THE EFFECTIVENESS OF SOCIAL MEDIA USE AT LOCAL GOVERNMENTS

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Abstract: Nowadays, people are connected through social media. The development of social media sites should be an opportunity for local governments to effectively communicate with citizens in many ways. The purpose of this study is to gain a deeper understanding of the usage of social media by the local government to disseminate information, to improve public services, government communication, and to encourage citizen participation. This research investigated social media users notably in Indonesia using Likert Scale questionnaire online then analyzed to find mean and using the ANOVA test as well to find the significant differences between the users and the demographic factors. The results found that 50% of the respondents positively perceived the social media use by the local government. However, 30 – 40% of the respondents were prone to choose neutral option. Therefore, the local government just needs to create the right policy how to effectively and efficiently use the social media to reach out to public

Keywords: social media, local government, Indonesia

1. INTRODUCTION

1.1. Research Background

In this day, people are connected through social media in which any information is able to be easily accessed. Wherever, whenever people are able to be connected through social media from various media such as laptops, tablets, mobile phones. Anderson & Wolff (2010) highlight the significance of these mobile devices for accessing social media platforms (e.g. social networking, text messaging, shared photos, podcasts, streaming videos, wikis, blogs, discussion groups).

Spending time on social media is the latest trend at the moment. Due to social media, people can simply find and connect with everything. Even today people prefer to send messages through social media than email. As said by Hansen, Shneiderman, & Smith, (2011) social media technologies have prompted profoundly new ways of relating. The growth of social media increases significantly. In 2013, nearly one in four people worldwide used one account of social media (eMarketer,

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2013; SI, & Priyanwada, 2016), thus making the information travels really fast so that every news and stories will easily go viral and become public consumption. No wonder surfing social media is a necessity as someone will keep up to date with the latest news and rumors come about.

Numerous activities can be carried out with social media like reading news online, looking for a recipe for housewives or newlyweds who just started to learn cooking, exchanging messages with office colleagues, friends or family, shopping through the e-commerce integrated with social media, and watching videos. According to Alexa (2015), a Web information company providing website traffic rankings, social media is in the top 10 list of the most visited websites, (1) Google; (2) Facebook; (3) YouTube; (4) Baidu; (5) Yahoo; (6) Amazon; (7) Wikipedia; (8) Qq.com; (9) Twitter; and (10) Google.co.in. Whereas for social media, according to Statista (2015), a leading statistics company on the internet, Facebook (1.490 million users) is the most popular social media worldwide followed by QQ (832 million users), QZone (668 million users), and Twitter (316 million users), but QQ and QZone can be only used in China.

THE TOP 15 CITIES WITH HIGHEST FACEBOOK USERS

#	City	Country	Users	Pen.
1.	Jakarta	Indonesia	17 484 300	80.20%
2.	Istanbul	Turkey	9 602 100	85.58%
3.	Mexico city	Mexico	9 339 320	50.67%
4.	London	United Kingdom	7 645 680	91.90%
5.	Bangkok	Thailand	7 419 340	89.50%
6.	Buenos Aires	Argentina	6 568 940	53.02%
7.	Ankara	Turkey	6 549 680	171.919
8.	Kuala Lumpur	Malaysia	6 514 780	119.109
9.	Bogota	Colombia	6 400 520	86.039
10.	Madrid	Spain	5 951 500	116.019
11.	Caracas	Venezuela	5 353 220	200.509
12.	Santiago	Chile	5 229 400	92.889
13.	Rome	Italy	4 306 600	157.189
14.	New York	United States	4 290 760	21.369
15.	Sao Paulo	Brazil	4 068 940	21.269

Statistics Courtesy: SocialBakers

Figure 1

Source: (onlinemarketing-trends, 2011)

The advance of social media sites should be an opportunity for companies or governments to effectively communicate with people in many ways, and develop communication strategies as social media have capability to transform the relationship between the internet and its users, and be able to change power structures and increase the opportunity for users to engage in greater community participation (Kes-erkul & Erkul, 2009). Several governments in Asia have been using social media to actively communicate with the citizens but only 30 percent of Asian governments take full use of Web 2.0 social media technology to communicate and disseminate information to constituents, leading to missed opportunities to better serve their constituents and most of governments use them for a) information dissemination on official government channels, b) education and c) tourism (Kuzma, 2010). Though several cities in Asia are in the top lists of the most active social media users in the world. (Shown in figure 1) (onlinemarketing-trends, 2011) and (Shown in figure 2) (Semiocast, 2012).

