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Master's Thesis of Public Administration

**Social Media and Government
Responsiveness:
A Case Study of the Secretaries of the Department of Foreign
Affairs of the Republic of the Philippines**

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Responsiveness:
A Case Study of the Secretaries of the Department of Foreign
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Abstract

Social Media and Government Responsiveness: A Case Study of the Secretaries of the Department of Foreign Affairs of the Republic of the Philippines

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In today's world, technology has enabled faster, even instantaneous, communication and connection between people. One of the most defining features of this phenomenon is the proliferation of social media use, with more than half of the world's population utilizing social media. With this development, it must be logical for governments to utilize social media to enhance its responsiveness, however, this is not true in all cases, with some governments restricting or not taking advantage of

social media to enhance responsiveness. Responsiveness has been defined as the ability of the government to enact policies which have been expressly desired by its citizens. Despite the hesitancy with the use of social media, there are still some government officials who are active on their respective social media platforms, interacting with citizens, which in turn may contribute to the enhancement of government responsiveness. This paper will investigate one such case of the twitter use of the Philippine Secretaries of Foreign Affairs and how their twitter accounts, tweets, and network enhance the responsiveness of their government agency, the Department of Foreign Affairs.

To answer the research questions, the author will make use of Social Network Analysis (SNA), analyzing the twitter network of “#DFAForgingAhead” and @DFAPHL to determine the centrality measurements of the twitter account of the current Secretary of Foreign Affairs, Mr. Manalo, and Content Analysis of the tweets of the former Secretary of Foreign Affairs, Mr. Locsin, comprising of the following dates: 10-11 December 2019, or before the COVID-19 pandemic, and 10-11 December 2021, when the Philippine government has lifted the hard lockdown measures and some frontline services of the Department resumed. Did the pandemic increase the use of social media to enhance government responsiveness? What are the differences between the tweets

made by the former Secretary before the pandemic and during the pandemic in terms of government responsiveness? This is an interesting development made possible by the unprecedented current global situation.

The study found that the DFA and its Secretaries used their respective Twitter accounts to enhance government responsiveness, which may take the form of information dissemination, as shown in the SNA, and by addressing complaints, requests, and concerns of citizens, as shown in the Content Analysis. The study also demonstrated how SNA can be used to measure government responsiveness. However, effectiveness of social media to enhance government responsiveness may need further study and in-depth studies with extended time span may need to be undertaken to provide a clearer and more complete picture of how social media can be used to enhance government responsiveness.

Keywords: Social Media, Government, Responsiveness, Twitter, Case Study.

Student ID: 2021-27225

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Chapter 1. Introduction

1.1. Background and Purpose of the Study

In today's world, technology has enabled faster, even instantaneous, communication and connection between people. One of the most defining features of this phenomenon is the proliferation of social media use, with more than half of the world's population utilizing social media. With this development, how do governments take advantage of social media in order to provide better responsiveness to its citizens? This research aims to investigate the relationship between social media and government responsiveness using the case study of the Twitter accounts of both the current Secretary of Foreign Affairs, Mr. Enrique Manalo and the former Secretary, Mr. Teodoro Locsin, Jr. The research will build on the previous works on social media and government responsiveness, specifically the Master's Thesis entitled "Social Media and Government Responsiveness: A Case Study of Bandung City, Indonesia" written by Mr. Agi Agung Galuh Purwa. However, social media use in this case will focus on a head of the line ministry instead of local governments. It is interesting to note how the personal social media account of the head of an agency enhanced that agency's responsiveness. One of the most important aspects of democratic governance is the government's ability to respond to citizens' demands in an effective, efficient, and speedy manner. It is hoped that this study will add to the body of knowledge on social media use and government responsiveness and may in turn provide compelling evidence

that social media does enhance government responsiveness at the agency level, even if the mode is through the personal Twitter account of the agency Head.

The research aims to investigate government responsiveness through the Twitter accounts of (1) the current Secretary Mr. Manalo and (2) the former Secretary Mr. Locsin during his tenure as the Head of the Department of Foreign Affairs (DFA) through providing answer to the following research questions:

1. How is social media being used to enhance government responsiveness at the agency level?
2. What are the different kinds of government responsiveness that can be identified through the use of social media?
3. How effective is the use of social media to enhance government responsiveness at the agency level?
4. Is there a difference between the tweets and twitter interaction of the Secretary pre-pandemic and during the pandemic?

Further, the research aims to provide empirical evidence on the relationship between social media use and government responsiveness using structural holes and the brokerage role in social network analysis using the twitter account of the current Secretary. In addition, the research shall also examine the Twitter network of the current Secretary to find the bridging hubs playing a central role in the network and in turn, measure the degree to which the network is disturbed when these bridging hubs are eliminated to quantify the influence of these bridging hubs in the network.

Content analysis of the former Secretary's tweets shall also be investigated to determine what kind of content the Secretary tweeted and if these contributed to his agency's responsiveness to citizens. The current pandemic offers a unique opportunity to investigate whether or not there has been an increased utilization of social media to enhance government responsiveness. A comparison will also be made in this paper between the pre-pandemic tweets and tweets of the former Secretary during the pandemic. Did the pandemic increase the use of social media to enhance government responsiveness? What are the differences between the tweets made by the former Secretary before the pandemic and during the pandemic in terms of government responsiveness? This is an interesting development made possible by the unprecedented current global situation and is worth investigating.

1.2. Scope of the Study

The research shall focus on the Twitter accounts of both the current Secretary of Foreign Affairs, Mr. Enrique Manalo, and the former Secretary, Mr. Teodoro Locsin, Jr. Secretary Manalo is a career diplomat who has been with the DFA for over forty years. He was appointed as the Head of the Department on 1 July 2022 under the new administration of President Ferdinand R. Marcos, Jr (Department of Foreign Affairs, 2022). Secretary Manalo created his twitter account in July 2022, after he assumed as the new Secretary of Foreign Affairs. His twitter account is @SecManalo and already has over 5,000 followers despite its recent

creation. Secretary Locsin was the Philippine Foreign Affairs Secretary from November 2018 until June 2022 and is known for his tweets that are sometimes quoted by the international and Philippine media due to their frequently controversial nature (Tiglao, 2021). The former Secretary has a substantial following on his personal twitter account (@teddyboylocsin) with over 679,000 followers and his popularity may stem from the fact that he actively responds and interacts with other twitter users. The former Secretary also has a facebook account but he is most active on Twitter.

For this study, I will investigate the twitter account of Secretary Manalo as generated in the Twitter network of “#DFAForgingAhead” and @DFAPHL on 1 November 2022. For the Content Analysis, I will use the tweets made by Secretary Locsin on 10-11 December 2019 and 10-11 December 2021 to determine the contents of his tweets as well as the differences in his tweets pre-pandemic and during the pandemic period.

1.3. Research Method and Data

The thesis will focus on the Twitter accounts of both the current Secretary of Foreign Affairs, Mr. Enrique Manalo, and former Secretary Mr. Teodoro Locsin, Jr. I shall utilize Secretary Manalo’s twitter account for the Social Network Analysis (SNA) part while I will use Secretary Locsin’s twitter account for the Content Analysis section.

For purposes of this study, Twitter shall be used since Twitter allows two-way communication between users and can be used to identify the role of a particular account based on different kinds of network

structures. In addition, Twitter's features, such as its hashtags, public display of tweets, retweets, replies, and user followers and following accounts are important quantitative data for social network analysis (SNA) and Content Analysis to be employed in this research. Furthermore, twitter data policy states that public Tweets and replies are available to Application Programming Interfaces (APIs), which would allow NodeXL to extract the necessary data and information for this research (About Twitter's APIs, n.d.). The research aims to investigate government responsiveness through the Twitter accounts of the Secretaries and provide empirical evidence on the relationship between social media use and government responsiveness using structural holes and the brokerage role in social network analysis. Furthermore, the research shall also examine the Twitter network of the current Secretary to find the bridging hubs playing a central role in the network and in turn, measure the degree to which the network is disturbed when these bridging hubs are eliminated to quantify the influence of these bridging hubs in the network. Content analysis of the former Secretary's tweets shall also be investigated to determine what kind of content the Secretary tweeted and if these contributed to his agency's responsiveness to citizens.

The thesis aims to answer the following research questions:

1. How is social media being used to enhance government responsiveness at the agency level?
2. What are the different kinds of government responsiveness that can be identified through the use of social media?

3. How effective is the use of social media to enhance government responsiveness at the agency level?
4. Is there a difference between the tweets and twitter interaction of the Secretary pre-pandemic and during the pandemic?

As mentioned, to answer these research questions, I will use SNA and Content Analysis. The hypothesis of this study is: Social media can be an effective tool to enhance government responsiveness at the agency level. The twitter account and tweets of Secretary Manalo and Secretary Locsin enhanced the responsiveness of DFA to the public by providing information, addressing complaints, requests, and concerns of the citizens, by serving as a bridging hub among other twitter users, etc.

