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Indah Srie Lestari

*Korea University*, indah@korea.ac.kr

Jae Yun Moon

*Korea University*, jymoon@korea.ac.kr

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# UNDERSTANDING CITIZEN PARTICIPATION IN GOVERNMENTAL SOCIAL MEDIA: A CASE STUDY OF THE INDONESIAN REGIONAL POLICE

Indah Srie Lestari, Business School, Korea University, Seoul, Korea, indah@korea.ac.kr

Jae Yun Moon, Business School, Korea University, Seoul, Korea, jymoon@korea.ac.kr

## Abstract

*Governments increasingly leverage social media to deliver better services to the public. Web 2.0 technologies enable people to interact and collaborate with one another efficiently and effectively. The use of web 2.0 technologies by government – government 2.0 – enables citizen to interact and collaborate with government in the delivery of public services. This exploratory study examines the use of social media in Indonesia. The focus is on examining the potential of social media in improving the effectiveness and efficiency of public service delivery, and how social media might boost the relationship between government and the public. We focus in particular on the use of social media by regional police action – Traffic Management Center Polda Metro Jaya in the Jakarta region which has been recognized as a social media best practice within the Indonesian government. We find that social media has contributed to information dissemination among the public. Furthermore, social media use results in improved public image and enables citizen participation in government service delivery.*

*Keywords: government 2.0, citizen participation, social media, Twitter*

# **1. INTRODUCTION**

As information and communication technologies become ever more pervasive, information about the world is now instantly accessible through diverse media. Web 2.0 services including social networking services (e.g., Facebook), video sharing (Youtube), wikis, blogs, and microblogs (e.g., Twitter) provide people with varied means of interacting and collaborating with one other (O'Reilly 2006). Social media enable personal, real-time communications, and thus enable people to be apprised of events as they occur (Golbeck 2013).

Social media technologies have also enabled new ways of managing citizen-government relationships (Dutil et al. 2007). In the U.S, President Barack Obama issued the Open Government Initiative, emphasizing the principles of transparency, participation and collaboration. The Open Government Initiative is about the delivery of public services through social media, i.e., Government 2.0. The goal of Government 2.0 is to increase the transparency and productivity of public service delivery. Moreover, Government 2.0 aims to enhance public participation and awareness. However, this new mode of participatory government does not always garner positive citizen responses. Government 2.0 services have not yet achieved their intended goals (Nam 2012). There are several reasons underlying the passive utilization of Government 2.0, such as concerns over privacy and security (Nam 2012). It is thus important to analyze citizen participation patterns in Government 2.0 initiatives in order to better understand how to achieve the intended goals of providing participatory and collaborative platforms for government-citizen interaction.

As a developing country, the Indonesian government has aimed to increase its productivity by using information technologies and particularly Web 2.0 technologies in its government system. The Traffic Management Center of the Jakarta local police (TMC Polda Metro Jaya) in particular has been recognized as a Government 2.0 best practice within Indonesia (Widjaya 2012). The local police provide the public with 24-hour non-stop information regarding traffic conditions in Jakarta city. The TMC Polda operates two main social media accounts – Twitter and Facebook – to provide real-time information updates to the public. The Twitter account has gained widespread acceptance by the public as a source of traffic information in Jakarta city. The Facebook account however, has failed to attract such a following, partly due to its being introduced at a later date, and not offering information beyond that which is provided through Twitter. As a result, the citizens of Jakarta are more familiar with the Twitter account. Since its inception in April 2010, the number of followers of this account has reached 1.6 million users by September 2013, and continues to grow every day. This number represents approximately 17% of the total Jakarta population.

This paper presents an exploratory analysis of the patterns of citizen participation in the Government 2.0 service provided by the Jakarta regional police. We examine to what extent the Jakarta regional police social media channel is able to achieve its intended goal as a participatory and collaborative platform for government and citizens of Jakarta. In the following section, we provide an overview of prior research on Government 2.0, and describe the Indonesian government's activities in promoting participatory citizen services through the use of web 2.0 services. We then discuss our exploratory case study and conclude with a discussion regarding future research directions based on the findings of our case study.