Top 20 cities by number of posted tweets

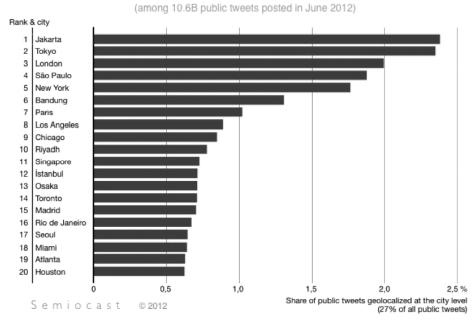


Figure 2

Source: (Semiocast, 2012)

There are still many opportunities to explore social media sites further. Now just how the Asian governments work on a strategy to build up the level of use of social media sites to support them because a lot of benefits gained by using social media, according to Europea (2009), governments and businesses can greatly benefit

from social networks by serving different audiences with minimal financial effort in which they are cheaper to use than traditional media, such as public service announcements in the newspaper, on television, or the radio (Newman, 2009). Likewise, social media technologies can assist government to increase its transparency, its interactions with citizens, to link users to the agencies main webpage, and to release job announcements (Bertot *et al*, 2010). Furthermore, they can increase convenience and personal involvement with government as people can express their opinion or request assistance from the comfort of their electronic device (Brodalski *et al.*, 2011), thus they can eradicate distance between government and citizens (Nielsen, 2012).

In terms of the most active country in the world on Facebook, Indonesia was in the 4th place (Statista, 2014) and in the 5th place for Twitter (Semiocast, 2012). Two Indonesian cities (Jakarta and Bandung) are in the top lists of the most active social media users in the world. Jakarta is the most active city both of Facebook and Twitter user in Indonesia and Bandung actually comes in second place. However, only Bandung's local government has been using social media since late 2013 to actively communicate with the citizens and that is the reason why Bandung is chosen to use in this study. By having that enormous potential resources, is it effective for the local government to use social media as a tool of communication?

1.2. Research Objectives

The main objective of this study is to analyze the effectiveness of social media as a local government's tool to communicate with the citizens. The findings could suggest other local government to adopt the idea in order to get tons of benefits from implementing social media and to create good governance as well, like Waters (2009) discovered that nonprofit organizations lag behind others in social media adoption, waiting to see how others use this new technology.

2. LITERATURE REVIEW ON SOCIAL MEDIA

2.1. Definition and Types of Social Media

There is no typical description used to define social media as it has been transforming and merging into the evolving development of new media (Solis, 2010). According to Daniel Nations (2010), social media is hard to define and is a two-way street that gives you the ability to communicate. However, many similarities from the definitions, (Dann & Dann (2011) have demonstrated how social media is formed based upon the interconnected elements – *social interaction*, *content*, *and communication media*.

According to Mayfield, (2008), social media accelerates the flow of communication by encouraging contributions and feedback from everyone who

is interested, and it is a two-way conversation when comparing to the traditional media because social media outlets are open up to feedback and participation. Additionally, Safko and Brake (2009) have supported the concept proposed by Kaplan & Haenlein (2010), as they have referred social media to "activities, practices, and behaviors among communities of people who gather online to *share information, knowledge, and opinions* using conversational media

According to Kaplan & Haenlein (2010), there are six types of social media:

1. Collaborative projects

Users can change, add, and remove the text-based content. Wikipedia is one of the examples

2. Blogs

It delivers the option of communication with others through the addition of comments. Twitter is the most popular blogs with 316 million users worldwide (Statista, 2015)

3. Content communities

The main objective of content communities is to share media content such as YouTube for videos, Flickr for Photos, and Instagram for photos and short videos

4. Social networking sites

Social networking sites are applications that facilitate users to connect by making personal information profiles, inviting friends and colleagues to have access to those profiles, and sending files and instant messages among each other. Created by Mark Zuckerberg, Facebook is unquestionably the biggest and the most popular social networking sites with 1.490 million active users worldwide as of August 2015 (Statista, 2015). Another social networking sites relatively well-known is Myspace

5. Virtual game worlds

Users can appear in the form of personalized avatars and interact with each other like in real life. "World of Warcraft" is the popular one

6. Virtual social worlds

Users show in the form of avatars and interact in a three-dimensional virtual environment, illustration of this is Second Life.

2.2. Social Media Use in Governments

Some governmental institutions and companies in several countries already use social media with diverse purposes even though there is some presumption that social media can interfere with the performance and productivity of work. Furthermore, according to Statista (2015), one in five American employees are

unable to access Facebook at work due to technical restrictions put in place by their employer. The social network regarded by many as a potential interference at the workplace is therefore blocked in many company networks.

According to Chavez *et al.* (2010), six local governments of the United States of America use social media for emergency readiness, and they include:

- 1. The City of Evanston, Illinois, uses Twitter to alert residents about breaking public safety news like snow emergencies and beach closures
- 2. Johnson County, Kansas, the Johnson County Emergency Management and Homeland Security Department uses to update residents about severe weather and snow alerts, the statewide Tornado Drill Day, emergency snow removal, flu prevention, tornado preparedness, how to prevent electrical fires, the importance of having emergency supplies in the car, winter preparedness and generator usage, and when to take a break from work.
- 3. The City of Moorhead, Minnesota, is using Facebook and Twitter to deliver information about press conferences, road closures, flooding alerts, state of emergency declarations, and updates about the eight flood zones and any flood zone meetings.
- 4. Fort Bend County, Texas, the staff from Fort Bend County OEM used Facebook, Twitter, and blogs to discredit speculation, communicate what the County OEM was doing about the disease, and to control the H1N1 conversation.
- 5. The City of Philadelphia, Pennsylvania, uses social sites to provide for notifications such as crime alerts, traffic alerts and health alerts
- 6. The City of Alexandria, Virginia, used social media to focus on keeping citizens updated as constantly as possible about specific changes to the amounts of snowfall and plowing in particular areas of the city.