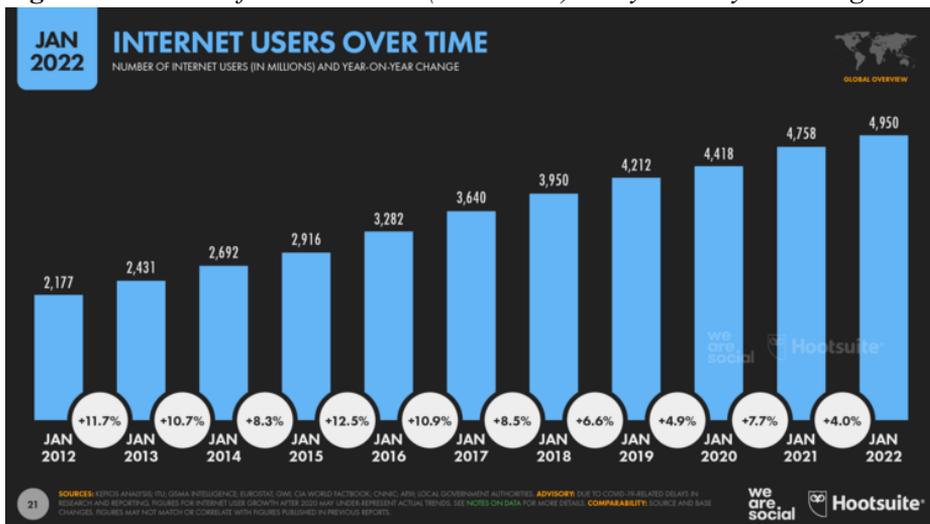
Chapter 2. Theoretical Background and Literature Review

2.1. Social Media

2.1.1 Ubiquity of Social Media

In today's world, social media is ubiquitous to the point that almost everyone we interact with have social media accounts or have access to social media. According to Digital 2022: Global Overview Report published by Datareportal, there are 4.95 billion global internet users at the beginning of 2022, representing 62.5% of the entire human population. Internet use has an increase of 4% or an increase of 192 million users compared to the previous year, which the author noted may be less than the actual number of new users due to limitation of reporting and researching brought about by the current pandemic. The figure below shows this growing trend of internet usage (Kemp, 2022):

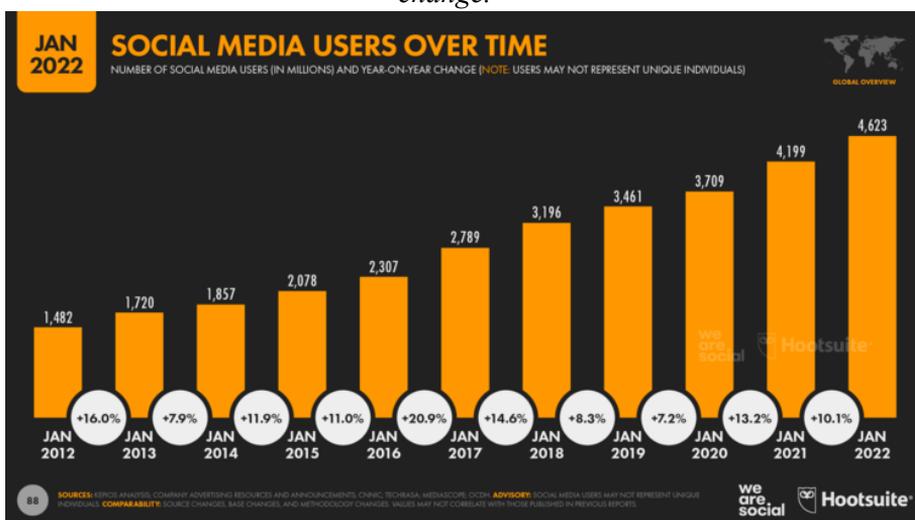
Figure 1. Number of Internet users (in millions) and year-on-year change.



Note. From Digital 2022: Global Overview Report
<https://datareportal.com/reports/digital-2022-global-overview-report>

With regards to social media use, the report cites that there are 4.62 billion social media users or around 58.4% of the world's population utilize social media but this may not mean unique individuals. The usage of social media, like internet use, has also surged to 10% compared to the previous year, representing 424 million new users in 2021 and an increase of 3.1 times compared to the figure in 2012 of 1.48 billion users. The figure below summarizes this trend (Kemp, 2022):

Figure 2. Number of social media users (in millions) and year-on-year change.

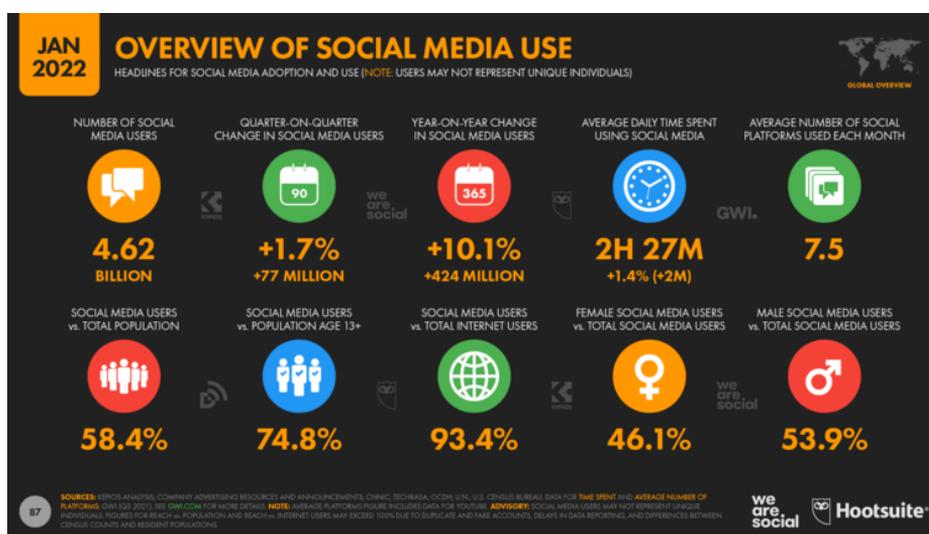


Note. From Digital 2022: Global Overview Report
<https://datareportal.com/reports/digital-2022-global-overview-report>

In addition, 93.4% of total internet users also utilize social media. Moreover, the average person uses social media for over 2 hours everyday, with 35.2% of his/her time online spent using social media. Below is an

overview of social media use as reported by Kemp (2022):

Figure 3. *Overview of Social Media Use.*



Note. From Digital 2022: Global Overview Report
<https://datareportal.com/reports/digital-2022-global-overview-report>

2.1.2 Definitions of Social Media

From these data, one can surmise the wide reach of social media and its potential to strengthen connection and interaction between and among humans and communities. But what is social media? Aichner et al compiled the definitions of social media from its first use in 1994 to 2019 and found that no single or common definition is accepted but that several definitions are simultaneously used and recognized in literature. Social media is generally utilized as a term to describe a range of online platforms that include blogs, business networks, collaborations, social networks, microblogs, photo and video sharing, product review, gaming, and virtual worlds. Further, the definition of social media has continuously

evolved from platforms to connect to becoming sources of information. Pre-2010 articles that provide definitions of social media focused on its ability to connect people with common interests while post-2010 articles shifted to creation and the sharing of user generated content through social media. Social media has the following uses as identified by the authors: (1) for connecting with friends and family, (2) for romance, (3) for job opportunities and connecting professionally, (5) for businesses and how they connect with their market, and (6) for interacting with companies and brands (Aichner et al., 2021). Boyd and Ellison provide a widely-used definition of social network sites, which are web-based services that permit users to create a profile that may be public or partially public, enclosed within a system. These sites also provide a list of connections to the users which may be viewed by themselves and by other users. For the authors, the public display of relationship and connection between users is an important part of social network sites as this feature allows more connections between individuals which would not have happened otherwise (Boyd & Ellison, 2007).

Social media has also been defined as a “group of internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content” (Kaplan & Haenlein, 2010, pg. 61). Web 2.0 pertains to the collaborative use of internet sites, in contrast with Web 1.0 in which sites are individually published. An example of Web 2.0 are “wiki” sites wherein content is collaboratively adjusted and updated. User Generated

Content (UGC) are user created content that are publicly accessible (Kaplan & Haenlein, 2010.) The Organization for Economic Cooperation and Development (OECD) identified three characteristics of UGC: (1) must be published either on a public website or on a social networking site; (2) there is creative effort in the content and that the creator/user provided a value-added to the content; and (3) the content is typically generated outside of professional routines and practices and may be motivated by connecting with peers, gaining fame, notoriety, or prestige, or self-expression (OECD et al., 2007). As such, from the attributes of Web 2.0 and UGC, social media allows increased participation and interaction of users to create, self-express, and connect (Kaplan & Haenlein, 2010).

Obar and Wildman echo the two definitions provided above: social media are presently Web 2.0 internet-based applications, UGC is an important aspect of it (“lifeblood of social media”), profiles are created by individuals and groups and are hosted in sites or apps designed and maintained by a social media service, and that social networks are created by connecting profiles with other profiles (Obar & Wildman, 2015). Carr and Hayes (2015) also forwarded their own definition of social media as *“internet-based channels that allow users to opportunistically interact and selectively self-present, either in real-time or asynchronously, with both broad and narrow audiences who derive value from user-generated content and the perception of interaction with others”* (Carr & Hayes, 2015, 50). This definition emphasizes that social media are online tools

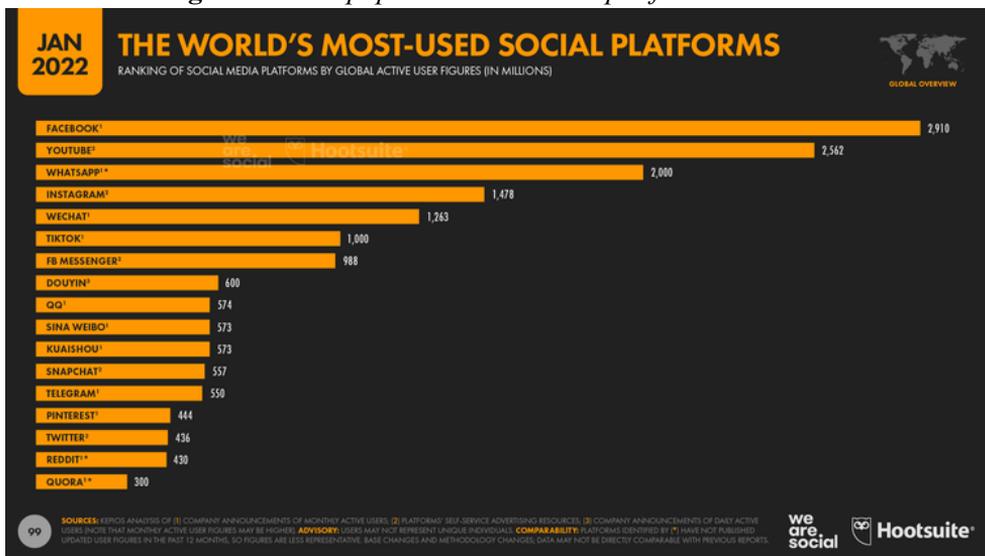
that are accessed through the Internet, that may be accessed asynchronously, with actors not needing to be interacting at the same time but the channel of interaction is always available. Further, and what is relevant to this paper, is that social media has user-generated value gained from users' contributions, uploads, and content, as well as allowing multidirectional communication that permits both mass and interpersonal interaction (Carr & Hayes, 2015). Based on these definitions, one can surmise that social media has democratic characteristics that permit contents to be published and shared by users and also enhances connectivity between users. Social media permits more connectivity between users and people by profile or follower suggestions based on users' existing connections or preferences which otherwise would not have happened. As such, social media makes it possible to have a wider reach, bigger audience, and more people to influence with user-generated content. Through these characteristics, and coupled with the fact that social media use is widespread and social media itself is cheap or oftentimes free, social media can be a viable tool to enhance government responsiveness.