## **2. LITERATURE REVIEW**

### **2.1 Government 2.0**

Government 2.0 refers to the use of social technologies to enable government to enlist citizen participation in government services (DiMaio 2009). Eggers (2007) described government 2.0 as “a form of digital revolution that transforms government”. In Government 2.0, citizens and government are able to directly interact with one another (Nam 2012). Citizens may thus participate in governmental decision-making processes and collaborate with the government in solving social problems (Nam 2012). Government 2.0 in short may lead to improved productivity of public service delivery as well as result in greater transparency and productivity (Eggers 2007); broadening and

boosting citizen participation (Cho & Hwang 2010); increasing public awareness of government policy (DiMaio 2009); and providing an inexpensive means of harnessing expertise and feedback from millions of citizens (DiMaio 2009). Expectations of such benefits have led social media to become a popular means of communication in the public sector. Furthermore, Government 2.0 services have the potential to facilitate a culture of open government, and thus result in increased transparency, participation, and collaboration (Nam 2012).

## **2.2 Social media utilization in government**

The utilization of social media or government 2.0 can be seen at the local government level. Bonson et al. (2012) provides evidence of how social media utilization by the local governments of the EU (European Union) countries has led to enhanced public participation and transparency. Furthermore, it has also enabled more open dialog between government and citizens. Research on the extent of social media usage for public service delivery across the U.S. indicates that the proportion of local governments using social media has increased from below 20% in 2009 to more than 80% in 2011 (Mossberger 2013). The studies demonstrate that social media provide benefits in increasing the quality of government public services. However, there are also risks that arise as governments utilize social media to support their operation. The benefits of social media usage in governments include improved efficiency in information dissemination, increased convenience of citizen information access, and increased opportunities for citizens to participate in government operation. Furthermore, social media usage also increased transparency, accountability and democracy in government and therefore may also enhanced public trust in government operation (Picazo-vela 2012; Chang & Kanan 2008). Social media increases opportunities for citizens to participate and collaborate in government public service delivery. Such citizen involvement may lead to the improvement of government public service delivery and also enhance trust in government (Chang & Kanan 2008). The risks related to social media use in governments stem from privacy and security issues, the potential inaccuracy of information provided by citizens, and issues related to governmental policy and requirements (Bertot et al. 2012; Picazo-vela 2012). Recent research regarding citizen coproduction of government services facilitated by new media suggests that emerging technologies such as the Internet may enable more effective and efficient delivery of public services by the government (Meijer 2012). Linders (2012) suggested that social media improves the viability of citizen coproduction of government public services. Furthermore, he classifies the types of government and citizen coproduction enabled by social media into “citizen sourcing (citizen to government)”, “government as a platform (government to citizens)”, and “do it yourself government (citizen to citizen)”. Through government social media channel, citizens may provide suggestions, ideas, request more services, as well as provide important local information updates (Linders 2012). Thus, government may benefit from information provided by citizens through its social media channel to improve their public service delivery. Other research on citizen coproduction focuses on the use of social media by governments to increase public awareness of extreme events. The research provides evidence on the essential usage of social media services such as Twitter in quickly disseminating early warnings, with citizens cooperate in retweeting governments’ early tsunami warnings to the greater network of citizens (Chatfield 2013). In short, social media usage enhanced the government’s ability to quickly spread awareness of the disaster.

## **2.3 Citizen participation**

The success of Government 2.0 depends largely on the extent of citizen participation. Citizens may influence the process of public services through direct participation in public service delivery. Citizen participation is important and may influence decision making of service agents (Whitaker 1980). Therefore, it is essential for government to understand what influences citizens’ participation in this service coproduction enabled by Government 2.0 tools, and furthermore to analyze potential strategies to boost citizen participation in service coproduction.