The city of Chicago uses foursquare to record the number of visits to different locations within the city (Mossberger & Wu, 2012). Sutton et al. (2007) reports that during the October 2007 Southern California wildfires, local governments used social sites to update the community about the situation and to more effectively manage disaster response.

(Mundy *et al.* (2012) selected ten UK Borough councils primarily using Twitter as broadcast channels, i.e. as outreach strategy. Hofmann et al. (2013) found that the online communication of local governments in Germany is based on disseminating information in a conventional way, the potential of social media as outreach and transparency is not well-exploited by German governments.

According to (Howard, 2012), Brisbane City Council, Australia, used social media during the Brisbane flood of January 2011 to share vital information and

engage with residents and businesses that needed to evacuate. In Kingston City Council in Victoria has set up several different Facebook pages, each focused on the interests of a different community group such as leisure centers, youth services, and maternal and child health. Other councils use social to 1) Promote council activities and events such as market days, festivals and art exhibitions 2) Disseminate information for weather warnings, road closures, and other emergency issues 3) Drive traffic to the council's website 4) Correct misinformation and 5) Engage with the community on a range of issues relevant to council and the community.

In Turkey, 43 out of 81 mayors use twitter for information and news sharing like events organized by the municipality, location and activity sharing regarding mayors' current locations and activities they are involved in, personal messages, direct communication with citizens like messages of congratulating, celebrating, supporting or criticizing, better public services, self-promotion, personal opinion and perspective sharing and promoting participation (Sobaci & Karkin, 2013)

India's and Kuwait's governments have set up site on Twitter to help prevent fatal road accidents (Kuzma, 2010). In addition, Abdelsalam et al. (2013) examined that Egyptian government social media websites were used mainly to post information, with very little two-way interaction between citizens and government. Moreover, in Shanghai, China, at Municipal level, government use microblogs with certain types of purposes such as disclosing government information, provide public services, respond to emergencies and foster interactions between government and citizens (Zheng, 2013).

2.2.1. Social Media Use in Bandung Local Government

The Mayor ordered all city departments to actively use social media to communicate with public, started from the top level like the mayor himself, the head of each city departments to the lowest level like district and its head. At least they need to choose either Facebook or twitter. Immediately after using social media, a lot of complaints and questions coming from the citizens fulfill the government's social media accounts.

Not only city departments but also all the heads of the department must also have social media, so that the conversation can be seen openly by the public. One of the most interesting examples when there was a person that complained about the service he got in one of the districts, then he mentioned the mayor's social media account. After a few minutes, the mayor mentioned the head's account to clarify the issue. Since the use of social media by all levels of the government, two heads of the district have been fired about illegal fees reported publicly on social media by citizens.

The local government has been using social media to disseminate its programs, regulations, policies such as posting a program providing free public transportation for laborers, development plans and the ongoing developments so that citizens will easily monitor the progress, a rule that will punish those who do litter in public spaces. Gamett (1992) adds that governments communicate with their publics in an effort to keep them informed about 'policies, procedures, requirements and conditions'.

Pasek *et al* (2009) say that social network sites users are more civically engaged. With so many social media users in the city of Bandung, it is undoubtedly a huge advantage. The local government knows this potential resources and uses to engage the citizens, such as to reduce flooding at some place in the city, the government ordered citizens through social media to create a hole called biopori in every yard of the citizens' house to reduce the pool of water. The Government also invited citizens through social media to become a volunteer in various government programs and events like helping the government to host in the Asia Africa Conference. The government also often holds a monthly culinary festival and invites the citizens to actively participate either as seller or buyer. Zukin et al, (2006) add that civic participation involves behavior aimed at resolving problems of the community

The local government also uses social media as a tool to serve public so the citizens do not have to come to the city departments to ask or complain, just mention their social media accounts and they will immediately reply. One of examples was when a citizen took a photo of a damaged road then mentioned the related city department's account. A few days later, the city department posted the process of repairing the road until it was completely repaired on social media. Integrity, centered around citizens, and responsive to the public's needs are needed to deliver public services and to improve service delivery, ordinary citizens are enabled to assess the quality, adequacy and effectiveness of basic services, to voice their needs and preferences (Ringold *et al.*, 2013).

By using social media, now the local government is not only very easy to be contacted as it eradicates the rigid bureaucratic protocol when dealing with government institutions but also the local government can respond clearly and fast to all issues and questions coming from citizens. Heise (1985) suggested that the most important part of a public communication model was that governments communicate in an open, honest and timely way with their publics

3. METHODOLOGY

3.1. Data Collection

In order to examine the effectiveness of social media, survey method is used for investigation. The area that has been selected for the present study is Bandung

city which is the capital city of West Java with 3.405.475 people (Jabar.bps, 2013). The samples are the people actively using social media. Online questionnaires were disseminated to author's social media and instant messaging friend list and forwarded to their friends and families. The total samples collected from January 17th to February 21st, 2015 were 216 respondents yet only 197 were useable.