2.1.3 Social Media Platforms

There are also many social media platforms available to everyone. An individual may use one or more of these platforms since they offer different experiences and features. For example, Facebook is mainly used to interact and connect with people through status sharing and photo

uploads. Instagram is known for its photo sharing feature and Instagram stories and reels. Youtube focuses on video contents while Twitter is used for swift and brief tweets and being able to see what is currently trending based on hashtags. The figure below shows the world’s most popular social media, with Facebook topping the list with 2.91 billion users as of October 2021 (Kemp, 2022):

Figure 4. *Most popular social media platforms.*



Note. From Digital 2022: Global Overview Report
<https://datareportal.com/reports/digital-2022-global-overview-report>

This paper will concentrate on one particular social media, which is Twitter. As indicated in the figure above, Twitter is one of the world’s most popular social platforms. Twitter became operational on 13 July 2006 and is described as an online microblogging site. Users have subscribers known as followers. Tweets are status updates consisting of a maximum of 140 characters posted by users on their profile pages and may be viewed by their followers and other Twitter users. These tweets

may also be retweeted, meaning another user may repost the original tweet (Asur & Huberman, 2010). For purposes of this study, Twitter shall be used since Twitter allows two-way communication between users and can be used to identify the role of a particular account based on different kinds of network structures. In addition, Twitter's features, such as its hashtags, public display of tweets, retweets, replies, and user followers and following accounts are important quantitative data for social network analysis (SNA) and Content Analysis to be employed in this research. Furthermore, twitter data policy states that public Tweets and replies are available to Application Programming Interfaces (APIs), which would allow NodeXL to extract the necessary data and information for this research (About Twitter's APIs, n.d.).

2.1.4 Social Media Use in the Public Sector

Based on the above discussion, social media has the potential to enhance government responsiveness due to the proliferation of social media use, its relatively low cost, and its widespread reach. According to Criado et al as cited in Noh (2019), social media use in the public sector has four core characteristics, namely: collaboration, searchability, linkability, and openness. These characteristics permit governments to provide better information dissemination, better public services, and allow citizen participation in public affairs. Moreover, social media use may be resource efficient and a way to innovate government processes (Noh et al., 2019). Social media use may be at the local level or agency level. At the

local level, Seigler found that 82% of 157 department managers of 261 large cities across the United States utilize some form of social media to connect with their constituents. However, the utilization of social media depends on the perceived organizational culture and administrator preconceptions in these cases. Social media is also more likely to be utilized in cities that have a centralized administrative structure (Seigler, 2015). At the agency level, Panagiotopoulos et al studied the use of social media by the UK Food Standards Agency (FSA) to provide government services. Through their websites, blogs, facebook groups, Twitter, youtube channel, email alerts, RSS feeds, pinterest, and mobile applications, FSA is able to provide information, training, facts and resources (such as research, documents, and instructional videos), communicate issues related to food hygiene and safety, broadcast campaigns, connect with food professionals and experts, display infographics, and provide hygiene rating scheme and allergy alerts. As such, the use of social media by the FSA enhances its ability to listen, network, and collaborate with its target audience (Panagiotopoulos et al., 2013).

The use of Twitter to enhance government responsiveness has also been widely investigated. Lorenzi et al asserted that Twitter allows a two-way platform between local governments and constituents that permits citizens to propose public work that require completion. This in turn allows local governments to optimize its responsiveness by basing their public works activities and routes on the requests received from their Twitter. For the authors, this is an efficient, transparent, and cost-effective

way to enhance government responsiveness of local governments with regards to public works (Lorenzi et al., 2014). Eom et al provided evidence that the Twitter account of the Seoul City Mayor, Mr. Wonsoon Park, played a bridging role between citizens and other public officials on Twitter. Such role permits enhanced government responsiveness by addressing the information asymmetry between the government and citizens, and by allowing citizens to raise their concerns and have these addressed by the relevant local government authorities (Eom et al., 2016). Similarly, Purwa investigated the Twitter account of the mayor of Bandung City, Indonesia, Mr. Ridwan Kamil, and found that the mayor plays a central bridging hub and brokerage role out of all the actors in the Bandung City Twitter network. However, Mr. Kamil used his Twitter mainly for information and news sharing. The author concluded that although social media (Twitter) contributed to the Bandung City's responsiveness, its usage heavily depends on the preferences and traits of government officials and leaders (Purwa, 2018).

The use of social media by government entities appears to have some benefits. However, there have also been some disadvantages and factors that had a negative impact on the government use of social media. Noh et al argued that there are wide differences in the use of social media by government officials and in turn, there are also differing outcomes in terms of government responsiveness. These factors include population, financial independence, level of government, the entity operating social media, the median age, and whether or not social media is used for

interaction or for opinion gathering as the most influential in social media use in local government. In addition, the quality of public service and responsiveness through social media use has not been thoroughly investigated as of present. As such, additional research is needed in this regard (Noh et al., 2019). Furthermore, social media use may have some legal implications, such as data maintenance and privacy and the way the public reports to the authorities through social media (Kavanaugh et al., 2012). The OECD also cautions that social media use by governments is mostly not governed by a dedicated strategy or overall plan for its institutional use and as such, its potential for citizen participation in policy processes and improved government responsiveness are not thoroughly met. Moreover, the OECD found that political leaders are more popular on social media than the government institutions that they represent, leading to more popularity for the political leaders and this also shows the need for government institutions themselves to maximize the benefits of social media (OECD & Mickoleit, 2014).

What is more alarming and apparent at present as well is the use of social media by governments to spread misinformation and sow division among the citizens. Hemsley et al provided the following examples: in Mexico, bots were utilized to suppress dissent against the administration especially during elections; the same is true in Venezuela but it is the opposition which made use of social media to spread misinformation. The authors identified the trend wherein social media is used for “evil”, that is, the creation of false narratives which emerge from

multiple sources and construct an “alternative” reality accepted by a community or part of the citizenry. Such proliferation and weaponization of social media is currently a serious challenge (Hemsley et al., 2018).

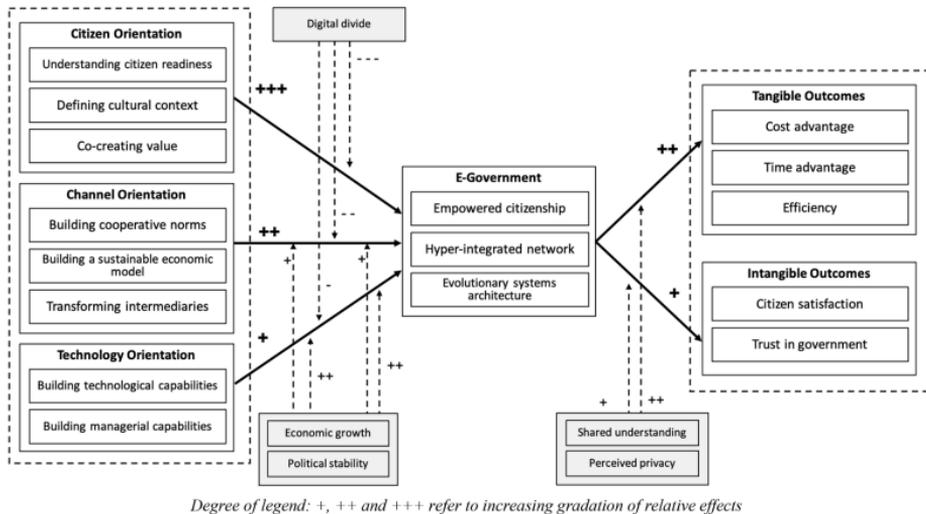
In addition, there is still a debate as to whether or not social media use by governments does enhance responsiveness. For some scholars, there is no compelling evidence yet if there has been an increased participation of citizens in decision making due to social media (Yang & DeHart, 2016). The ideal usage of social media regarding government responsiveness is to have an increased interaction between the government and its citizens and for social media to permit a two-way communication between these two entities (Vigoda as cited in Purwa, 2018). However, it appears that social media is used in the public sector mainly for news, to publish government activities, and for publicity (Eom et al., 2018). Further, there appears to be a disparity on the use of social media between regions, with less developed regions not having the same access and utility of social media as more developed regions (Noh et al., 2019).

2.1.5 Social Media and e-Government

Social media use has been linked with the development of e-government. Electronic government (e-government) is the usage of information and communication technology (ICT) for the provision of government services. The goal of e-government is to enhance the quality of services, and improve accountability and efficiency (Malodia et al., 2020). Malodia et al further developed a conceptual framework of

e-government that emphasizes empowered citizenship, hyper-integrated networks, and evolutionary systems architecture. The figure below shows this conceptual framework:

Figure 5. *E-government conceptual framework.*



Note. From Malodia et al. (2021).

