# The optimization of social media usage by BP2MI for Indonesian migrant worker families in rural areas

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**Abstract.** This study aims to examine the use of information technology through the Indonesian Migrant Workers Protection Agency (BP2MI), Twitter account @bp2mi\_ri. It is concerned with the management of BP2MI in public communication using social media in the information disclosure era. Furthermore, it maps the information in Twitter account @bp2mi\_ri related to the issue of Indonesian migrant workers. This also explored the Twitter account @bp2mi\_ri by utilizing computer-assisted qualitative data analysis software (CAQDAS), such as NVivo 12 plus to determine the level of sentiment, dominance of information, and influential actors in relations to the Indonesian Migrant Workers (TKI). The results showed that BP@MI has maximized social media, specifically Twitter, in communicating with the public, and the sentiment tends to be negative. This study is important in terms of efforts to distribute information to employees, including those in the agricultural sector, employers, and especially the families of migrant workers living in rural areas, in order to promote sustainable development.

## **1** Introduction

In today's world, information and communication technology (ICT) play a significant role in determining good governance [1]. ICT use will increase community trust while providing transparency and promoting service quality improvements [2]. Information disclosure is an essential part of government performance that has always sparked the public's interest. Furthermore, it is an organizational culture to deliver the most satisfactory service to the community in the ICT age [3]. Great openness and accountability is necessary while dealing with Indonesian workers engaging with different complicated issues. The Indonesian Migrant

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Workers Protection Agency (BP2MI) is tasked with ensuring that the protection of workers is adequate. BP2MI is an organization that replaces the previous agency, namely the National Agency for Placement and Protection of Indonesian Migrant Workers (BNP2TKI). However, the problem of Indonesian migrant workers appears to be endless after the name of the organization was changed.

During the Covid-19 pandemic, migrant workers' problems are not limited to unpaid wages and acts of abuse, but health issues and job loss are also a concern. Disclosure of information becomes critical, particularly for the families of migrant workers in rural and remote areas. With the advancement of ICT, social media can currently reach and influence people at all levels[4]. One of the social media that has become a public reference is Twitter, used as an influential microblogging and provides an instant information dissemination platform [5]. This study examines BP2MI's Twitter usage through the @bp2mi\_ri account in the context of migration governance related to Indonesian migrant workers. Specifically, this moves from BP2MI's public communication management using social media to the information mapping process in the @bp2mi\_ri Twitter account related to the issue of Indonesian migrant workers. The following section will outline the main concept of ICT and transparency, particularly in the Indonesian migrant workers' governance.

#### 1.1 ICT and transparency

International Relations (IR) emphasizes transparency since governance as a political practice dominates global politics in various problem areas of nuclear proliferation, internet governance and foreign aid politics [6]. However, studies linking the phenomenon of IR with ICT, such as those in diplomacy, have received less attention [7]. Technological acceleration is very influential on the political order, security, economy, culture, and the global environment [8]. In this context, ICT is promoting the state as an important actor of IR to continuously make improvements, specifically related to transparency in running the government [9]. Furthermore, more transparent state governance, as a result of ICT usage, will boost a country's international competitiveness [10].

The use of ICT that promotes transparency in various fields is consistent with the context of human security in the study of IR. Additionally, ICT can solve complex human security problems, including those involving the state [11,12]. In Asian countries [13], including Indonesia [14], it is very effective in supporting transparency and eradicating corruption. It is implemented comprehensively in the context of developing sustainable governance in the Philippines [15], Iran [16], and Poland [17,18]. ICT can solve human security issues such as environmental degradation, finance, and energy consumption in South Africa [19]. It has a positive impact on solving multi-dimensional human security problems. However, transparency, a consequence of using ICT, is part of the fulfilment of human rights as an essential aspect of security [20].

#### 1.2 Social media create transparency

Social media is an essential element of ICT that promotes transparency [21,22]. It has become an important domain of human life, forcing the government sector to adjust to the speed of information flow and openness expected by society. Furthermore, it can increase community involvement and trust in the government with all the advantages, such as speed. Therefore, the existence of social media in the government sector can be argued to benefit and pose obstacles in providing the optimum service to the public [23]. For example, a study reported that the use of social media is positively connected with public perceptions of government transparency [24]. This is also consistent with a survey, where social media improved government transparency in communities worldwide, including Kenya, Nigeria, Pakistan, and Indonesia. Similarly, in Indonesia, the level of trust rose 52% in 2019, as shown in Figure 1. Twitter is a social media that government officials often use in various countries to communicate directly with the public [25,26]. A study also shows that politicians and heads of government active on social media, specifically Twitter, tend to be influential in society because they are considered more transparent and closer to their constituents [27].

