EFFECT OF SOCIAL MEDIA ON WEBSITE CITY GOVERNMENT IN INDONESIA

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ABSTRACT

All municipal governments in Indonesia have implemented a website as a medium for information and communication society. The number of municipalities involved as samples in this study were 98 municipalities in the province except city located in the province of Jakarta as the capital of the country. Based on observations of the structure of the URL name, it was found that there are still fraction not meet site regulations and policies that have been outlined by the government. Website municipalities are rarely accessible by the visitors. They prefer to visit the websites of companies or educational institutions Website popularities are measured by Alexa Global Traffic Rank, number of referring domains and external back links. The results showed that of the 93 municipalities studied have been entirely (100%) web-accessible. Twenty-nine (29) of the 93 municipalities (24%) have social media. The most social media widely used are Facebook and Twitter, followed by Youtube, and other social media. This study shows that there is still a correlation between using of social media by the website popularity. A visit to the website is not caused by the availability of the website and use of social media. In other words, the popularity of a website is not caused by the use of social media.

Keywords: social media, website, government

1. INTRODUCTION

Indonesia is the largest archipelago in the world with more than 17,000 islands, consisting of 33 provinces, 399 districts and 98 municipalities. Having a separate area located and various communities, Indonesia is able to utilize ICT as an alternative to integrate all areas of administration. Use ICT and Internet as a tool to achieve better government [4].The provincial government, counties, and cities located outside Java have relatively little information and services on their website [1].

Problems encountered are computer networks and communications database which is not uniformly implemented by all provinces in Indonesia. This condition will lead to a digital divide in the use of information and communication technologies by certain

groups of people in different areas. The Indonesian government should be able to find a solution of the problem, so that e-government will be successfully implemented. Successful implementation of e-government in Indonesia will result in improved public sector service.

2. THEORETICAL BACKGROUND

During the period of the last decade has made progress in the field of information and communication technology (ICT) has changed much of the world into an interconnected digital community for "365/24/7" [5].
Creating an interaction with government activities which can be done through a service 24 hours a day, 7 days a week, for the developed countries is not difficult. But it would be difficult to realize this situation for developing countries [6].

E-Gov (also called Electronic Government, Digital Government, Electronic Government, and similar names) emerged in the late 1990s [10]. According to the World Bank definition, the E-Government refers to the use by government agencies of information technologies (such as Wide Area Networks, the Internet, and mobile computing) that have the ability to transform relations with communities, businesses, and other arms of government. ICT with the exception of institutional efficiency and sustainability factors positively associated with governance indicators. Therefore, ICT, has the potential to promote good governance [11]. Stages of E-Government are (1) Emerging; The construction official website; (2) Improvement: increased government sites; information becomes more dynamic; (3) Interactive: Users can download forms, e-mail officials and interact through the web; (4) Transactional: Users can actually pay for services and other online transactions; and (5) Seamless: Full integration of e-services across administrative boundaries.

2.1 The growth of social media
Social media is a term describes a software that can create user-generated content that can be shared [7]. Social media technologies including social networking Websites, blogs, and wikis, and photo and video sharing sites online, and status updates RSS site. In recent years, companies, organizations begin to utilize social media as one of alternative to engage in dialogue with stakeholders, including in terms of CSR. Facebook, blogs, and twitter is a social media company that has begun to be used.

2.2 Use of social media
2.2.1 Facebook
At the beginning of it's launch in 2004, currently facebook is the most famous and popular web's social media. Facebook also helps people communicate more efficiently with their relationships, family and co-workers [8]. Within 10 years, Facebook has grown rapidly, from one million active users in 2004 [8] and quoted from The Next Web, monthly active users Facebook now has surpassed the 1.19 billion account which is 874 million users access Facebook from mobile devices. The existing features of Facebook allows municipal governments to present and disclose any information that would like to display by utilizing the wealth of media available on Facebook. Because Facebook provides capabilities for writing the status, reply to comments, post pictures, upload videos up, the company can use it to express and present the company as desired by management.

2.2.2Twitter

Twitter is a social networking service website that allows users to send and read text-based short messages up to 140 characters, or better known as chirp (tweet). Twitter was founded in March 2006 by Jack Dorsey and launched social networking site in July. Since its launch, Twitter has now become one of the top ten most visited sites on the Internet, and Twitter is often dubbed the "short message from the Internet." On Twitter, unregistered users can only read chirp, while registered users can posting interface chirp through the web site, short message services (SMS), or through a variety of applications for mobile devices.