3.2. Measures

The research examines the effectiveness of social media use at the local government. There are several models or definitions of effectiveness, this study uses the goals model (effectiveness means accomplishing goals) which is part of organizational effectiveness, to analyze the data (Cameron, 2015).

The purpose of social media used by the local government can be found in the government sites, newspaper, television, the book written by the Mayor describing why his reign uses social media, and collections of the local government's tweets and posts on social media, then classified based on theory into 4 variables analyzed using Likert scale. Additionally, the study as well factors in the demographic variables (gender, age, occupation, education, and monthly income) to deeply grasp the respondents' backgrounds.

To interpret the survey responses, this study uses the percent agree which summarizes the percent of respondents who agreed to the item (Sauro, 2011a) and a theory proposed by Boone & Boone (2012), if you have designed a series of questions that when combined measure a particular trait, you have created a Likert scale. Use means and standard deviations to describe the scale. If your Likert questions are unique and stand-alone and you need to report the individual items that make up the scale, then analyze them as Likert-type items.

	Likert-Type Data	Likert Scale Data
Central Tendency	Median or mode	Mean
Variability	Frequencies	Standard deviation
Associations	Kendall tau B or C	Pearson's r
Other Statistics	Chi-square	ANOVA,t-test, regression

4. RESULTS AND DISCUSSION

4.1. Demographic data

Among 197 useable respondents consisting of 51.3% female and 48.7% male participants ranging from the age of 15 to > 46, the majority of which are in 25-35 at 48.2% and 15-24 at 35.5%. Regarding to occupations, most of respondents are office workers at 25.9% and others 34,5%. Almost half of them are bachelor's degree/ undergraduate at 40.1% and followed by diploma at 29.9%. Nevertheless, the percentage of respondents' monthly income are 23.4% earned between RP.

2.100.000 – Rp. 3.000.000, 20.8% earned between Rp. 3.100.000 – Rp. 4.000.000 (shown in Table 4.1)

Table 4.1 Summary of demographic statistics (N = 197)

Mea	sure	Item	Frequency	%
1.1	Gender	Male	96	48.7
		Female	101	51.3
1.2	Age	15-24	70	35.5
		25-35	95	48.2
		36.45	29	14.7
		• 46	3	1.5
1.3	Occupation	Student	16	8.1
		College Student	29	14.7
		Office Workers	51	25.9
		Civil Servant	7	3.6
		Entrepreneur	26	13.2
		Other	68	34.5
1.4	Education	Senior High School	55	27.9
		< Bachelor's degree	59	29.9
		Bachelor's degree	79	40.1
		Masters/Doctoral Degree	4	2
1.5	Monthly income	< Rp 1.000.000	38	19.3
		Rp. 1.100.000 - Rp. 2.000.000	35	17.8
		Rp. 2.100.000 - Rp. 3.000.000	46	23.4
		Rp. 3.100.000 - Rp. 4.000.000	41	20.8
		>Rp. 4.100.000	37	18.8

4.1. Descriptive analysis of variables

4.2.1. Sharing Information

Social media can be used to share information about social and political problems (OECD, 2007). To measure the variable of sharing information, used the following objectives:

- a. The citizens know local government's policies posted through social media
- b. The citizens know local government's programs posted through social media

- c. The citizens know local government's development plan and what is being carried out posted through social media
- d. The citizens know the events held by the local government posted through social media

All the variables are measured by the Likert scale from strongly disagree to strongly agree (1 to 5). The result of descriptive statistics in table 4.2. shows that 74,6 % of respondents agree that social media used by the local government can effectively disseminate the information to the public. The indicator is the public nearly never miss the information issued regularly by the local government proving that the utilization of social media by the local government is quite useful to convey the information related to the government's work program. So that the local government could divert the funds regularly used to publicize the information through traditional media which is extremely expensive such as television, radio, and newspapers, then now these funds can be positively used and transferred to other government useful activities.

The ANOVA test in Table 4.2 concludes that there is a different mean value within 3 groups of occupations in which the group of civil servants have higher mean value than the others. They agree that social media used by the local government is effective to disseminate the information as they are also part of the local government widely spreading the information and should be the first to get informed.

A statistically significant difference in mean value occurs in the group of education in which people earning masters and doctoral degree have the highest mean value. They get 4.5 putting them among agree and strongly agree on the use of social media by the local government. Seems they observe any related information issued by the local government.

A Significant difference in mean value as well shows up in the group of income in which the population with the lowest income have the highest mean value. It indicates that they tremendously take notice of the information posted by the local government fully expected to create programs or policies in order to change their lives way better financially.

People know that dealing with government institutions could be grueling like facing with complex and complicated red tape that never ends. By using social media, people no longer need to come and ask face to face with the local government officers regarding the policies or programs the local government has, just wait in front of the smartphone as governments supposed to have programs and policies to assist and protect the economically disadvantaged citizens.