The above conceptual framework shows the factors for the successful implementation of e-government, considering that e-government, especially in developing countries, have not reached their intended outcomes. For the authors, the main factor that must be considered in the successful implementation of e-government is citizen orientation, or the government’s commitment to respond to the needs of citizens, through viewing citizens as customers (Malodia et al., 2020). Twizeyimana and Andersson also found that the public value, or the expectations of citizens towards government services, of e-government are improved public services, improved administrative efficiency, and

improved trust and confidence in the government. Malodia et al's concept of citizen orientation lies within the first dimension of public value, improved public services. Citizens have the expectation that e-government should enhance government responsiveness to their needs (Twizeyimana & Andersson, 2019). The use of social media, therefore, coincides with the goals of e-government. Better public services may be provided by the government when citizens have a direct way of communicating their wants and needs to the authorities. Citizens are already very familiar with social media and they are able to utilize this easily to express their needs. In addition, social media use by the government is relatively more cost efficient than developing its own website or applications. Popular social media sites such as Facebook, Instagram, and Twitter do not cost anything and governments may take advantage of these platforms to enable two-way communication between citizens and governments.

E-government is also in line with democratic dimensions such as openness, inclusiveness, transparency, participation, and collaboration (Twizeyimana & Andersson, 2019). The former President of the United States, Barack Obama, in an official memorandum, recognized the usefulness of social media in making the government transparent, participatory, and collaborative - values that are important in a democratic society (Obama, 2009). Further, social media use has been perceived to encourage good governance. Good governance is defined as the "*exercise of economic, political, and administrative authority to better manage affairs of a country at all levels*" (Basu, 2004, p.10). Due to social media's

user-generated content, social media also allows a “many-to-many” communication structure different from the traditional “one-to-many” structure employed by the traditional media to broadcast publicly, which enhances participation in democratic societies. In addition, democratic movements may be supported through information sharing, encouraging participation, and ease collaboration with the usage of social media. Social media has an effect of democratizing access to information and communication tools. However, social media use may also lead to repression, with authoritarian governments employing censorship policies to silence dissent (Tucker et al., 2017). Examples of repression perpetrated by the governments have already been discussed earlier. It appears that governments have opposing views regarding social media use: one, as an opportunity to enhance delivery of public services, and the other to restrict its usage. This paper will later discuss how some officials of the Philippine government are of the former view and how it makes use of social media to enhance government responsiveness.

2.2. Government Responsiveness

One of the most important aspects of democracy is government responsiveness, specifically to the wants and needs of citizens (Dahl, 1971). For Dahl, democracy’s defining feature is that this political system and governance should be absolutely responsive to the entirety of its citizenry and, in this sense, citizens are considered politically equal with the government. Dahl identified three (3) requirements to meet

government responsiveness, namely: (1) that citizens have the free opportunity to define their preferences, (2) that citizens have the free opportunity to express or articulate these preferences both to the government and their fellow citizens individually or through collective action, and (3) that these preferences are fairly considered by the government in decision making without prejudice or discrimination against the content or source of the identified preferences (Dahl, 1971). Governments are deemed responsive if they enact policies that have been expressly desired by the constituents (Przeworski et al., 1999). Government responsiveness is also related to political accountability of leaders since it pertains to the following: (1) leaders' willingness to take heed of citizens' requests and complaints, (2) the leaders' responsibility to articulate and forward their constituents' demands to relevant decision-making bodies, and (3) leaders' ability to deliver the good and services requested by their citizens which validates that the wants and needs of the citizens have been met (Bratton, 2012). In addition, government responsiveness is associated with public opinion. Public opinion reflects citizens' preferences, wants, and needs (Hagemann et al., 2017). Government responsiveness is also a public administrative activity that leads to an increased medium of information and a way to respond more quickly to the inquiries of citizens (Panagiotopoulos et al., 2013).

As such, government responsiveness may be enhanced through social media since social media provides a two-way interaction and connection between the government and citizens: first, citizens are able to

express their wants and needs through social media, and second, the government and its officials may be able to respond, by taking heed of complaints and requests, forwarding the demand to relevant offices, and deliver the wants and needs, through social media as well. On the part of citizens, democratic characteristics as identified by Dahl may be apparent in social media: by enabling citizens to express their preferences, and by being a platform that enables individual expression and also collective citizen action. On the government side, social media can serve as a platform or repository for citizen preferences from which the government can refer to. In addition, social media can also be a digital space for the government to respond directly to citizen queries and concerns.

2.3. Social Media and Government Responsiveness in the Philippines

In the Philippines, social media use is widespread. In fact, the Philippines has been consistently ranked first for time spent in social media by advertising companies We Are Social and Hootsuite in their annual report for the 6th year in a row. Filipinos are on social media at an average of 4 hours and 15 minutes every day, higher than last year's record of 3 hours and 53 minutes (Chua, 2021). In addition, the Philippines has also been ranked first in internet usage worldwide, with an average of 10 hours and 56 minutes on the internet everyday ("The Philippines Are the World's Most Active Internet and Social Media

Users,” 2021). However, internet access remains a challenge in the Philippines. According to the Philippine Statistics Authority, in 2019, only 75.4% of the population has access to social interaction on the internet, with only 73.9% having access to research work or study on the internet. This brings the average of 63.6% of the total population with exposure to the internet in the Philippines (Philippine Statistics Authority, n.d.).

Social media use by government officials and institutions is “encouraged”. However, the governing regulation crafted by the Department of Information and Communications Technology (DICT), Administrative Order on Social Media Use for the Government, is still in the drafting stages and has not been signed by the President as of present (Pateña, 2018). As such, there are still no standard guidelines governing the use of social media by government agencies in the Philippines; instead, each agency crafts their own provisions. In addition to the lack of an overarching strategy for Philippine government agencies and officials, there is also the concern about the use of social media by the same government agencies to proliferate “fake news” or misleading information, which, as shown in the previous section, appears to be a trend at present. Many Filipinos rely on the information available on popular social media websites in the Philippines, namely Facebook, Twitter, and Youtube since Filipinos have ready-access to these platforms. However, some government agencies have been criticized for peddling misinformation in their respective social media platforms. Pro-government “bloggers” were also appointed in key government

positions as well, which undermine freedom of expression in the Philippines (Gutierrez, 2017). Even during the pandemic, fake news proliferated through social media, with official social media accounts of government agencies promoting such misinformation (“Increased Reliance on Government Sources Dangerous for Filipinos on Facebook,” 2022).

However, despite the shortcomings mentioned above, the Philippines can still be considered as an example of a state which views social media as an opportunity to increase responsiveness. Almost all government agencies in the Philippines have their respective social media accounts, reflecting the government’s recognition that social media can be an effective communication tool to provide information, publish events and happenings, improve reputation, program promotion, etc (David, 2022). There are also social media accounts which the public rely on for information and queries, such as the twitter account of the Metropolitan Manila Development Authority (MMDA). The MMDA twitter account is responsive to queries and tweets it receives from the public regarding the traffic situation in the Metro, floods, car crashes, etc (David, 2022). In addition, the Philippine government has officially recognized the role of social media for digital advocacy, wherein social media is used to publish advocacy materials of the government (Baquiran, 2022). As such, the Philippines supports the use of social media to improve the provision of government services and information dissemination.

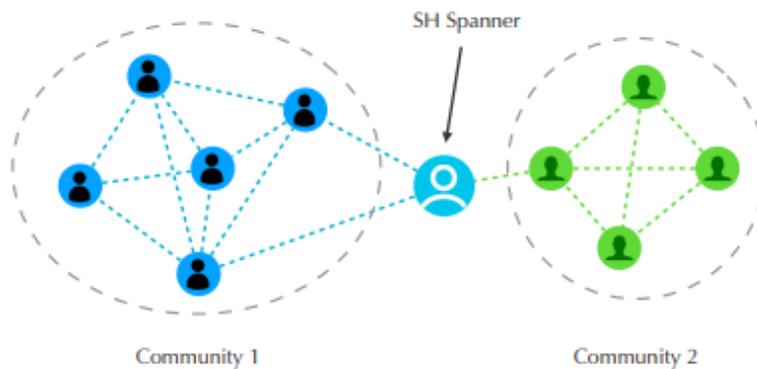
2.4. Barriers to responsiveness

One of the biggest barriers to responsiveness is information asymmetry. Information asymmetry pertains to the unequal access to relevant information between a principal and agent. In public administration, this information asymmetry manifests itself in two ways, first, between elected politicians and bureaucrats, and between public officials and citizens. For the first scenario, elected politicians may not have the technical expertise, experience, and needed information bureaucrats may possess that may render politicians unable to carry out their constituencies' demands, thereby limiting responsiveness. Similarly, bureaucrats may not have access to citizens' demands that politicians have, making bureaucrats unable to determine what is demanded by citizens. For the second scenario, citizens may not be aware of how to express their demands to the public officials. Public officials, in turn, may find that it is in their best interest to perpetuate such information asymmetry since it lessens accountability and enables them to pursue private gains. In short, information asymmetry is a big hindrance in government responsiveness. As such, lessening such information asymmetry may already improve responsiveness (Wolf, 1994).

Other important concepts with regards to responsiveness is that of Burt's structural holes and brokerage roles. In order to overcome information asymmetry, structural holes may be bridged together by actors acting in a brokerage role. Structural holes refer to holes formed in a social network or structure due to groups of people having no connections

with each other. Actors who have brokerage roles are the ones who act as a bridge between these unconnected groups of people, thereby filling the structural holes, as illustrated in the figure below. Note that the structural hole spanners are the brokerage roles in the network (Lin et al., 2020).