## 2.4 Indonesian e-government history and background

Indonesia, like many other countries, has long recognized the importance of establishing online services in order to become more accessible and transparent to public. Indonesia first established and developed e-government in 2001, which is based on the President's instructions related to telecommunication, media and information. The presidential directive in 2001 stressed the importance of information technology in enabling good governance and accelerating democratic process. Moreover, the national strategic plan and policy that was contained in Presidential Instruction No.3 was issued to provide greater momentum to the development of e-government services. The initiative focused on the need to develop computerized-based governance system in order to improve the effectiveness and efficiency of public service delivery. Therefore, electronic-based government services have been implemented in central government and also in the local government. The main purpose of the development of e-government services in Indonesia are: 1) to improve democracy in government; 2) to promote the equality of power between governments; 3) to support better communication between governments; 4) to enhance transparency and openness; and 5) to develop the necessary capabilities for the information era (Harijadi 2004).

As the public demand for increased information openness grew, the President on April 30, 2008, approved the Law No.14/2008 regarding Public Information Openness (UU KIP), to be put into effect within two years. The law lays out the following basic principles: (1) All public institutions must ensure that public information is made available and open; (2) All public information should be open and accessible to public; (3) Strict, limited and provisional measures should be imposed to the information exempted from public; (4) All public information should be made easily accessible, timely fashion, and at minimum cost; (5) Public information must be proactive; (6) Public information must be intact, accurate and accountable; (7) Information disputes must be resolved through fast, low-cost, competent and independent mechanisms; and (8) Criminal sanctions should be imposed for inhibiting information disclosure.

## 3. RESEARCH CONTEXT

One of the most progressive government institutions in implementing the law of Public Information Openness in (UU KIP) is the National Police of Indonesia. The National Police has prepared internal policies to manage public information, such as the National Police Chief Regulation No 24/2011 to revise the National Police Chief Regulation No. 16/2010 regarding the Procedures for Public Information Services in the National Police of the Republic of Indonesia. It developed the Traffic Management Center (TMC) to support and promote regional police actions. The Traffic Management Center of Polda Metro Jaya is a system established to control and collect information related to traffic conditions, accidents, traffic law violations, license registration and identification in the Jakarta region.

The emergence of a new social technology platform with its characteristic of an interactive tool of communication, coupled with increased public demand for quality and professionalism of the public services rendered by the national police, has been the impetus for the Jakarta local police to implement social media as part of their action platform. The local police aimed to respond to public demand by establishing social media channels for public communication. The general objectives of the Traffic Management Center are to (1) establish a professional "quick response time" service to the public; (2) support law enforcement in public; and (3) become the information center for the National police and public. The Traffic Management Center policy was developed in 2005 and came into effect in 2008. This policy was based on *Reactive Policing* or what in the West is known as the 911 system. In addition, this policy is also based on *Community Policing*, which refers to the development of relationship between polices and citizens. Therefore, It is expected that public may increase direct communication with police, furthermore police may foster public education, increase informational updates to public, increase public awareness of crime prevention, and increase its guidance and cooperation with public. Thus, the four objectives of TMC Polda Metro are (1) to build a communication and information system regarding traffic situations which includes traffic flow, road infrastructure and facilities, traffic jam, and traffic accident among its personnel and the citizens of the Jakarta region, (2) to increase quick time response by coordinating with various agencies in solving

traffic related and non-traffic related issues, (3) to increase quick time command for all field personnel in order to increase professionalism and productivity of police, (4) to enhance the provision of valuable information for decision making by the top officials.