Table 4.2 Information Sharing

Scale	Frequency	Percentage	
1 = strongly disagree	4	0,5%	
2 = disagree	40	5,1%	
3 = neutral	156	19,8%	
4 = agree	307	38,9%	
5 = strongly agree	281	35,6%	
Total	788	100%	
Mean = $4,041$			
Standard deviation = 0,895			

Table 4.3 ANOVA test of Information Sharing

Information Sharing	Gender	Age	Occupation	Education	Monthly Income
knowing local government's policies	0.311	0.937	0.044*	0.304	0.422
knowing local government's programs	0.725	0.476	0.028*	0.036*	0.013*
knowing local government's development plan	0.381	0.514	0.082	0.598	0.413
knowing activities and events held by local government	0.960	0.166	0.000*	0.823	0.008*

^{*}significant = < 0.05

4.2.2. Civic Engagement

Lindahl (2011) highlights that civic engagement has to come from fostering strong community leadership from both professionals and community organization leaders and could come in the form of volunteering, campaigning, or even discussing community issues. The following objectives are used to measure the variable of civic engagement:

- a. Citizens participated in events held by the local government posted through social media
- b. Citizens became volunteers for activities held by the local government posted through social media
- c. Citizens participated in the local government's programs posted through social media (GPS (to collect garbage around you)
- d. Citizens participated in making biopori holes

The result of descriptive statistics in table 4.4. shows 48,8% of the respondents think that social media is an effective tool to engage people to be actively involved in the local government's programs, and 32,4% of the respondents are prone to

choose neutral answers. It simply describes social media used by the local government is not fully able to reach the public to be actively involved.

The ANOVA test illustrates that there is a significant difference statistically between men and women in which the mean value of men is higher than women indicating men tend to be slightly more active to participate. While, the respondents aged 15-24 have the highest mean value among the other age groups, they are still agile to actively participate in all sorts of activities including engaging in the activities held by the local government. Moreover, according to The Indonesian Internet Service Providers Association or APJII (2014), 60% of the internet users in Indonesia belong to this group called digital native which is familiar with internet from an early age.

Table 4.4 Civic Engagement

Scale	Frequency	Percentage
1 = strongly disagree	52	6,6%
2 = disagree	96	12,2%
3 = neutral	255	32,4%
4 = agree	206	26,1%
5 = strongly agree	179	22,7%
Total	788	100%
Mean = $3,461$		
Standard deviation = 1,159		

Table 4.5 ANOVA test of Civic Engagement

Civic Engagement	Gender	Age	Occupation	Education	Monthly Income
participation in events held by the local government	0.018*	0.043*	0.092	0.749	0.143
becoming volunteers for activities held by the local government	0.576	0.226	0.217	0.139	0.617
participation in the local government's programs (a program to pick up the trash around you)	0.867	0.896	0.081	0.100	0.443
participation in making biopori holes	0.237	0.937	0.081	0.104	0.848

^{*}significant = < 0.05

4.2.3. Public Service

The objectives of better public service:

a. The citizens can easily search for any information related to the local government's policies through their social media accounts

- b. The citizens no longer need to go to the related the local government agencies to ask or complain, just mention their social media accounts
- c. The local government answers questions coming through their social media accounts
- d. The local government responds to complaints coming through their social media accounts

The result of descriptive statistics in table 4.6. shows that 56,3 % of the respondents agree that social media can help the local government improve the public services but those who are neutral are quite a lot with 33,2%. Even if the outcome is slightly above half of the citizens yet still social media used by the local government cannot be fully viewed as an effective tool to use in the public services as almost half of the citizens are on the other side.

The ANOVA test delivers a statistically significant difference of the group occupation, notably the civil servants having the highest mean value with 4.5 which see social media used by the local government can effectively improve the quality of public services but it is less objective as the civil servants surveyed are not only part of the local government itself but also completely involved in the process of giving service regularly to the public, which actually are more entitled to assess their performance.

There is a statistically significant difference as well in the group of education in which the high school students have the highest mean value. They assume that the local government is quite effective in using social media to answer questions or hear their complaints conveyed through social media but different with the respondents having master's / doctorate degree which think the opposite that the local government does not effectively use social media in order to answer the questions or respond to the complaints from citizens, proved they have the lowest mean value.

Table 4.6 Public Service

Scale	Frequency	Percentage	
1 = strongly disagree	16	2%	
2 = disagree	66	8,4%	
3 = neutral	262	33,2%	
4 = agree	254	32,2%	
5 = strongly agree	190	24,1%	
Total	788	100%	
Mean = 3,680			
Standard deviation = 0,995			

ANOVA test of Public Service						
Better Public Service	Gender	Age	Occupation	Education	Monthly Income	
Easiness of searching for any information	0.817	0.521	0.006*	0.300	0.678	
Simplicity of asking and complaining	0.123	0.341	0.072	0.078	0.778	

0.192

0.327

0.000*

0,003*

0.436

0.217

0.739

0,858

Table 4.7

0,233

0.573

the questions

the complaints

4.2.4. Government Communication

The local government's response to

The local government's response to

Pasquier (2012) divides government communication into two functions, (1) core functions: informing the public, explaining and supporting decisions, defending values and promoting responsible behaviors, facilitating dialogue between institutions and citizens, and (2) ancillary functions: orienting citizens and residents; demonstrating responsiveness, promoting the legitimacy of government organizations and actions, providing whatever information is requested by individuals. The following objectives are used to measure the variable of the government communication:

- It is relatively easy to contact the local government
- b. The local government always socializes every policy and program through social media
- The local government responds quickly to the questions coming through social media
- d. Information posted by the local government through social media is easy to be understood

Table 4.8. shows 51,7% of the respondents think that social media can help the local government have better public communication and 40% think neutral. The local government has not fully succeeded in using social media as a means to communicate with the citizens who still tend to choose neutral option as a safe choice as a sign that they probably do not know or have not tried yet to interact directly with the local government using social media.