Figure 6. *Brokerage role in Social Networks.*



Note. From Lin et al. (2020)

Since brokerage roles bridge these unconnected groups of people together, the brokerage role provides advantages, such as having control and access to nonredundant information, and new information being more readily available to them. More often, these actors in brokerage roles are weak ties (Hansen & Himelboim, 2020). Strong and weak ties as discussed by Granovetter pertains to the kinds of relationships and connections among groups of people. Strong ties are those connections between close and similar actors, and due to this, information between these actors tend to be redundant and internalized, resulting in new information not coming into this network as well as information from this

network not going out. Weak ties, on the other hand, allow the flow of nonredundant information from outside groups, since weak ties connect different groups. As such, weak ties have important brokerage roles in social network structures that may lessen information asymmetry (Eom, 2018).

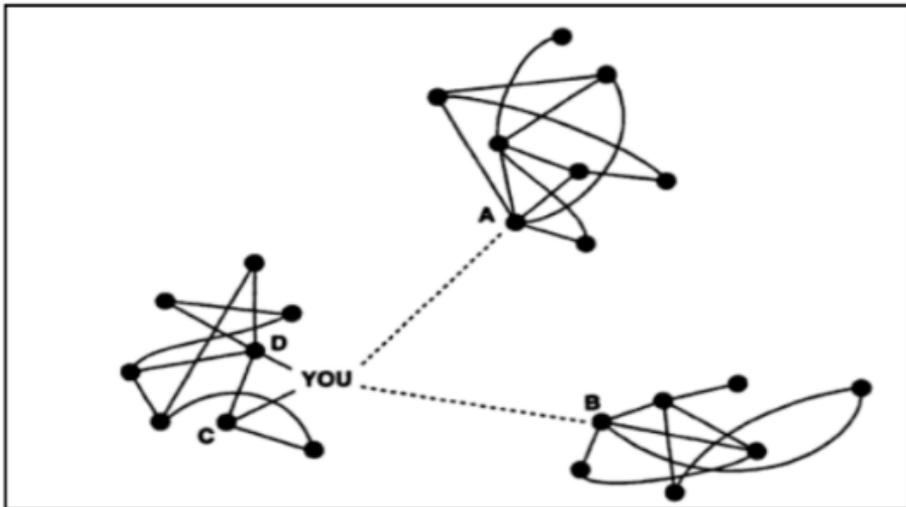
Based on the discussion above, a study on the use of Twitter by the Head, Minister, or Secretary of a line agency may add to the body of research investigating social media and government responsiveness at the agency level. As shown, Twitter is a useful platform that allows two-way communication between users and can be used to identify the role of a particular account based on different kinds of network structures. It has also been exhibited that Twitter does enhance government responsiveness at the local level but how about at the agency level? The next section will discuss the Research Design.

Chapter 3. Research Design

3.1. Social Network Analysis (SNA)

To answer the research questions, the study will use Social Network Analysis (SNA). SNA is the study and analysis of the social environment in terms of patterns or regularities in relationships (structure) among interacting units (Wasserman & Faust, 1994). The study will employ the method used by Eom et al and Purwa in their respective studies and as such, tweets will be analyzed using structural hole and the role of brokerage in social media. This will provide a map of patterns of interaction, connection, and flow of information between Twitter users. These interactions range from information sharing which lessens information asymmetry between the government official (in this case, the Secretaries of Foreign Affairs) and citizens, as well as linking users that would otherwise not have had any interaction or connection in the absence of the bridging hub. In a social network, a vertex is the main unit of the network. Vertices are also called actors, nodes, and pertain to the twitter users in this study. An edge is the connection or links between two vertices (Social Media Research Foundation, n.d.). The figure below illustrates a network with structural holes from Burt (1992) as cited in Eom et al:

Figure 7. *Weak ties and the brokerage role.*



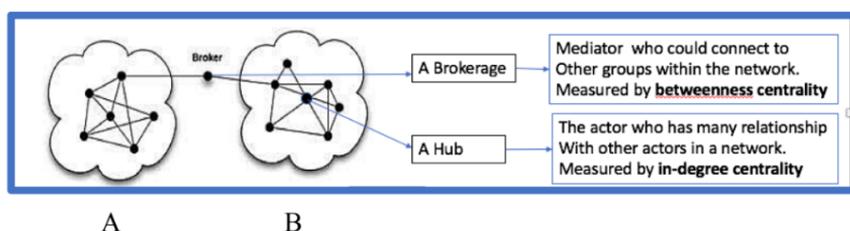
Note. From Eom et al. (2018)

The figure shows how YOU forms a connection between A, B, and D which otherwise would not have happened in the absence of YOU. In this instance, YOU becomes a broker in this specific network that has many structural holes, the structural holes being the absence of connection between the different points/actors (such as A, B, and D) (Eom et al., 2016). The vertices form edges and the YOU vertex creates an edge, linking A, B, and D vertices together and providing a non redundant linkage.

NodeXL will be used to determine the centrality measure of @SecManalo in the Twitter network of those who use “#DFAForgingAhead” and @DFAPHL. NodeXL will also be used to determine the percent change to which the network is disturbed in case the bridging hubs are eliminated. Betweenness centrality will also be investigated in the case that @SecManalo is eliminated. Centrality refers

to how dominant the actors are connected in a network and has two types: (1) betweenness centrality and (2) degree centrality. Betweenness centrality measures the extent to which the actor falls on the shortest path between other pairs of actors in the network. A high number signifies that the vertex is located in a central position in the network. Degree centrality shows the direction of the relationship between actors, whether in-degree (ex. No. of users following a user) and out-degree (ex. no. of users that a user follows). Relevant to this study is the in-degree centrality, which pertains to the number of edges or connections that other vertices have made to a certain vertex, for example the other users' tweet at, retweet, or mentions of a certain vertex. Having a high in-degree centrality means that many vertices refer to that certain vertex. The figure from Purwa below illustrates this concept:

Figure 8. *Betweenness and in-degree centrality.*



Note. From Purwa (2018).

The figure above shows how the broker provides a brokerage role between two hubs. Using NodeXL, the betweenness centrality of the broker and the in-degree centrality shall be measured to determine if the current Secretary's twitter account plays a bridging role among the

#DFAForgingAhead and @DFAPHL network.

The study will also determine if the twitter account of the Secretary forms a bridging hub. Bridge refers to a mediator who enables contact among clusters in a network while hub means an actor who has connections with other actors in the network and on Twitter means a user with a big number of followers. To be a bridging hub, a user must play a brokerage role connecting one group with another group. This would allow networks to be connected which otherwise would not have happened without the bridging hub. The bridging hub is therefore a mediator in terms of bridging measured by the betweenness centrality and a hub based on the number of followers which is measured by the in-degree centrality. The bridging hubs in this study will be measured as the users who are at the top 1% in the network in terms of betweenness centrality values and who are at the top 10% in terms of in-degree centrality values. These analyses shall be done for tweets and twitter network of the “DFAForgingAhead” and @DFAPHL.

3.2. Content Analysis

Content Analysis will also be used in the research to determine the level of government responsiveness through social media. Content Analysis is the study of the content with reference to the meanings, contexts, and intentions contained in the message (Prasad, n.d.). Berelson defines content analysis as a “research technique for the objective,

systematic, and quantitative description of the manifest content of communication” (Berelson, 1952). Content Analysis involves the identification, collation, analysis, and interpretation of tweets in order to quantify patterns based on the tweets contents. The tweets of Secretary Locsin and the tweets directed to him from the public will be analyzed and categorized based on the following classifications that correspond to the mandate of the DFA, as shown in the table below:

Table 1. *Classification of Tweets.*

Classification	Examples of content
Political	Foreign Policy, Information about Philippine Diplomacy, Vaccine Diplomacy
Economic	Trade issues, Vaccine Diplomacy
Assistance-to-Nationals (ATN)	Repatriation, Assistance to Overseas Filipino Workers (OFWs)
Consular	Passport services, authentication/apostille, updating of consular records
Cultural	Information on cultural programs of the Philippine embassies and consulates
Others	Miscellaneous (birthday greetings, retweets of articles of interest to the Secretary)

For this study, I will have a Case Study Database, attached as **Appendix A**, wherein all the relevant tweets will be stored to increase the reliability of the findings of the study. As previously mentioned, the tweets to be examined are those made by the former Secretary on 10-11 December 2019, prior to the pandemic, and on 10-11 December 2021, when the Philippine government has eased the hard lockdown restrictions

over the country. This will enable us to compare if there has been a difference in the contents of the tweets made by the Secretary before the pandemic and during the pandemic in terms of government responsiveness. This may also reveal if there has been an increase in the use of Twitter during the pandemic to enhance government responsiveness.

3.3. Data and Scope

The proposed thesis will focus on the Twitter accounts of the incumbent Secretary of Foreign Affairs, Mr. Enrique Manalo, and former Secretary Teodoro Locsin, Jr. Secretary Manalo is a career diplomat who has been with the DFA for over forty years. He was appointed as the Head of the Department on 1 July 2022 under the new administration of President Ferdinand R. Marcos, Jr (Department of Foreign Affairs, 2022). Secretary Manalo created his twitter account in July 2022, after he assumed as the new Secretary of Foreign Affairs. His twitter account is @SecManalo and already has over 5,000 followers despite its recent creation. Secretary Locsin was the Philippine Foreign Affairs Secretary from November 2018 until June 2022. Secretary Locsin is a lawyer and a journalist who also was elected as a Congressman from 2001 to 2010. He also served as a legal counsel and speechwriter to previous Philippine presidents and prior to his appointment as Secretary of Foreign Affairs, he served as the 20th Philippine Permanent Representative to the United Nations (UN) (Secretary of Foreign Affairs Republic of the Philippines,

n.d.). Secretary Locsin frequently uses his personal twitter account (@teddyboylocsin) to interact with other Twitter users and provide commentaries on politics, diplomacy, consular affairs, social issues, among others. He has 679,000 followers on Twitter and follows 568 users.