2.2.3 YouTube

Founded in 2005, YouTube is the world's largest online video community, where users upload, watch, and share videos. YouTube appears at the beginning of its development as a business tool which is very good and effective for use presentation and promotion. The use of social media sites as social networking sites be put into a medium of information and communication.

3. Methodology

Procedures and models used in this study is called Research conducted by [3], [2] and [1] conducted webmetrics and evaluation approach to web site 93 municipalities in Indonesia. Two other variables used in this study are numbered backlinks and referring domains. Features are evaluated is the use of social media as an alternative media that can be used to communicate information city government and improve dialogue between government and its stakeholders, and classify social media based on its use.

Features of the site was evaluated by 3 investigators using a standard worksheet that contains features of an ideal city government website that refers to reasearch ever done by previous investigators [1,2,3]. Checklist prepared for the study include any social media website listed in the city government. Descriptive analysis was conducted to demonstrate any kind of social media that have been used by the city government website.

The wealth of information is measured by the number of web pages indexed in google search engine with the syntax: - site: the url address -. Wealth is measured in the range of 0 which means there are features and 1, which means there are features in the website. At first, the total score was calculated for each site, then the index is obtained by dividing the features in the total value of each municipal government websites with the highest value.

Measurements were performed in the same time to avoid fluctuations in search engine query results. Data taken at the end of May 2013. Data collected is the number of web pages, alexa traffic, and evaluation of the features of the website. Popularity of a website is measured by using the alexa traffic rank.

Independent sample t test was used to test for differences in the number of webpages and the traffic based on the use of social media for each type ie facebook, twitter, youtube, instagram, and path. The difference between the rate of use of social media

websites in the city outside Java and tested with cross-tab analysis with chi-square test. Testing techniques recently used to determine the digital divide phenomenon (digite divide) geographically in Indonesia. According to the OECD (Organization for Economic Co-operation and Development), the definition of the Digital Divide as "the gap between individuals, Households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access ICTs and to their use of the Internet for a wide variety of activities ".

4. Result and Discussion

Not all municipalities in the Indonesian government has implemented a website with the name of the URL that refers to government regulations. URL must include the name stands for municipalities and combined with the word "city" such as **www.semarangkota.go.id**. Regulations are not applied equally Jakarta as the capital city of Indonesia. Name URL Jakarta Special District is www.jakarta.go.id. How naming URL set in the Decree of the Minister of Communication and Information, number: 28/PER/M.KOMINFO/9/2006 go.id about the use of the domain name to the official website of central and local government.
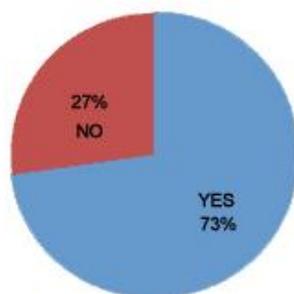

Figure 1. Naming url governments

Figure 1. above are shown in percentages municipal government of Indonesia has implemented a website with the name of the URL that refers to government regulations.

Utilization of social media is shown by some municipal government websites that include addresses or symbols of social media on his official website. Social Media is a web-based information technology and mobile (mobile) communication is used in order to become more interactive dialogues. By using social media to share someone or community, helped create (Cocreate), discuss, and modify user-generated content.
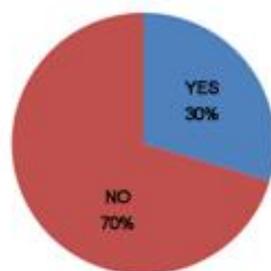

Figure 2. Use of Social Media

There are several types of social media use is popular microblogs (Twitter), content communities (YouTube), social networking sites (Facebook).
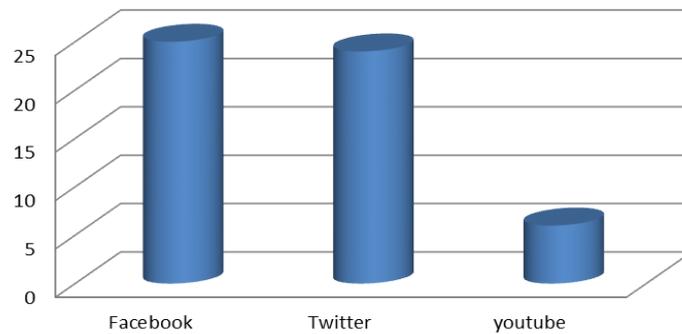