The ANOVA test shows that there is no a statistically significant difference among the groups in the demographic backgrounds. The variables of better public communication do not depend on any demographic factors.

^{*}significant = < 0.05

Table 4.8 Government Communication

Scale	Frequency	Percentage	
1 = strongly disagree	14	1,8%	
2 = disagree	49	6,2%	
3 = neutral	317	40,2%	
4 = agree	281	35,6%	
5 = strongly agree	127	16,1%	
Total	788	100%	
Mean = $3,581$			
Standard deviation = 0,893			

Table 4.9
ANOVA test of Government Communication

Government Communication	Gender	Age	Occupation	Education	Monthly Income
Easiness to contact the local government	0.715	0.527	0.378	0.243	0.288
Socialization of the local government's programs	0.626	0.930	0.090	0.784	0.201
Quickness of the local government's answer to the questions	0.998	0.958	0.350	0.093	0.591
Clarity of the local government's information	0.456	0.473	0.504	0.947	0.602

^{*}significant = < 0.05

5. CONCLUSION

5.1. Key Findings

The impact of social media used by the local government, the citizens become aware of the programs, policies, information, and what is happening and what is being carried out in the city. This study has revealed that the use of social media by the local government to share information is positively perceived by the public. Innumerable information disseminated by the local government can be effortlessly discovered by the public as well.

The use of social media to engage people cannot be said fully effective in this study. Not only is it not fully effective to engage people but also to have better public services and better public communication as over 30 - 40% of the respondents tend to choose neutral option. Sauro (2011b) explains that it seems reasonable that users will genuinely have a neutral attitude about some items that ask about usability or the general satisfaction with a system

The phenomenon currently happening in the city is the citizens more focus on social media privately possessed by the mayor than the city departments which are equipped as well with social media. Instead of addressing the questions and the complaints to the related city departments which are relevant and responsible for handling the problems, most of them are addressed directly to the mayor's social media accounts so that some people look disappointed as their problems remain unresponded/ and probably unsolved causing the local government is less likely to effective using social media in terms of engaging people, having better public services, and having interactive communication with the public. Additionally, the mayor just responds few questions considered important and representing many similar questions. Fair enough if the local government is reflected to be effective in using social media just for sharing information as it is mostly disseminated through the mayor' social media followed the most by the citizens.

Maybe some people living in the city do not know that all city departments have been already using social media so that many questions addressed directly to the social media accounts belonging to the mayor, or the city departments do not even respond the questions or the answers received are not fully solving the problems. That is why some questions mention the related department and the mayor's account in the same sentence to put a bit pressure that the questions are known by the mayor just like 'Cc' option in the e-mail

Having overwhelmed schedule makes the mayor cannot respond to every post or tweet coming from social media, the local government therefore needs to keep informing the citizens that all the city departments are currently reachable and to create a special division led by social media specialist at all city departments to handle all the questions and curiosities about everything being carried out, planned, and talked about within the city. Many companies, notably those engaged in the field of services are using social media not only as a means to communicate and respond to every complaint coming from the customers but also to maintain and improve the relationship between them. A company simply exemplifies how giving birthday greetings to a customer can greatly impact to the loyalty level. In the context of the government's relationship with the citizens, congratulating those who gave positive impact on the city in the field of academics or sports nationally or internationally could impressively boost sense of belonging to the city, thus giving positive image of the local governments and likely bringing about a domino effect to other citizen to make something useful for the city.

To positively influence those who chose the neutral option, the local government might need to use any other social networking sites instead of keeping using Facebook, Twitter, and Instagram. You tube could be one of the best choices available as 60% of the Indonesian internet users belong to Generation Z which 85% of them are more likely to visit You tube than any other social media site

(Simpson, 2015). Furthermore, the local government might need as well to optimize social media posting frequency in order to keep the citizens informed, Hughes (2106) highlights that Facebook post engagement is steady for the first 90 minutes, so start with a mid-afternoon schedule and tweak from there or try experimenting with early morning posts as most of people scroll through the Facebook feed when they wake up each morning.

Today, more and more people get addicted and vigorously use social media as a means of communication tool, then the local government just needs to find the right strategy and formula to enhance the effectiveness of social media use so as to effectively communicate, reach out to the public and save money as well at the same time. By using social media, the citizens are willing to ruthlessly criticize, thus delivering honest feedback consistently for evaluation for the local government.