The table below shows an overview of the Secretaries’s twitter accounts:

Table 2. *Overview of Twitter accounts.*

Information	Remarks
Current Secretary Enrique Manalo	
Twitter handle	@SecManalo
Account creation	July 2022
Following users	3 <ul style="list-style-type: none"> ● DFA Philippines ● Bongbong Marcos - Official Twitter account of the current President of the Philippines ● @teddyboylocsin - Official Twitter account of former Secretary Teodoro Locsin, Jr.
Followers	5,082 Notable users: <ul style="list-style-type: none"> ● Former Secretary Locsin ● DFA Philippines ● Ambassadors based in the Philippines ● Various journalists and members of the press
Tweets	111
Verified account?	Yes
Former Secretary Teodoro Locsin, Jr.	
Twitter handle	@teddyboylocsin
Account creation	April 2011
Following users	616 Notable users and their follower count: <ul style="list-style-type: none"> ● DFA Philippines - 118,000

	<ul style="list-style-type: none"> ● European Commission - over 1 million ● Ursula von der Leyen - over 1 million ● Twitter accounts of various Philippine Embassies and Consulates
Followers	<p>674,216</p> <p>Notable users:</p> <ul style="list-style-type: none"> ● Various former and current Philippine senators ● Various Philippine politicians ● Various Philippine Cabinet members ● Various Philippine media outlets
Tweets	294,800
Verified account?	Yes

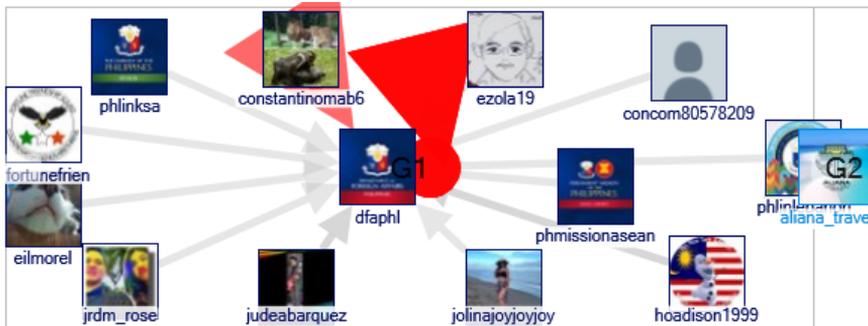
Chapter 4. Findings and Discussion

4.1. Social Network Analysis

4.1.1 Twitter Network of #DFAForgingAhead generated on 1 November 2022

As stated earlier, the official hashtag used by the DFA is #DFAForgingAhead. NodeXL was run to analyze the twitter network using this hashtag generated on 1 November 2022. Based on NodeXL, only 14 users used “#DFAForgingAhead” for this set. Figure __ below shows the visualization of this Twitter network:

Figure 9. Visualization of the Twitter network of #DFAForgingAhead generated on 1 November 2022.



Note. Created with NodeXL Pro (<http://nodexl.codeplex.com>) from the Social Media Research Foundation (<http://www.smrfoundation.org>)

As can be seen from the above, the twitter network for #DFAForgingAhead is not dense. The DFA’s Official Twitter Account, @DFAPHL, is in the middle of Group 1 (G1) and the twitter account of the current Secretary is not even included in this network. The table below summarizes the centrality measures of this network, showing the 3 top

users based on betweenness centrality and in-degree centrality:

Table 3. *Centrality measures of bridging hubs in #DFAForgingAhead network.*

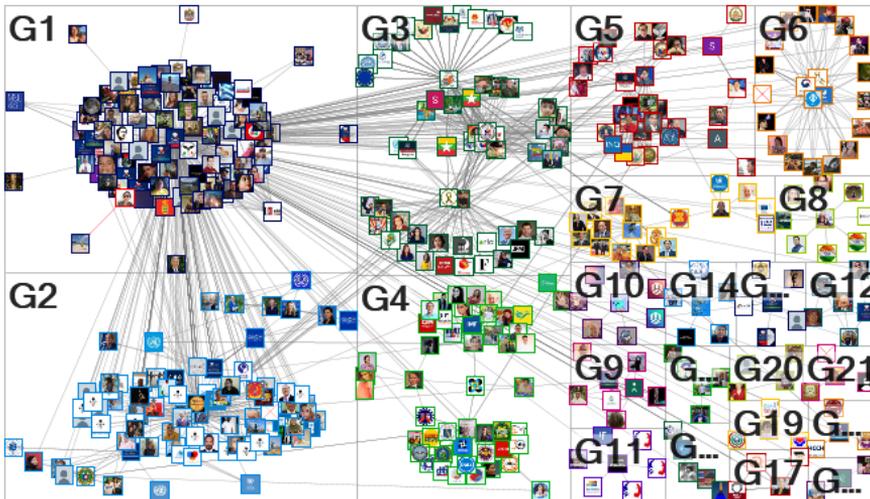
Actors	Betweenness centrality	In-degree centrality	Twitter account holders
dfaphl	132.000	13	DFA Philippines
judeabarquez	0.000	1	J.A.M. Covers
phlinlebanon	0.000	1	Philippine Embassy in Lebanon

Based on this result, the Twitter network for #DFAForgingAhead does not seem to provide a good indicator of how the twitter account of the Secretary of Foreign Affairs can be used to enhance government responsiveness. It appears that the official twitter account of the DFA is the main user of this hashtag, and that the public rarely uses this hashtag to engage with the DFA.

4.1.2 Twitter Network of @DFAPHL generated on 1 November 2022

However, it has been observed that most of the public interact with the official Twitter account of the DFA, @DFAPHL. As such, to be able to capture these kinds of interaction, NodeXL was run to show the Twitter network of the account @DFAPHL generated on 1 November 2022. Figure __ below shows the visualization of the @DFAPHL twitter network for 1 November 2022:

Figure 10. Visualization of the Twitter network of @DFAPHL generated on 1 November 2022.



Note. Created with NodeXL Pro (<http://nodexl.codeplex.com>) from the Social Media Research Foundation (<http://www.smrfoundation.org>)

In comparison with the twitter network of #DFAForgingAhead, the twitter network of @DFAPHL consists of more users. 440 twitter users interacted with @DFAPHL from this data set. The above figure shows the interaction between twitter users that include tweets, retweets, replies-to, mentions, and mentions in retweets. The twitter users are grouped into clusters using the Clauset-Newman-Moore algorithm found in NodeXL. The twitter network is divided into 22 groups, Group 1 (G1) having 96 vertices (users) followed by Group 2 with 82 vertices. The table below shows a summary of the groups in the twitter network and includes the topic most trending within each group based on the top words as generated by NodeXL. For brevity, this paper will only present the main groups from G1 to G7:

Table 4. *Groups' topic in the @DFAPHL Twitter Network.*

Groups	Actors	Edges	Graph Density	Topic (based on top words)
G1	96	183	0.016	DFAPHL, Trade, Philippines, Relations, Government, #DFAForgingAhead
G2	82	212	0.030	DFAPHL, Secretary Manalo (current Secretary), efforts, Philippines, Recovery, Victims
G3	59	345	0.051	Singapore Police, Lee Hsien Loong, Singapore Government, DFAPHL, House of Representative Philippines
G4	49	90	0.021	DFAPHL, Department of Science and Technology, Cebu Pacific Air, Appointment, Department of the Interior and Local Government, Department of Health
G5	32	131	0.109	DFAPHL, US Embassy in the Philippines, US Ambassador in the Philippines, President of the United States, Federal Bureau of Investigation (FBI), State Department
G6	21	75	0.169	Cultural Center of the Philippines, DFAPHL, National Commission for Culture and the Arts
G7	18	17	0.056	Failure, DFAPHL, Association of Southeast Asian Nations (ASEAN)

Further, the table below shows the bridging hubs or the actors who are in the top one percent in this twitter network in terms of

betweenness centrality values and in-degree centrality. Since the twitter network under scrutiny is @DFAPHL, it is expected that this account will have the highest centrality compared to other bridging hubs:

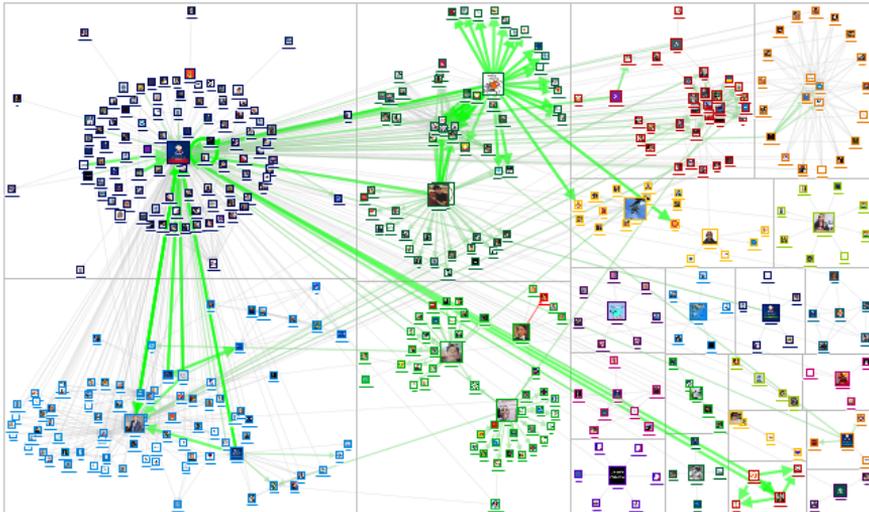
Table 5. Centrality measures of bridging hubs in @DFAPHL network.