The TMC Polda Metro Jaya has become a pioneer of social media utilization in supporting government services in Indonesia. The social media accounts for the Traffic Management Center of Polda Metro Jaya were established in April 2010. Both Twitter and Facebook accounts were expected to improve traffic conditions and public awareness of traffic regulations in Jakarta city where traffic has become one of the biggest problems. The local police provide 24-hours of information service regarding traffic conditions for the public in Jakarta city. The Twitter account of TMC Polda Metro Jaya (@TMCPoldaMetro) was the first social media account developed by TMC Polda Metro. It has since become the most influential account for information regarding traffic in Jakarta city for the public. It has also been recognized as the most frequently updated twitter account providing traffic information in 24 hours by the Indonesian World Records Museum (Antique 2010). Follower of this account has reached more than 1.6 million users as of October 2013 and continues to grow every day. With this social media account, TMC Polda Metro Jaya also received ASEAN's most respected public services award for citizen engagement by FutureGov in 2013 (Joshi 2013). Moreover, the TMC Polda Metro Jaya account has been recognized as one of the best practices of Government 2.0 utilization in Indonesia. Based on the success of the TMC Polda Metro Jaya twitter account, we chose to focus on the Twitter account for further analysis.

Recognized as a social media best practice in providing public support services, it is important to understand the actual patterns of citizen interaction with TMC Polda Metro Jaya on this platform. Therefore, this research aims to observe and analyze how social media is being utilized in local police action. Specifically, how does the use of social media contribute to improving the effectiveness of information dissemination to the public? Furthermore, how does social media utilization lead to enhanced citizen participation and contribute to better quality of relationships between the government and public?

## **4. METHOD**

In order to better understand the TMC Polda Metro social media activities, we conducted a case study of TMC Polda Metro Jaya Office and observed its operations with regard to the social media channel.

We conducted case study analysis by interviewing the operators of the TMC Polda social media channels, and by collecting Twitter message interactions that were posted by TMC Polda Metro and Jakarta citizens (i.e., all messages that were retweets of TMC Polda's messages, and all messages that were directly addressed to TMC Polda). We used a web service ([www.scrapewiki.com](http://www.scrapewiki.com)) to download the Twitter interactions by collecting all twitter messages that contained the keyword @TMCPoldaMetro in order to retrieve messages directed to TMC Polda by followers. We also retrieved status updates by TMC Polda Metro Jaya. We retrieved message activity during a 3 month period starting from September 6<sup>th</sup> and lasting until November 30<sup>th</sup> 2013. During this time period, there were no special events in Indonesia that may affect the amount and nature of interactions among citizens. The total data collected during the 3 month period consist of 176,789 followers' tweets.

The twitter data was analyzed using content analysis to identify the types of interactions that appeared, and the pattern of follower interactions. The content coding scheme was developed through an iterative process in which we derived categories of types of citizen action on social media channels by referring back to prior research of citizen participation in order to code the messages. Categories were added and refined during the process of coding a random sample of 3000 messages that we had collected in June 2013. The coding scheme was finalized when no new categories were needed. The detailed coding scheme is provided in Appendix A. The preliminary content analysis reports are discussed in the following section.

## 5. FINDINGS

### 5.1 Interview

The interview was conducted with the manager of TMC Polda Metro Jaya and with its Internet operator. The interview lasted approximately 3 hours. We transcribed the discussion and analyzed the transcript. TMC Polda Metro is operated by 3 groups of personnel throughout the day, with every group in charge for 8 hours of operation. Each group of personnel consists of 19 members and one manager. The 19 members are in charge of the communication channels of TMC Polda Metro including its call center, CCTV, SMS, radio, and the Internet which include its social media services. The Internet and social media channel are mainly operated by 3 members. The job of the Internet and social media operators is to record citizens' reports, respond to citizens' feedback to the government functions that may take action, and to produce a daily report to record all the necessary information regarding the activities of the TMC Polda Metro and the participating citizens. More specifically, the daily report provided by the social media operators provided information regarding the increase in the number of followers, the increase in the number of updates, and the daily report of citizen suggestions and criticisms. Based on the interview with the Internet and social media operator, we established that the TMC Polda Metro updates are based on reports from the field officers, real-time CCTV feeds, and radio (handy talky used by the officers). However, TMC Polda Metro also forwarded information from citizens once citizen reports had been confirmed either by field officer, through CCTC, or radio reports. TMC Polda Metro responds to each citizen's information request via direct message rather than responding on the public feed. In order to boost citizens' active participation through its Twitter channel, TMC Polda Metro provides a best picture competition and awards winners with various prizes. However, such activities are not held on a regular basis. A monthly report is also provided in order to calculate the total number of messages of varying types of reports provided by citizens.