5.2. Limitations and Further Research

The local government has been using social media since late 2013. The time frame is a relatively short to fully acquire an overview of the effectiveness level of social media use. As the time goes by, the effectiveness level will gradually increase if accompanied by a number of improvements as well

Further research could use another approaches, for example, the strategic constituencies model (effectiveness means satisfying important stakeholders) (Cameron, 2015), which could have other point of view related to the effectiveness level of social media use by assessing level of satisfaction of the citizens or the government itself as the user.

Countless factors are likely to affect the effectiveness of social media use by the local government, it could be the citizens who do not completely understand how to use social media or the government officers who are lack of training how to manage social media as part of local government communications tools. The use of social media in the workplace, especially in government agencies are still considered taboo, how social media still considered as an entertainment tool could interfere or distract a person's job. Further research in this area would be interesting.

References

- Abdelsalam, H. M., Reddick, C. G., Gamal, S., & Al-shaar, A. (2013). Social media in Egyptian government websites: Presence, usage, and effectiveness. *Government Information Quarterly*, 30(4), 406–416. http://doi.org/10.1016/j.giq.2013.05.020
- Apjii. (2014). Profil Pengguna Internet Indonesia 2014. Retreieved March 10, 2016 from https://www.apjii.or.id/content/statistik/39
- Alexa. (2015). Top sites: The top 500 sites on the Web. Retrieved October 6, 2015, from http://www.alexa.com/topsites

- Anderson, C., & Wolff, M. (2010). The Web Is Dead. Long Live the Internet | WIRED. Retrieved January 7, 2016, from http://www.wired.com/2010/08/ff_webrip/all/1
- Badan Pusat Statistik Provinsi Jawa Barat. (2013). Retrieved from http://jabar.bps.go.id/linkTabelStatis/view/id/83 retrieved 21/10/2015
- Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies. *Government Information Quarterly*, 27(3), 264–271. http://doi.org/10.1016/j.giq.2010.03.001
- Boone, H. N. J., & Boone, D. a. (2012). Analyzing Likert Data. *Journal of Extension*, 50(2), 30. http://doi.org/10.1111/j.1365-2929.2004.02012.x
- Brodalski, D., Brink, H., Curtis, J., Diaz, S., Schindelar, J., Shannon, C., & Wolfson, C. (2011). The Health Communicator's Social Media Toolkit.
- Cameron, K. (2015). Organizational Effectiveness. *Organizational Behavior* (pp. 1–4). Wiley Encyclopedia of Management. 11. http://doi.org/10.1002/9781118785317.weom110202
- Chavez, C., Repas, M. A., Stefaniak, T. L., & Chavez, C. (2010). A New Way to Communicate with Residents/: Local Government Use of Social Media to Prepare for Emergencies An ICMA Report, 1–13.
- Dann, S., & Dann, S. (2011). E-Marketing: Theory and Application. Palgrave Macmillan. Retrieved from https://books.google.com/books?hl=en&lr=&id=5dReAQAAQBAJ&pgis=1
- eMarketer (2013). Social Networking Reaches Nearly One in Four Around the World. Retrieved October 20, 2015, from http://www.emarketer.com/Article/Social-Networking Reaches-Nearly-One-Four-Around-World/1009976
- Europa, (2009). Social Networking Sites: Commissioner Reding stresses their economic and societal importance for Europe. 26-September, 2009. Retrieved October 10, 2015 from http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/587
- Gamett, J. L. (1992). Communicating for Results in Government. Jossey-Bass Publishers: San Fransisco.
- Hansen, D., Shneiderman, B., & Smith, M. A. (2011). Analyzing Social Media Networks with NodeXL: Insights from a Connected World. Morgan Kaufmann. Retrieved from https://books.google.com/books?hl=en&lr=&id=rbxPm93PRY8C&pgis=1
- Heise, J. A. (1985). Toward closing the confidence gap: an alternative approach to communication between public and government. *Public Affairs Quarterly* 9(2): 196-217
- Hughes, B. (2016). How To Optimize Your Social Media Posting Frequency. Retrieved March 19, 2016 from http://socialmediaweek.org/blog/2016/03/optimize-social-media-time/
- Hofmann, S., Beverungen, D., Räckers, M., & Becker, J. (2013). What makes local governments' online communications successful? Insights from a multi-method analysis of Facebook. *Government Information Quarterly*, 30(4), 387–396. http://doi.org/10.1016/j.giq.2013.05.013
- Howard, A. E. (2012). Connecting With Communities: How Local Government is Using Social Media to Engage with Citizens.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59–68. http://doi.org/10.1016/j.bushor.2009.09.003