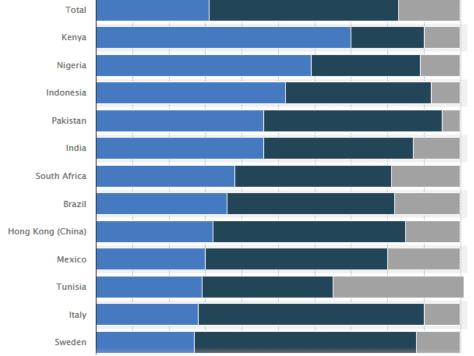


Fig. 1. Trend of internet users who believe that social media platforms have affected transparency in government as of February 2019 by country.

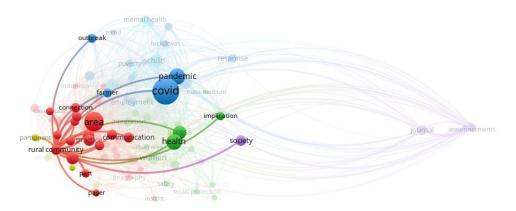


Fig. 2. VOSviewer research gap visualization on rural community and social media.

The results above showed two conceptual analyses, namely ICT and transparency and social media as a source of transparency, are critical in the governance of migrant workers. Social media of important institutions such as BP2MI with its Twitter account @bp2mi\_ri is critical for providing information and transparency to the public in relation to the problem of

Indonesian migrant workers. Therefore, this analysis is necessary to understand how BP2MI disseminates information through its Twitter account. As per analysis using VOSviewer application (Figure 2), there was no specific research related to social media and migrant workers as well as the workers' families in the rural areas. The word "social media" does not appear in the graphic. The phrase "rural community" is also unrelated to social media. However, it is remarkable that the words "rural community" and "Covid-19" are related. This indicates that research on rural communities and Covid-19 is published, but there is no evidence connecting it to social media, particularly social media and migrant workers which are noticeably absent from previous research papers.

# 2 Method

This study examines Twitter account of the BP2MI agency in the management of Indonesian migrant workers especially on information dissemination for workers' family in rural area using a qualitative approach with descriptive analysis. Specifically, it investigates the BP2MI Twitter account (@bp2mi\_ri), using computer-assisted qualitative data analysis software (CAQDAS), namely NVivo 12 plus to determine the form of sentiment, dominance of information, and influential actors in the information discourse. This is particularly conducted following the numerous problems of Indonesian migrants' workers.

NCapture is a free web browser extension for Chrome that allows web content collection, including Twitter microblogs, to be imported into the NVivo application. In this context, NCapture NVivo 12 Plus is used to collect Twitter datasets, import, encode, classify, and display data. Furthermore, the data is coded using the NVivo 12 Plus application to determine the metadata classification of the Twitter account. The NVivo 12 Plus application can analyze Twitter data to produce sentiment analysis, frequency of Twitter activity, and display the dominance of words (word cloud frequency). In this study, the Twitter dataset in the @bp2mi\_ri account was crawled on 11 November 2021 at 08.11 WIB with a total of 1342 tweets. The tweet activity was accumulated between August 2019-November 2021. After the dataset is crawled, coding and analysis were performed using NVivo 12 Plus, including word frequency, sentiment analysis, and crosstab analysis. The final results of the data are presented in a report after the analysis stage of the Twitter dataset using NVivo. These stages can be illustrated as shown in Figure 3 below.

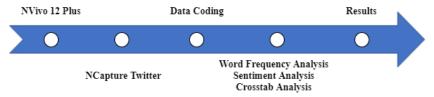


Fig. 3. Stages of data mining and analysis using NVivo 12 Plus.

## 3 Results

## 3.1 Social Media Activities

The use of social media by BP2MI through the @bp2mi\_ri account fluctuates is presented in Figure 4. Most of the tweets were posted in April 2020 (142 tweets) and October 2021 (140 tweets), while the least numbers were in February 2021 with zero (0) or no tweets. Previously, the concerned organization was known as BNP2TKI before changing to @bp2mi\_ri account.

The new account started tweeting in August 2019, and the monthly tweet activity averages 47.9%.

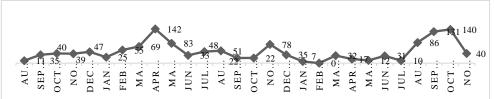


Fig. 4. Social Media Activities.

#### 3.2 Sentiment Analysis

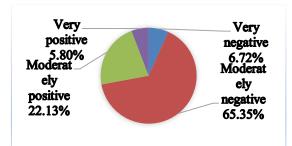


Fig. 5. Auto-Code Crosstab Query Sentiment Analysis.

In the context of sentiment analysis, Figure 5 demonstrates that negative sentiment dominated @bp2mi\_ri tweets by more than 72%. In contrast, a positive attitude is more modest, with a moderate and very positive proportion of 22.13% and 5.80%, respectively. The sentiment analysis results were acquired using Auto-Code Crosstab Query on NVivo 12 Plus software.