### 5.2 Content analysis

Our preliminary analysis found that most followers' messages were retweets of information updates provided by TMC Polda Metro. Other messages mentioned TMC Polda Metro directly or were replying to status updates by TMC Polda Metro.

Retweet	136,115	77%
Mention	24,983	14%
Reply	15,691	9%
Total	176,789	

*Table 1. Types of messages of TMC Polda Metro's followers*

#### 5.2.1 Types of information updates

TMC Polda Metro provided updates on 24-hours basis regarding the traffic-related situation in Jakarta city. The types of information updates from TMC Polda Metro Jaya include updates regarding traffic issues, non-traffic issues, missing reports, events, notice, advice, law enforcement, greetings, and forwarded information updates. (See Table 2 for more detailed definitions and examples of each content category).

Types of updates	Definition and example
Traffic information update	TMC Polda Metro's main goal is to provide citizens information related to traffic particularly in Jakarta city, where traffic has become one of the biggest problems. Traffic related information may include information about traffic, accidents, and traffic law violation. Updates are equipped with time and occasionally with cause of the traffic incident together with photo. Traffic: <i>19:18 traffic situation there starting from Manggarai to Tambak road observed heavy</i> Accident: <i>17:51 Series of accidents at Bintaro toll KM 2 (way to BSD)</i>
Non-traffic information update	TMC Polda also provides other updates that are not related to traffic. It can be included as fire, brawl, flood, demonstration, earthquake, and other emergency situations. Fire: <i>03:46 fire at Kramat Street Central Jakarta, still managed by fire fighters</i> <i>http://t.co/BibER17tBE (Foto: @taka_girl)</i> Brawl: <i>02:00 Brawl among teenagers at Pahlawan Revolusi Street East Jakarta, please be careful when passing the area</i>
Event information update	TMC Polda Metro also provides citizens of Jakarta city with information related to events which held in Jakarta, for example information about the car free day time during weekend in Jakarta or the open-close flow traffic time in some area around Jakarta. Other event information update is related to events which held by the local police, such as the time schedule and place for the mobile license registration service in the current day. <i>Information about License registration mobile service location on Wed, June 5<sup>th</sup> 2013</i>
Notice	TMC Polda Metro Twitter account provides information or notice regarding non traffic such as administrative requirements, crime alert, weather alert, etc. <i>Driver's license requirements for foreigners</i>
Missing reports update	TMC Polda Metro Twitter account disseminates information about missing vehicle or person which has been reported from citizens. The objective is to increase citizens' awareness of the situation such that citizens might report to the police if they discover the lost vehicle or person. <i>13:01 Had been lost, a Daihatsu Xenia black colored B 120 S, if found contact TMC PMJ : 021-529607**</i>
Tips and advice update	In order to foster education and guidance to citizens, TMC Polda Metro Jaya provides tips and advice related to traffic in order to support safety of citizens. <i>For the sake of public safety, remain cautious and obey traffic signs. Remember that your family is waiting at home.</i>
Law enforcement update	TMC Polda Metro provides information about law enforcement action. <i>Central Jakarta police took action of 18 person with 16 motorcycle that doing wild race at Pramuka Street.</i>
Greetings	TMC Polda Metro also provide greetings for public in some national or religious days <i>Polda Metro Jaya and all staff congratulate the 68<sup>th</sup> National Armed Forces Day</i>
Public appreciation	TMC Polda Metro also shared public appreciation by retweeting followers' appreciation to TMC Polda Metro <i>RT @reza_habiib: Congratulation for the anniversary of traffic division of National Police of Indonesia @TMCPoldaMetro</i>
Invitation	TMC Polda Metro invites the public to send traffic law violation pictures to TMC Polda Metro <i>Send pictures of all kind of traffic violation here : #PelanggarLantas</i>
Forwarded information update (from citizens' report)	Information updates from citizens' report that are forwarded/retweeted by TMC Polda. The types of information may include traffic related information, non-traffic related information update, event related information, lost information, law enforcement update, which equipped with picture occasionally. <i>RT @Dannyfebriansy1: 10.24 traffic is heavy because of labor strike in Narogong Road 19 km Bekasi</i>

