development Studies*, *50*(2), 126–141. https://doi.org/10.1080/13600818.2021.1904866

Charoensukmongkol, P., & Sasatanun, P. (2017). Asia Paci fi c Management Review Social media use for CRM and business performance satisfaction : The moderating roles of social skills and social media sales intensity. *Asia Pacific Management Review*, *22*(1), 25–34. https://doi.org/10.1016/j.apmrv.2016.10.005

Cheng, G., Cherian, J., Sial, M. S., Mentel, G., Wan, P., Álvarez-Otero, S., & Saleem, U. (2021). The relationship between csr communication on social media, purchase intention, and e-wom in the banking sector of an emerging economy. *Journal of Theoretical and Applied Electronic Commerce Research*, *16*(4), 1025–1041. https://doi.org/10.3390/JTAER16040058

Ching, H.Y. and Gerab, F. (2017), Sustainability reports in Brazil through the lens of signaling, legitimacy and stakeholder theories, *Social Responsibility Journal*, Vol. 13 No. 1, pp. 95-110. https://doi.org/10.1108/SRJ-10-2015-0147

Deegan, C. M. (2019). Legitimacy theory: Despite its enduring popularity and contribution, time is right for a necessary makeover. *Accounting, Auditing and Accountability Journal*, *32*(8), 2307–2329. https://doi.org/10.1108/AAAJ-08-2018-3638

Du, S., Bhattacharya, C. B., & Sen, S. (2010). Maximizing business returns to corporate social responsibility (CSR): the role of CSR communication. *International Journal of Management Reviews*, *12*(1), 8–19. https://doi.org/10.1111/j.1468-2370.2009.00276.x

Galiano-Coronil, A., Jiménez-Marín, G., Elías Zambrano, R., & Tobar-Pesántez, L. B. (2021). Communication, Social networks and sustainable development goals: a reflection from the perspective of social marketing and happiness management in the general elections in Spain. *Frontiers in Psychology*, *12*(September), 1–14. https://doi.org/10.3389/fpsyg.2021.743361

Geraldo, G., & Pinto, M. D. S. (2020). The use of social media instagram to disseminate sustainable information. *International Journal of Librarianship*, *5*(2), 4–12. https://doi.org/10.23974/ijol.2020.vol5.2.170

Ghezzi, A., Gabelloni, D., Martini, A., & Natalicchio, A. (2018). Crowdsourcing: a review and suggestions for future research. *International Journal of Management Reviews*, *20*(2), 343–363. https://doi.org/10.1111/ijmr.12135

Golder, A.S. & Macy, M. W. (2011). Diurnal and seasonal mood vary with work, sleep, and daylength across diverse cultures. *Science. 333*(September), 1878–1882.

Hao, X., Li, X., Liu, C., Zhan, X., Zhu, Y., Li, X., & Wang, J. (2019). A literature review of sentiment analysis on chinese social media a literature review of sentiment analysis. *Journal of Physics: Conference Series* https://doi.org/10.1088/1742-6596/1314/1/012140

Jaffar, A., Shahid, M., Hashim, A., Muhammad, R., Jaffar, A., Shaher, B., & Mohammad, N. (2019). The Effects of corporate social responsibility practices and environmental factors through a moderating role of social media marketing on sustainable performance of business firms. *Sustainability (Switzerland)*, *11*(12).

Jedynak, M. (2020). Social media and CSR – systematic literature review. *Zarządzanie Mediami*, *8*(3), 219–241. https://doi.org/10.4467/23540214zm.20.033.12051

Jha, A. K., & Verma, N. K. (2022). Social media sustainability communication: an analysis of firm behaviour and stakeholder responses.

Information Systems Frontiers, *0123456789*. https://doi.org/10.1007/s10796-022-10257-6

John, S. P., & De'Villiers, R. (2020). Elaboration of marketing communication through visual media: An empirical analysis. *Journal of Retailing and Consumer Services*, *54*(April 2019), 102052. https://doi.org/10.1016/j.jretconser.2020.102052

Jose, A., & Lee, S. M. (2007). Environmental reporting of global corporations: A content analysis based on Website disclosures. *Journal of Business Ethics, 72*(4), 307–321. https://doi.org/10.1007/s10551-006-9172-8

Kaluarachchi, Y. (2022). Implementing data-driven smart city applications for future cities. *Smart Cities*, *5*(2), 455–474. https://doi.org/10.3390/smartcities5020025

Keller, K. L. (1972). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, *57*(1), 1–22. https://doi.org/10.1016/0039-9140(72)80130-9

Kharde, V. A. (2016). Sentiment Analysis of Twitter Data : A Survey of Techniques. *International Journal of Computer Applications*, *139* (11), 5–15.

Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? get serious! understanding the functional building blocks of social media. *Business Horizons*, *54*(3), 241–251. https://doi.org/10.1016/j.bushor.2011.01.005

Klein, J., & Dawar, N. (2004). Corporate social responsibility and consumers ' attributions and brand evaluations in a product – harm crisis. *International Journal of Research in Marketing. 21*, 203–217. https://doi.org/10.1016/j.ijresmar.2003.12.003

Kolk, A., Levy, D., & Pinkse, J. (2013). Corporate responses in an emerging climate regime : the institutionalization and commensuration of carbon disclosure. *European Accounting Review*, *23*(September 2013), 37–41. https://doi.org/10.1080/09638180802489121

Kujala, J., Sachs, S., Leinonen, H., Heikkinen, A., & Laude, D. (2022). Stakeholder engagement: past, present, and future. *Business and Society*, *61*(5), 1136–1196. https://doi.org/10.1177/00076503211066595

Lee, E., & Weder, F. (2021). Framing sustainable fashion concepts on social media: an analysis of #slowfashionaustralia instagram posts and post-covid visions of the future. *Sustainability*, 13(17), https://doi.org/10.3390/su13179976

Lestari, M. L., & Suardana, K. A. (2019). Pengaruh intensitas pengungkapan dimensi sustainability reporting terhadap reaksi pasar perusahaan BUMN yang terdaftar di BEI. *E-Jurnal Akuntansi*, *27*, 954. https://doi.org/10.24843/eja.2019.v27.i02.p05

Lodhia, S., Kaur, A., & Stone, G. (2020). The use of social media as a legitimation tool for sustainability reporting: A study of the top 50 Australian Stock Exchange (ASX) listed companies. *Meditari Accountancy Research*, *28*(4), 613–632. https://doi.org/10.1108/MEDAR-09-2019-0566

Manetti, G., Bellucci, M., & Bagnoli, L. (2017). Stakeholder engagement and public information through social media: a study of canadian and american public transportation agencies. *American Review of Public Administration*, *47*(8), 991–1009. https://doi.org/10.1177/0275074016649260

Mäntylä, M. V., Graziotin, D., & Kuutila, M. (2018). The evolution of sentiment analysis—A review of research topics, venues, and top cited papers. *Computer Science Review*, *27*, 16–32. https://doi.org/10.1016/j.cosrev.2017.10.002

Matas-Terrón, A., Leiva-Olivencia, J. J., Franco-Caballero, P. D., & García-Aguilera, F. J. (2020). Validity of the big data tendency in education" scale as a tool helping to reach inclusive social development. *Sustainability (Switzerland)*, *12*(13). https://doi.org/10.3390/su12135470

Natalia, I.A., & Soenarno, Y.N., (2021). Analisis pengaruh pengungkapan sustainability report terhadap nilai perusahaan pada perusahaan non keuangan yang terdaftar di Bursa Efek Indonesia (BEI) periode. *Jurnal Akuntansi Keuangan Dan Akuntansi Pemerintahan*, 3(1) 1–13. https://doi.org/10.30606/akpem.v3i1.857

Nurjanah, A. (2021). Corporate Social Responsibility Communication and Company Reputation in Pandemic Era. *Jurnal Komunikator*, *13*(2). https://doi.org/10.18196/jkm.12336

Omuya, E. O., Okeyo, G., & Kimwele, M. (2022). Sentiment analysis on social media tweets using dimensionality reduction and natural language processing. *Engineering Reports*, *October 2021*, 1–14. https://doi.org/10.1002/eng2.12579

Patten, D. M. (2020). Seeking legitimacy. *Sustainability Accounting, Management and Policy Journal*, *11*(6), 1009–1021. https://doi.org/10.1108/SAMPJ-12-2018-0332

Pavelle, S., & Wilkinson, C. (2020). Into the digital wild: Utilizing Twitter, Instagram, YouTube, and Facebook for effective science and environmental communication. *Frontiers in Communication*, *5*(October), 1–8. https://doi.org/10.3389/fcomm.2020.575122

Peslak, A. R. (2017). Facebook Fanatics: A Linguistic and Sentiment Analysis of the Most “Fanned” Facebook Pages. *Proceedings of the Conference on Information Systems Applied Research*, 1–11.

Pujiningsih, V. D. (2020). Pengaruh Sustainability Report Terhadap Nilai Perusahaan dengan Good Corporate Governance sebagai Variabel Pemoderasi. *Jurnal Riset Akuntansi Dan Keuangan*, *8*(3), 579–594. https://doi.org/10.17509/jrak.v8i3.22841

Reilly, A. H., & Hynan, K. A. (2014). Corporate communication, sustainability, and social media: It’s not easy (really) being green. *Business Horizons*, *57*(6), 747–758. https://doi.org/10.1016/j.bushor.2014.07.008

Russo, S., Schimperna, F., Lombardi, R., & Ruggiero, P. (2022). Sustainability performance and social media: an explorative analysis. *Meditari Accountancy Research*, *30*(4), 1118–1140. https://doi.org/10.1108/MEDAR-03-2021-1227

Singh, N. K., Tomar, D. S., & Sangaiah, A. K. (2020). Sentiment analysis: a review and comparative analysis over social media. *Journal of Ambient Intelligence and Humanized Computing*, *11*(1), 97–117. https://doi.org/10.1007/s12652-018-0862-8

Thelwall, M., Buckley, K., & Paltoglou, G. (2013). Sentiment in Twitter Events Mike. *Journal of the American Society for Information Science and Technology*, *64*(July), 1852–1863. https://doi.org/10.1002/asi

Zhao, L., Lee, S. H., Li, M., & Sun, P. (2022). The Use of Social Media to Promote Sustainable Fashion and Benefit Communications: A Data-Mining Approach. *Sustainability (Switzerland)*, *14*(3). https://doi.org/10.3390/su14031178