Figure 3. The use of social media types

Such studies have been carried out [9], Facebook has its own level of disclosure and self-presentation with a high level of media presence and wealth being. Features that facebook allows government municipal government in this regard can be present and disclose any information to be conveyed and the display of wealth by utilizing existing media on Facebook. Because of Facebook provides the ability to write your status, reply to comments, post pictures, upload videos up, the company can use it to express and present activities or work program as desired by management. Twitter is an option that can complement communication media. Although the level of presence and richness of media that can be used low, but the social dimension of the disclosure and presentation of high belong Twitter. By using Twitter, municipal governments can not share any information, in the form of news or statements or short comments on all stakeholders compact.

Table 1. Data maximum city government website statistics

City	Google Size	Alexa		Social Media			Twitter			Facebook (Fan Pages)
		Global Rank	Indonesia Rank	F	T	Y	Twitter	Following	Follower	
Kota Pematang Siantar	7130	3315966	83419	1	1	0	878	197	95	280
Kota Tebing Tinggi	1480	4953655	0	1	1	0	0	0	8	18
Kota Bandung	722000	304452	3879	0	1	1	6034	424	15394	0
Kota Depok	32400	205093	3232	1	1	1	5965	268	10067	19525
Kota Surabaya	1050000	84100	1113	1	1	0	6087	23	3201	8893
Bali	139000	355449	7500	1	1	1	7043	113	5475	1231

The table above shows that the municipality is not popular websites, full-featured, inadequate information. Score or usefulness of the information is not addressed in this study. Traffic does not depend on the wealth of information and a number of web features. There are differences in the wealth of information and real traffic rank amongst the provinces outside Java with Java. City government website that utilize social media in general have a number of web pages and different traffic rankings. Websites that utilize facebook page shows the amount of traffic and rank better than without it. A slightly different pattern occurred

in the use of Twitter that shows traffic rank higher but showed a lower page number. The descriptive analysis shows that the use of social media more impact on website traffic. General description of the differences in the use of social media seen from the location of the city on the island of Java and outside Java can be seen in the figure below.
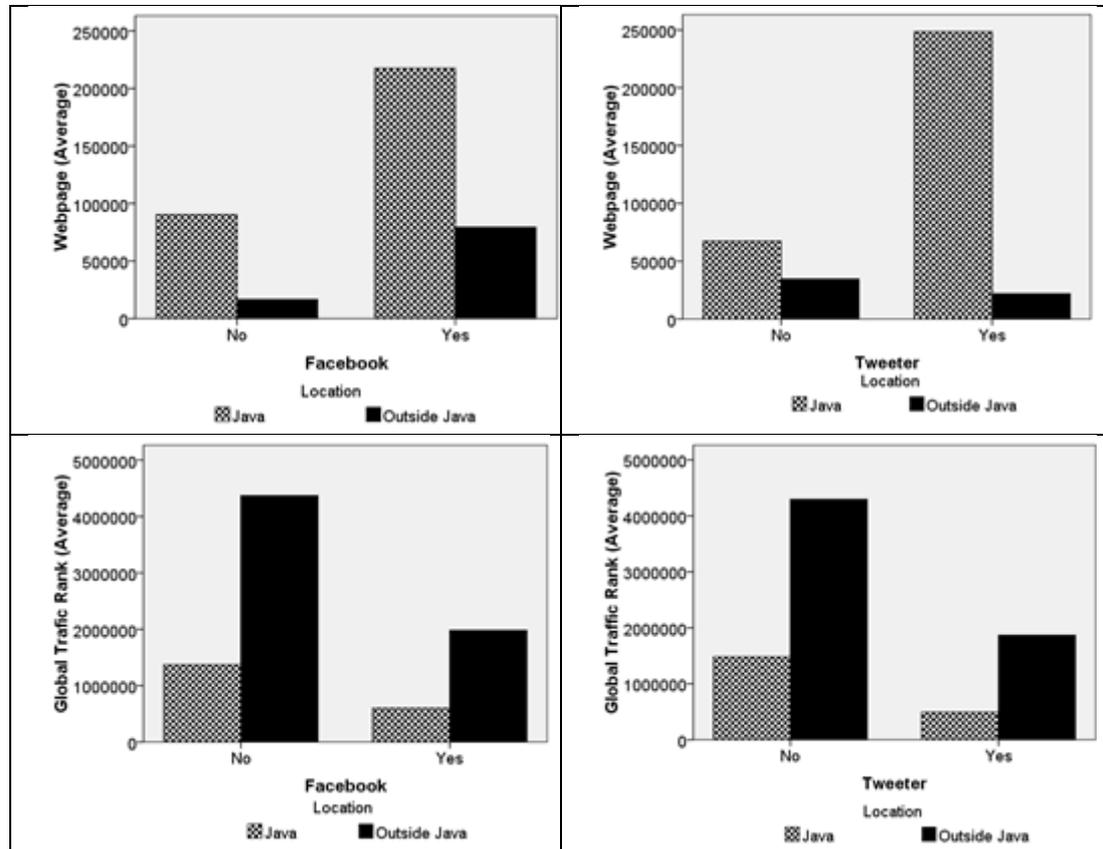