Table2. Types of information updates by TMC Polda Metro

### 5.2.2 Types of citizens' interaction

Social media offers the following advantages for the government: first, it offers an effective and efficient tool for information dissemination, second, it enables citizen participation in government operations, and third, it serves as a collaborative tool for citizen and government in solving problems (Nam 2012). These advantages can be seen from citizen's interaction through types of interaction contained in TMC Polda Metro's twitter account. Benefits of information dissemination tool might be reflected in the number of retweets or sharing of information updates provided by TMC Polda Metro. Benefits of citizens' participation and collaboration might be reflected in the number of feedback, report, query, suggestion and critics provided by citizens in TMC Polda Metro Twitter account. We performed Twitter content coding analysis based on the previously developed content coding scheme. The first author coded the Twitter interaction data into several types of citizen participation. The result of the content coding analysis is as follows.

Types of messages	Definition and example	Number of messages	Percentage
Re-share or retweet of information provided	One of the benefits of leveraging social media in public service delivery is to effectively and efficiently disseminate information to public. By utilizing social media, government may disseminate important and emergency information to public easily. Citizens re-share or re-tweet the information provided by TMC Polda Metro Twitter account to other fellow citizens in their own network, in addition citizens may also provide simple comment along with the re-tweeted information occasionally. This type of interaction is the majority of interaction in TMC Polda Metro Twitter account. <i>RT @TMCPoldaMetro: 18.30 Traffic condition in front of Metropolitan Mall Bekasi is reported heavy</i>	128,618	73%
Positive feedback	Other valuable benefit in leveraging social media by government is to foster good relationship and strengthen relationship between government and public. Positive feedback indicates how government receives appreciation from public, which may increase governments' reputation in public and foster good relationship with public. Citizens provide positive feedback by mentioning or retweeting TMC Polda Metro status updates. This category of tweet includes grateful messages, encouragement messages, and positive comment. Words that contained in this type of message are "terimakasih" (thank you), ok, yes, "siap pak" (copy sir), etc. <i>Thanks "@TMCPoldaMetro: 08:19 Impact of the queue at the toll gate from KM 14 to Tomang. AbdulAzizID"</i>	4,815	3%
Suggestions	Social media is also an effective tool to gather public opinion and reaction to some issues and situation. By leveraging social media, government may gather public's opinion and comments related to situation happened and their particular public service. Other category of interaction that can be captured from the social media interaction of TMC Polda Metro is giving suggestion. Citizens provide suggestions to TMC Polda Metro by mentioning or replying TMC Polda Metro Jaya's tweet. This category of tweet usually contains words like "saran" (suggest), "masukan" (input), and "lebih baik" (it is better). <i>@TMCPoldaMetro I suggest the zebra operation to be held every day, so that the traffic might decrease.</i>	2,807	2%
Critiques	Other type of messages that provided by citizens to government through social media is critique. Citizens' provide critiques to TMC Polda Metro by mentioning or replying TMC Polda Metro Jaya's tweet. This category of tweet usually contains word like "kecewa" (disappoint). <i>@TMCPoldaMetro Please not only provide info, but also mobilize officer to organize the traffic</i>	891	1%
Report	Another benefit of social media utilization in government is to	21,522	12%