- Kes-erkul, A., & Erkul, R. E. (2009). Web 2 . 0 in the Process of e-participation/: The Case of Organizing for America and the Obama Administration, 1–19. Retrieved from http://scholarworks.umass.edu/ncdg/32/
- Kuzma, J. (2010). Asian Government Usage of Web 2.0 Social Media. Sites The Journal Of 20Th Century Contemporary French Studies, (March), 1–13. Retrieved from http://www.epractice.eu/en/document/313346
- Lindahl, N. (2011). Civic Honours. Retrieved March 17, 2016 from http://civichonors.com/2011/03/chapter-1-what-is-civic-engagement/
- Mayfield, A. (2008). What is social media. Networks, 1.4, 36. http://doi.org/10.2217/rme.11.82
- Mossberger, K., & Wu, Y. (2012). Civic Engagement and Local E-Government/: Social Networking Comes of Age, 1–3.
- Mundy, Darren, Umer, & Qasim. (2012). An analysis of UK Council use of the social network Twitter.
- Nations, D. (2010). Web Trends. Retrieved October 20, 2015, from About.Com. http://webtrends.about.com/od/web20/a/social-media.htm
- Newman, B. (2009). Government/Non-Profit policy: Use of social media. Retrieved October 10, 2015 from Inqbation: http://www.inqbation.com/government-policy-on-the-use of social media/
- Nielsen. (2012). State of the media: Social media report. Retrieved October 10, 2015 from Nielsen: http://blog.nielsen.com/nielsenwire/social/2012/
- OECD (2007). Participative Web and User-created Content. Paris: OECD.
- Onlinemarketing-trends. (2011). Retrieved October 10, 2015, from http://www.onlinemarketing-trends.com/2011/04/top-15-cities-with-highest
- Pasek, J., More, E., & Romer, D. (2009). Realizing the Social Internet? Online Social Networking Meets Offline Civic Engagement. *Journal of Information Technology & Politics*, 6:3-4, 197-215, DOI: 10.1080/19331680902996403
- Pasquier, M. (2012). Government Communication, in L. Côté and J.-F. Savard (eds.), *Encyclopedic Dictionary of Public Administration*.
- Ringold, D., Holla, A., Koziol, M., & Srinivasan, S. (2012). Citizens and Service Delivery: Assessing the Use of Social Accountability Approaches in Human Development, Washington DC: World Bank
- Safko, L. & Brake, D. K. (2009). The Social Media Bible: Tactics, Tools and Strategies for business Success. N.J, USA: John Wiley and Sons.
- Sauro, J. (2011a). How To Interpret Survey Responses: 5 Techniques. Retrieved March 10, 2016 from http://www.measuringu.com/blog/interpret-responses.php
- Sauro, J. (2011b). Survey Items Should Include A Neutral Response: Agree, Disagree, Undecided?. Retrieved March 19, 2016 from http://www.measuringu.com/blog/neutral-option.php
- Semiocast (2012). Twitter reaches half a billion accounts More than 140 millions in the U.S. Retrieved October 20, 2015, from http://semiocast.com/en/publications/2012_07_30_Twitter_reaches_half_a_billion_accounts_140m_in_the_US
- Simpson, P. (2015). The Subtle Differences Between Gen Y And Gen Z. Retrieved March 19, 2016 from http://socialmediaweek.org/blog/2015/04/differences-gen-y-and-z/

- Sobaci, M. Z., & Karkin, N. (2013). The use of twitter by mayors in Turkey: Tweets for better public services? *Government Information Quarterly*, 30(4), 417–425. http://doi.org/10.1016/j.giq.2013.05.014
- Solis, B. (2010). Defining Social Media:2006 2010. Retireved October 10, 2015 from http://www.briansolis.com/2010/01/defining-social-media-the-saga-continues/.
- Statista. (2015 a & c). Leading social networks worldwide as of November 2015, ranked by number of active users (in millions). Retrieved October 24, 2015, from http://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-ofusers/
- Statista. (2015 b & d). Leading countries based on number of Facebook users as of May 2014 (in millions). Retrieved October 24, 2015, from http://www.statista.com/statistics/268136/top-15-countries-based-on-number-offacebook-users/
- Statista. (2015e). 1 in 5 Americans Cannot Access Facebook at Work. Retrieved October 24, 2015, from http://www.statista.com/chart/1483/websites-blocked-by-us-employers/
- Sutton, J., Palen, L., and Shklovski, I. (2007). Backchannels on the Front Lines: Emergent Uses of Social Media in 2007 Southern California Wildfires, In Proceedings of the 5th International ISCRAM Conference, May 2008, Washington, DC, USA,(Eds, Fiedrich, F. and Van de Walle, B).
- Waters, R. D. (2009). The use of social media by nonprofit organizations: An examination form the diffusion of innovations perspective. In T. Dumova, & R. Fiordo (Eds.), *Handbook of research on social interaction technologies and collaboration software: Concepts and trends* (pp. 473–485). Hershey, PA: IGI
- Zheng, L. (2013). Social media in Chinese government: Drivers, challenges and capabilities. *Government Information Quarterly*, 30(4), 369–376. http://doi.org/10.1016/j.giq.2013.05.017
- Zukin, C., Keeter, S., Andolina, M., Jenkins, K., & Delli-Carpini, M. X. (2006). A new engagement? Political participation, civic life, and the changing American citizen. New York: Oxford University Press.
- SI, L. & Priyanwada, W. (2016). An investigation and analysis of online public access catalogues (OPACs) in university libraries in Sri Lanka. International Journal of Humanities, Arts and Social Sciences, 2(5), 44-55.