Actors	Betweenness centrality	In-degree centrality	Twitter account holders
dfaphl	175994.166	249	DFA Philippines
lahyax	16077.531	0	lahyax
akoaymasaya1	15141.001	0	masaya matagumpay
uaung1262022	13548.009	6	U Aung
stevenkyawgyi15	9428.616	0	Steven KyawGyi
packhmer	9412.833	0	KhmerPAC
williamthein86	8456.755	0	William Thein
justinb61139723	6952.000	0	Justin Bieber
leo1stokesk	6090.000	0	Drawing Art Nft Collections
secmanalo	5751.447	84	Enrique A. Manalo PH (Current Secretary of Foreign Affairs)

However, based on the above, it must be noted that Secretary Manalo’s twitter account is a bridging hub in the @DFAPHL network and has, in fact, the second highest in-degree centrality in that network, just

after the DFA twitter account. To provide more information in this Twitter network, the figure below shows its visualization showing the actors with the highest betweenness centrality and their interactions in each group:

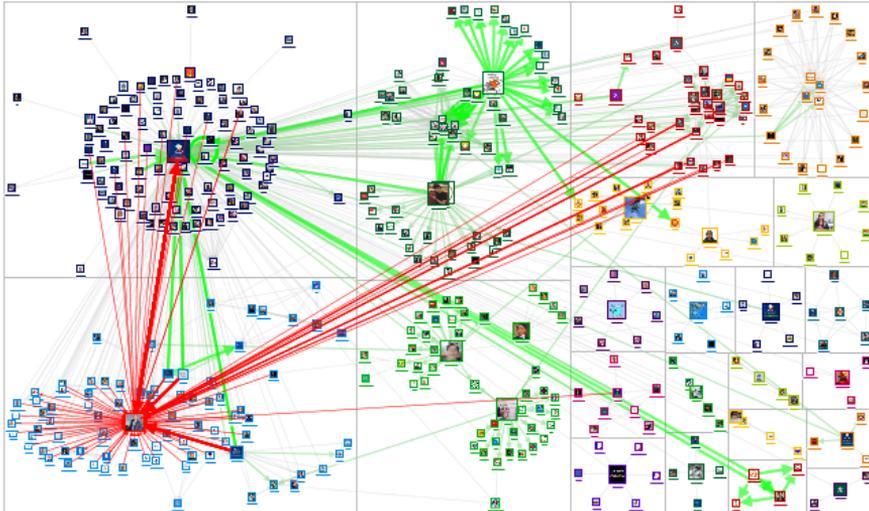
Figure 11. *Visualization of the Twitter network of @DFAPHL showing bridging hubs.*



Note. Created with NodeXL Pro (<http://nodexl.codeplex.com>) from the Social Media Research Foundation (<http://www.smrfoundation.org>)

While the figure below shows the same visualization but highlighting the interaction of the twitter account of Secretary Manalo in red:

Figure 12. *Visualization of the Twitter network of @DFAPHL showing secmanalo's interactions.*



Note. Created with NodeXL Pro (<http://nodexl.codeplex.com>) from the Social Media Research Foundation (<http://www.smrfoundation.org>)

As visualized above, it appears that the twitter account of Secretary Manalo has a main role in the twitter network of @DFAPHL, despite his account being in the G2 group. Let us further investigate this by calculating how much the network is disturbed when Secretary Manalo’s twitter account is eliminated from the twitter network. First, let us eliminate the top four bridging hubs based on betweenness centrality and that of Secretary Manalo’s account for comparison:

Table 6. Degree to which the network is disturbed when bridging hubs are eliminated from the Twitter network.

Actors eliminated	Percentage change in average path distance	Percentage change in network density	Missing vertices
dfaphl	52.4766	-9.98575	36
lahyax	-1.52534	6.26397	18
akoaymasaya1	-1.44243	5.96551	17

uaung1262022	-1.14314	3.85804	15
secmanalo	0.143778	-8.34872	1

As can be seen from the above, only the DFA's and Secretary Manalo's accounts showed a positive percentage change in the average path distance, which means that information through the Twitter network will have to go through more paths to be able to reach the other vertices or nodes in the network, making information exchange more challenging. However, eliminating the other bridging hubs actually result in less path distance for information dissemination. Similarly, only the DFA's and Secretary Manalo's accounts have a negative percentage change in network density, meaning that there is a slight decrease in connections between vertices in the whole network if the accounts of DFA and Secretary Manalo are eliminated. However, only 1 vertex is isolated from the network when Secretary Manalo's twitter account is eliminated. Next, let us investigate the changes in the betweenness centrality of other bridging hubs if Secretary Manalo's twitter account is eliminated in the network.

Table 7. *Extent to which the betweenness centrality of other bridging hubs is changed when Secretary Manalo's Twitter account is eliminated.*

Actors	Betweenness centrality (before)	Betweenness centrality (after)	Increasing rate (%)
dfaphl	175994.166	180627.22224	2.63251
lahyax	16077.531	16045.25424	-0.200757

akoaymasaya1	15141.001	15119.617666	-0.141228
uaung1262022	13548.009	13567.37728	0.14296

As seen in the table above, for DFA’s twitter account and the last bridging hub, there is a very slight increase in the betweenness centrality while for @lahyax and @akoaymasaya1, there is a decrease. The increase signifies that there is more nonredundant information going through these actors in the case of Secretary Manalo’s account elimination. However, such increase is very miniscule. The decrease in betweenness centrality of the other accounts is also quite insignificant.

Based on the above, it appears that Secretary Manalo’s twitter account has some importance in the twitter network of @DFAPHL by being in the top ten accounts with the highest betweenness centrality and the second top account with the highest in-degree centrality, thus being a bridging hub in the network. However, Secretary Manalo’s elimination from the network does not result in a lot of missing vertices and has no significant impact on the change in the betweenness centrality of the other bridging hubs. However, one must remember that Secretary Manalo’s twitter account was only created in July 2022, when he assumed as the Head of the DFA.

4.2. Content Analysis

To answer the research questions of this paper, the second part of the Findings and Discussion section will discuss and analyze the contents

of the tweets of the former Secretary of Foreign affairs, Mr. Teodoro Locsin, Jr. The whole list of the tweets, screenshots, and links are attached as **Appendix A**. For 10-11 December 2019, the former Secretary made 83 tweets, while during the pandemic on the same dates two years later (10-11 December 2022), the former Secretary made 105 tweets. The table below shows a summary of the tweet categories made by the former Secretary during these period:

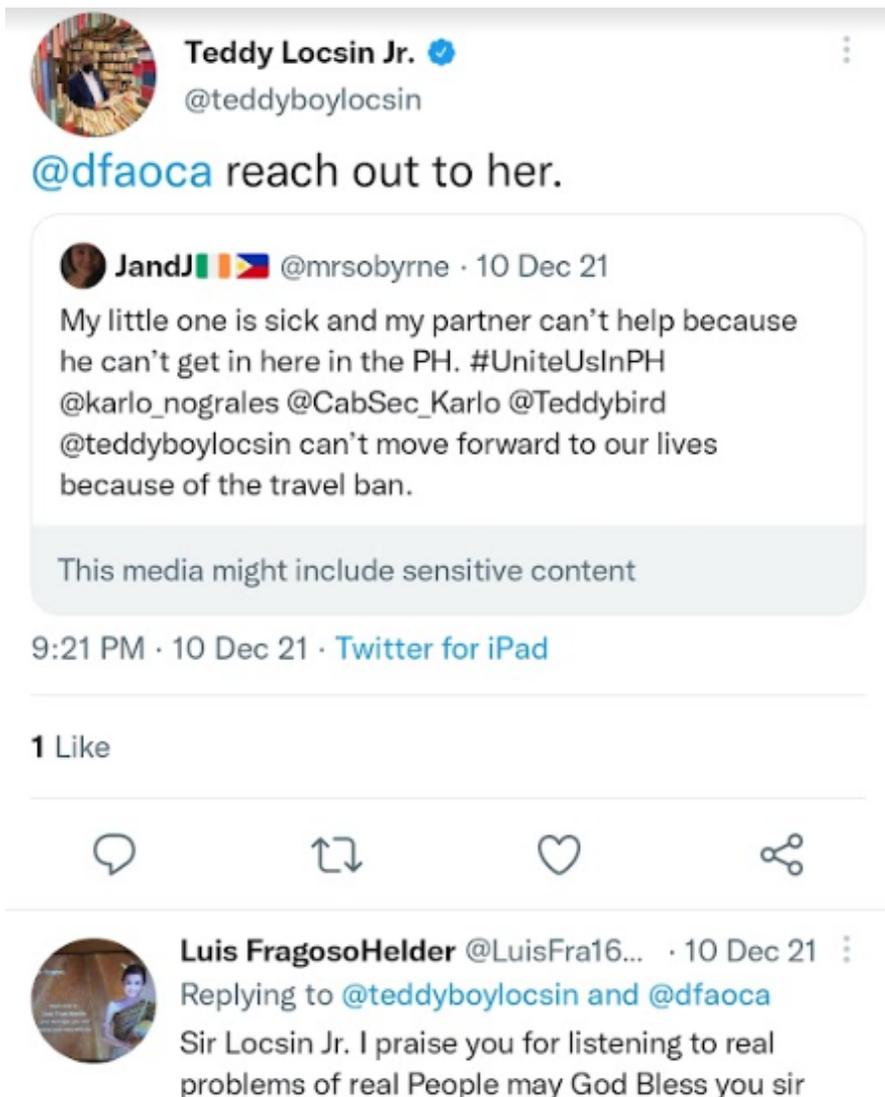
Table 8. *Tweet categories of Secretary Locsin's twitter account in 2019 and 2021.*

Tweet Categories	2019		2021	
	No. of Tweets	Percentage (%)	No. of Tweets	Percentage (%)
Political	14	16.87	18	17.14
Economic	4	4.82	0	0
Assistance-to-Nationals (ATN)	1	1.20	2	1.90
Consular	0	0	10	9.52
Cultural	0	0	0	0
Others	64	77.11	75	71.43
Total	83	100	105	100

As one can observe, there is a marked increase not just in the total number of tweets made by the Secretary in 2019 and 2021 but also in the number of tweets per category, except for Economic. However, the table above also shows that the former Secretary mainly used his twitter

account for tweets falling under the category “Others”, which consist of miscellaneous information such as retweets of articles of personal interest to the Secretary and personal opinion. It also appears that there are more tweets regarding frontline services offered by the DFA, in other words those falling under “Consular”, being brought to the attention of the Secretary. One such case is illustrated below:

Figure 13. Example of “Consular” tweet made by Secretary Locsin on 10 December 2021 (Tweet no. 2021-53).