	<p>encourage citizens' participation and collaboration with government. Citizens may easily reach government through social media, which encourages citizens to actively provide information and reports regarding their own situation to government. This may in turn, improve public service delivery of government. Citizens provide report of their situation to TMC Polda Metro with the expectation that the situation will be followed up immediately. The types of citizen reports may include report on traffic, report on crime or traffic law violation, report on vehicle loss, which equipped with picture occasionally. This category of tweets contains words such as "tolong" (help).</p> <p><i>Chaotic traffic at Tomang Cideng intersection because of the broken traffic light. Where are police officers? @TMCPoldaMetro</i></p> <p><i>There is a wild race around Pemuda road, please follow up this action @TMCPoldaMetro</i></p> <p><i>A car lost, Nissan March Grey Metallic B.1572.NKE @TMCPoldaMetro</i></p>		
Query	<p>As a communication medium, social media allows government to be easily reached by citizens. Therefore, citizens may gain information they needed easily. Citizens request information related to traffic to TMC Polda Metro by mentioning or replying to TMC Polda Metro's tweet. This category of tweets contains words such like "mohon info"(please info), "tanya " (ask), "butuh info" (need info), and "Tanya" (ask).</p> <p><i>@TMCPoldaMetro Good Afternoon, Need information for traffic from Pd. Ranji Toll gate to Pasar Minggu Tanjung barat</i></p>	8,633	5%
Conversation	This category includes conversational messages among followers that related to the topic of updates provided by TMC Polda Metro	1,898	1%
Not relevant	This category includes messages that are not relevant to traffic, accident, traffic law violation, crime, and emergency situation; messages that contain unrecognized Indonesian words or local words; and blank messages (do not contain any messages).	7,605	4%
	Total Number of Messages	176,790	100%

Table 3. Types of follower interaction messages and results of categorization

In order to assess the reliability of the result, we assessed the *intercoder reliability* between the main coder and an outside independent coder. An independent coder who was not aware of the study purpose was recruited. The coder was provided with the coding scheme with definitions and examples of Twitter message coding. The rater coded 3,000 tweets that were randomly selected from the total twitter interaction data. The dataset consisted of 1,252 reports, 444 queries, 846 comments, 59 feedbacks, 85 critiques, and 170 suggestions. The *Cohen's Kappa* ratio was 0.802 which represents reasonable agreement between the coders based on the guidelines from Altman (1999).

### 5.2.3 Types of followers

Based on the types of interaction contained in TMC Polda Metro Twitter account, the followers or citizens might be divided into two categories. First, followers who are passively interact with TMC Polda Metro only through re-tweeting or re-sharing information updates provided. Second, followers who are actively interact with TMC Polda Metro through providing reports, feedbacks, suggestions, critics or asking information.

- Passive participation  
Followers or citizens who follow TMC Polda Metro Twitter account that participated by re-sharing or re-tweeting information which provided by the local police to their own network.
- Active participation  
Followers or citizens who follow TMC Polda Metro Twitter account that participated by reporting, giving suggestions, critiques, feedbacks and asking questions.

## 6. DISCUSSION

The result of the analysis demonstrated that social media utilization in one of Indonesian government has achieved its intended goals by becoming a new media to support public service. The large number of retweets or re-shared messages of TMC Polda Metro's Twitter update by the citizens showed that the Twitter channel of TMC Polda Metro is an effective means of disseminating information. It also indicates that Twitter extends the reach of existing online and offline messages such as news and web updates (Wigand 2010). Therefore, information provided by TMC Polda Metro is effectively being spread to its follower network. Thus, it provides TMC Polda Metro with a more effective communication channel to reach the public and increase their awareness of the situation both for traffic and non-traffic situation particularly in Jakarta city.

By utilizing social media, government also encourages citizens to contribute and participate in realizing public safety. This is evident in the large number of reports provided by TMC Polda Metro's followers. The citizens of Jakarta report situations that they have personally witnessed and also capture the proof of the situation. This act of citizens enabled government to increase the effectiveness of their public service. This also indicates that the Government 2.0 or social media channel enables the actualization of citizen-government co-production. Social media is also an effective channel for citizens to request information from government. This was seen from the number of questions sent from citizens to TMC Polda Metro.