### 3.3 Dominant actor

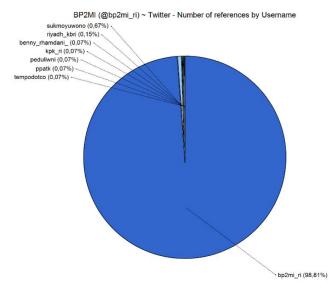


Fig. 6. The number of references by username indicates the most dominant actor

With a score of 98.81 %, the @bp2mi\_ri account reigns as the most important actor (Figure 6). Others range from the Indonesian Embassy in Riyadh to Tempo magazine, all of which have a very low score of less than 1% on average.

#### 3.4 Most frequent words



Fig. 7. Word Frequency.

Figure 7 depicts some of the most frequently used words in the @bp2mi\_ri account. Six of the most prevalent words were recognized using the NVivo 12 Plus application, as seen in the WordCloud above: 'https', 'bp2mi', '#pekerjamigranindonesia', 'pmi', '#sobatmigrants', 'migrant', 'placement', etc.

## 4 Discussion

The primary goal is to discover more about how BP2MI uses Twitter, particularly in relation to Indonesian migrant workers. The intensity of usage is relatively substantial, as seen in Figure 3, with an average of 47.9% tweets each month. On average, BP2MI accounts tweet practically every day to inform the public about concerns affecting migrant workers. There are two exciting trends in BP2MI's tweeting activity: the period with the highest intensity and with no activity. BP2MI admin was quite intense on Twitter in April 2020 (142 tweets) and October 2021 (140 tweets). The two explanations for this are, first, it coincided with a rise of daily COVID-19 cases, which became a concern and a hot topic globally. As a result, BP2MI publicizes relevant government actions, including their role in responding to the issue [21–23]. Second, there were no or very few tweets in February 2021 because the daily new case for Indonesia was already on a declining trend [29].

Meanwhile, sentiment analysis has an unexpected pattern, with the majority receiving a negative score. This is worth noting because the score is relatively high, at 72%, indicating that negative talk predominates in BP2MI accounts. Therefore, BP2MI has garnered significant public attention in the governance of the migrant worker issue, as evidenced by the @bp2mi\_ri account [25,27]. One example of the discourse in the account that contributes to negative sentiment is the following tweet on 20 October 2021.

"Mereka berangkat dengan kondisi sehat, pulang dengan kondisi yang kurang beruntung sudah sepatutnya negara hadir untuk mereka".

"They left in good health, but returned home in a less fortunate condition, the state should be there for them."

However, the negative sentiment is quite dominant in BP2MI's tweets, in disseminating information to the public, the organization is very successful because of its significant tweet activity. As a result, the @bp2mi ri account has a significant amount of influence over others (Figure 8). This success can also be seen from the dominance of the word that appears, namely 'https,' which shows that BP2MI provides follow-up links and more information on the posted issues. This means that the function of 'public communication' is carried out correctly. The narrative aspect of the word 'bp2mi', which ranks second is a strong indication that the BP2MI wants to show its role as a severe institution of handling the issue of migrant workers [5]. It synergizes with other institutions in handling the issue of migrant workers [2,20,30]. This can be seen in the sociogram analysis, which shows a strong relationship with other accounts. For example, the accounts of President of the Republic of Indonesia, the Ministry of Foreign Affairs, the Ministry of Home Affairs, and the Ministry of Manpower, and others are shown in Figure 8.

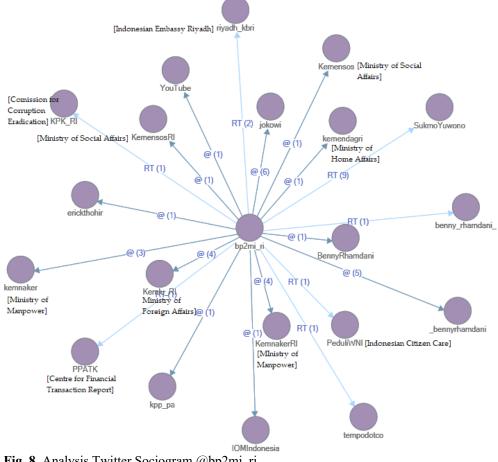


Fig. 8. Analysis Twitter Sociogram @bp2mi ri

# 5 Conclusion

The BP2MI institution is very active in using ICT, particularly Twitter. This is shown in the significance of tweets and the increasing intensity during the COVID-19 pandemic. BP2MI also dominates as the most crucial factor in Twitter's discourse on the governance of Indonesian migrant workers. The prominence of the words 'https' and 'bp2mi' in the tweets

demonstrates its success in leveraging Twitter to communicate information to the public. The preponderance of the word 'https' indicates a proactive approach to providing advanced information to the audience over the internet. However, the majority of BP2MI's tweets are negative due to the hitherto governance of Indonesian migrant workers. There are still numerous issues faced by the Indonesian migrant laborers. As a result, several objections and unhappiness were expressed on the BP2MI Twitter account. This study is important in terms of efforts to distribute information to employees, including those in the agricultural sector, employers, and especially the families of migrant workers living in rural areas, in order to promote sustainable development.

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