In the above tweet, the former Secretary responded to a tweet by a citizen requesting if her partner can be given a visa in order to be able to enter the Philippines. It must be noted that during this time, the Philippines was implementing a travel ban and limited the issuance of visas to non Filipino citizens. The former Secretary directed one of the offices under the DFA, the Office of Consular Affairs, to reach out to the citizen in order to address her concern. Another citizen replied to Secretary Locsin's tweet, expressing his appreciation that the Secretary took note of citizens' grievances aired through twitter.

Another instance wherein government responsiveness through twitter was made by the Secretary is shown below:

Figure 14. *Example of "Consular" tweet made by Secretary Locsin on 11 December 2021 (Tweet no. 2021-77).*



Same as in the previous tweet, the former Secretary directed the DFA Office of Consular Affairs as well as the Official twitter account of the DFA to issue the visa to the foreigner requesting for the issuance of visa in order to be with his Filipina spouse. Also, the Secretary garnered a number of replies praising him for being responsive and taking quick action on the matter.

As shown, tweets like the above were made during the pandemic

period in 2021. No tweets under the “Consular” category were made during the same period pre-pandemic, in 2019. This could mean that (1) the Secretary utilized his twitter account more during pandemic, as shown in the increase in the number of tweets, and (2) in general, more members of the public used social media, in this case Twitter, to air their grievances, considering that physical movement was limited during these times. As such, more people might have made requests through twitter, tagging the former Secretary’s personal account, which the Secretary was able to take note of and directed the relevant offices under his Department to take action. In any case, the above examples showed how twitter was used by the former Secretary to respond to citizens’ concerns. However, it must be noted that the number of tweets investigated during this period may be too small to maintain the validity of this research.

Chapter 5. Conclusion, Limitations, and Recommendation

5.1. Conclusion

The purpose of the study is to answer the research questions, namely: (1) how is social media being used to enhance government responsiveness at the agency level?, (2) what are the different kinds of government responsiveness that can be identified through the use of social media?, (3) how effective is the use of social media to enhance government responsiveness at the agency level?, and (4) is there a difference between the tweets and twitter interaction of the former Secretary pre-pandemic and during the pandemic?. For the first question, the study has shown that social media is used to enhance government responsiveness by government agencies. In the case of the DFA, the DFA has an official DFA Twitter account that the public actively engages with, as shown in the @DFAPHL twitter network in Figure 10. Moreover, the Heads of DFA, both the current and former Secretaries, recognize the importance and the potential of having twitter accounts in order to serve the public better. The current Secretary, Mr. Manalo, created a twitter account once he was appointed as the Head of DFA and is in fact a bridging hub in the @DFAPHL twitter network by being in the top ten accounts with the highest betweenness centrality and by having the second highest in degree centrality. The former Secretary, Mr. Locsin, has been active on twitter and has utilized his twitter account both for personal use

and to respond to citizens' matters directed to him through twitter, as shown in the Content Analysis of his tweets. As such, social media, in this case Twitter, has been used by the DFA and its Heads to enhance government responsiveness by providing information, addressing complaints, requests, and concerns of the citizens, and by serving as bridging hubs among other twitter users.

For the second research question, this study has shown that government responsiveness may take the form of information dissemination as shown in the SNA, wherein information was propagated to many actors in the network, and by addressing complaints, requests, and concerns of citizens, as shown in the Content Analysis.

Effectiveness of social media to enhance government responsiveness is not clear from this study. The former Secretary did have some tweets directing relevant offices under his command to address citizens' concerns but the outcome of those was not apparent in the available data. As such, effectiveness may be a subject of further studies.

Lastly, as seen in the Content Analysis, there is a difference between the pre-pandemic and pandemic tweets of the former Secretary. There is a marked increase in tweets falling under "Consular" which pertains to one of the frontline services of the DFA. Moreover, it was shown that there were cases wherein the Secretary addressed citizens' concerns made through twitter in 2021. However, the number of tweets investigated during the given may be too small to maintain the validity of the research.

The research has also demonstrated that SNA can be used to measure government responsiveness through social media use. As such, SNA may be utilized in future research regarding social media and government responsiveness. Likewise, the implication of the study is that social media may be an effective tool to enhance government responsiveness by providing information, addressing complaints, requests, and concerns of the citizens; however, utilizing the full potential of social media requires the necessary infrastructure that allows even remote parts of the nation to have access to the internet. It also requires that citizens have the means and ability to access such social media to be able to have direct communication with government officials. Government officials should also understand and create a strategic plan to fully maximize the benefits of social media to enhance government responsiveness.

5.2. Limitations of the Study

The study has many limitations, the first and most important being is the availability of data. NodeXL is limited in the importation of Twitter API and thus, cannot extract older tweets. The second limitation is that the contents of the tweets of Secretary Manalo were not discussed. It would have been interesting to compare them with the tweets of Secretary Locsin since the effectiveness and responsiveness of government officials to citizens' concerns through social media is heavily determined by the officials themselves and their personal preferences and traits. But due to time constraints, such analysis has been omitted in this study. Another

limitation of the study is the number of tweets investigated for the Content Analysis section. The number of tweets are too small to maintain the validity of the research. As such, more tweets and maybe a longer time period would provide more compelling evidence for the purposes of this study. Lastly, as discussed in the first part of this study, there are many social media available and this study only focused on Twitter. To fully understand how social media enhances government responsiveness, then other social media should also be investigated.

5.3. Recommendation

It is recommended that further studies be done in order to determine the effectiveness of social media in enhancing government responsiveness. Facebook and Instagram are also popular platforms used by government officials. Similarly, in order to see changes in the twitter networks and to have a deeper and broader analysis, the time span of the research should be extended. Lastly, in-depth case study should be done in order to determine how social media is used by government officials and citizens and to see their interaction to discover how government responsiveness is made through social media. For example, the former Secretary directed one of DFA's offices to address the concern of the citizen. One can interview that citizen to check if her concern was in fact resolved. This way, we will have a clearer and more complete picture of how social media can be used to enhance government responsiveness.

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소셜미디어와 정부 대응력:
필리핀 공화국
외무부 장관의 사례 연구

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오늘날의 세계에서, 기술은 사람들 사이의 의사소통과 접촉을 더 빠르고, 심지어는 즉각적으로 가능하게 했다. 이 현상의 가장 명확한 특징 중 하나는 소셜 미디어 사용의 확산이며, 전 세계 인구의 절반 이상이 소셜 미디어를 사용하고 있다. 이러한 발전으로 정부가 대응력을 높이기 위해 소셜 미디어를 활용하는 것이 논리적이어야 하지만, 일부 정부가 대응력을 높이기 위해 소셜 미디어를 제한하거나 활용하지 않는 등 모든 경우에 해당되는 것은 아니다. 대응력은 정부가 시민들이 명시적으로 원하는 정책을 제정할 수 있는 능력으로 정의되어 왔다. 소셜 미디어 사용에 대한 망설임에도 불구하고, 여전히 각 소셜 미디어 플랫폼에서 활동하며 시민들과 교류하고 있는 정부 관료들이 있고, 이는 다시 정부의 대응력 향상에 기여할 수 있다. 본서에서는 필리핀 외무부 장관의 트위터 사용 사례와 그 트위터 계정,

트윗, 네트워크가 필리핀 외무부의 대응력을 높이는 방법에 대해 조사할 것이다.

연구 질문에 답하기 위해 저자는 소셜 네트워크 분석(SNA)을 사용하여 2019년 12월 10-11일 또는 COVID-19 대유행 이전과 필리핀 정부가 강력한 폐쇄 조치를 해제하고 국방부의 일부 일선 서비스를 재개한 2021년 12월 10-11일자의 현 외교부장관 Mr. Manalo의 트위터 계정 중심점 측정 및 전 외교부 장관 Mr. Locsin의 트윗 내용을 알아내기 위해 #DFAForgingAhead"와 @DFAPHL 트위터 네트워크를 분석할 것이다. 팬데믹으로 인해 정부 대응력을 강화하기 위해 소셜 미디어 사용이 증가했는가? 정부의 대응 측면에서 팬데믹 이전과 팬데믹 기간 동안 전 장관이 작성한 트윗의 차이점은 무엇인가? 이것은 전례 없는 세계 정세에 의해 가능해진 흥미로운 진전이라고 볼 수 있다. 연구에 따르면 DFA와 DFA의 장관들은 SNA에 표시된 것처럼 정부 대응력을 강화하여 정보 배포의 형태를 취할 수 있도록 그리고 내용 분석에 나와있는 것처럼 시민들의 불만, 요청 및 우려를 해결하기 위해 각각의 트위터 계정을 사용했다. 이 연구는 또한 SNA가 정부 대응력을 측정하는데 어떻게 사용될 수 있는지 보여주었다. 그러나 정부 대응성을 향상시키기 위한 소셜 미디어의 효과는 추가 연구가 필요할 수 있고, 정부 대응성 향상을 목적으로 소셜 미디어를 사용할 수 있는 방법에 대한 보다 명확하고 완전한

모습을 제공하기 위해 장기간의 심층 연구가 수행되어야 할
수도 있다.

키워드: 소셜미디어, 정부, 대응력, 트위터, 사례 연구.

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