Twitter has become an effective media for citizens to easily access government in order to access information they need. Therefore, government may also effectively and efficiently reply and answer citizens' questions via Twitter. Such interactions may help the government to enhance their positive image and also increase good relationship with public. Based on our interviews with the managers, TMC Polda Metro had thus far only replied to citizens' question via direct message, i.e., private messages to the question asker. By publicly answering, TMC Polda Metro may further enhance their public image. The number of messages with positive feedbacks that TMC Polda Metro received through Twitter indicates that citizens appreciate the information provided by TMC Polda Metro. The public also provides messages of encouragement for the government officials managing the channel to further boost the performance of public service. An additional type of audience interaction that can be seen from the Twitter data is suggestion and critique. The government may benefit from suggestions and critiques sent by citizens. By identifying the issues that are of importance to the public, the government might further improve public service delivery.

The goal of our exploratory study was to examine how social media is being utilized in the Indonesian government. We particularly focused on a regional police's action in realizing public safety. We found that social media utilization in TMC Polda Metro has partially achieved its intended goals by serving as an efficient and effective tool for information dissemination, providing easier access to citizens, and encouraging public participation and collaboration in government work. This has also led to a better image for the government. However, to fully achieve the full potential of social media usage in government services, the proportion of actively engaged followers of the TMC Polda social channel needs to be increased. Thus, further analysis on the behavior of followers is needed to understand the motivation of active followers of government social media channels, in order to elicit more active, sustained participation from the government's social media channel followers.

## APPENDIX A

### Coding Scheme for types of citizen participation

Re-share or retweet of information provided	Includes citizens' re-share or re-tweet of the information provided by TMC Polda Metro Twitter account to other fellow citizens in their own network, in addition citizens occasionally provide simple comment along with the re-tweeted information.
Report	Includes citizens' report regarding situation of traffic, accident, traffic law violation, crimes, brawl, fire, flood, natural disasters, and other kinds of emergency situation. The message can include retweet of TMC Polda update, reply of TMC Polda update, mention of TMC Polda account, retweet of other user, or mention to other user. The messages can also include picture or link. Words that contained in this type of message is "tolong" (help), "butuh bantuan" (need help)
Positive feedback	Includes grateful messages (thank you messages), greetings (dirgahayu), encouragement messages (setuju, siap, semangat, etc) to TMC Polda The message can include retweet of TMC Polda update, reply of TMC Polda update, mention of TMC Polda account, retweet of other user, or mention to other user. The messages can also include picture or link. Words that contained in this type of message are "terimakasih" (thank you), ok, yes, "siap pak" (copy sir)
Query	Includes information request to TMC Polda Metro related to traffic, accident, event, traffic law violation, crime, natural disaster or other kind of emergency situation. The message can include retweet of TMC Polda update, reply of TMC Polda update, mention of TMC Polda account, retweet of other user, or mention to other user. The messages can also include picture or link. Words that contained in this type of message are "mohon info"(please info), "tanya" (ask), "butuh info" (need info)
Suggestion	Includes suggestion or input to TMC Polda related to traffic, accident, event, traffic law violation, crime, natural disaster or other kind of emergency situation.. The message can include retweet of TMC Polda update, reply of TMC Polda update, mention of TMC Polda account, retweet of other user, or mention to other user. Words that contained in this type of message are "saran" (suggest), "masukan" (input), and "lebih baik" (it is better).
Critique	Includes critique or complaint to TMC Polda Metro related to traffic, accident, event, traffic law violation, crime, natural disaster or other kind of emergency situation. The message can include retweet of TMC Polda update, reply of TMC Polda update, mention of TMC Polda account, retweet of other user, or mention to other user. Words that contained in this type of message is "kecewa" (disappoint).
Conversation	Includes conversation among user related to traffic, accident, event, traffic law violation, crime, natural disaster or other kind of emergency situation. The message can include retweet of TMC Polda update, reply of TMC Polda update, mention of TMC Polda account, retweet of other user, or mention to other user.

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