Figure 4. Comparison webpage and traffic rank is based on the ownership of social media types and locations of cities in Indonesia

The figure above shows there are gaps popularity as measured by traffic rank and wealth content measured by the number of webpages between cities in Java and outside Java. Website town in Java show traffic ranking and the number of webpages better than outside Java. Test results based on differences webpage traffic and ownership of social media by using independent sample t tests are presented in the table below.

Table 2. Summary of statistical tests based on differences in the social media web metrics

Web Metrics	Facebook		Twitter		Instagram	
	A	Result	α	Result	α	Result
Number of webpage	0.024	**Significant**	0.056	No Significant	0.051	No significant
Global traffic rank	0.027	**Significant**	0.014	**Significant**	0.118	No significant

The test results using α values assuming similarity between group variance (equal

variance assumed). The difference is significant if the value of α is said to be less than or equal to 0:05. Tests on instagram and path utilization can not be done because most of the city government websites in Indonesia has not utilize the two types of social media. The testing results showed that only facebook that had a significant impact on the webpage and traffic, while Twitter only affects the Traffic alone. Instagram utilization showed no significant difference in either the webpage or traffic. For facebook impact, these findings are consistent with research Milano, Baggio, and Piattelli (2011) which states that the use of facebook increase the number of visits to a tourism website.

Further analysis is a difference between the use of social media websites in the city on the island of Java and outside Java with descriptive statistics and Chi-square test statistic can be seen in the table below.

Table 3. Percentage use of social media in the city website

Social Media		City location		Chi-Square	α	Remark
		Java	Outside Java			
Facebook	No	20 (69%)	50 (78%)	0.899	0.343	No Significant
	Yes	9 (31%)	14 (22%)			
Twitter	No	19 (66%)	52 (81%)	2.735	0.098	No Significant
	Yes	10 (34%)	12 (19%)			
Youtube	No	25 (86%)	62 (97%)	3.763	0,052	No Significant
	Yes	4 (14%)	2 (03%)			

Percentage of city websites in Java that using social media is higher than outside Java for all types of social media. Types of social media use is the highest percentage in the island of Java, namely Twitter, followed by Facebook and YouTube, while outside the island of Java, Facebook is more widely used, followed by Twitter and YouTube. Percentage use of facebook and twitte higher by local government websites in accordance with the study Graham and Avery (2013) as well as research Hartmann, Mainka, and Peters (2013) on the use of social media is officially managed by the city government.

Although the percentage of use of social media in the island of Java is higher than outside the island of Java, the results of Chi-square test showed the difference was not significant as indicated by the value of α greater than 0.05. However, the statistical analysis does not mean that Indonesia did not face the problem of the digital divide. The difference is not significant in this study is due to the level of equity in the use of social media remains low and the city website usage percentage difference between Java and outside Java is relatively small. When compared with other countries, it is clear that Indonesia is facing a digital divide.

Hermana and Silfianti (2011) states that local government websites in Java and outside Java still shows the digital divide by using parameters such as the number of webpages webmetrics, number of links, and the number of documents on the website of the local government in Indonesia. The phenomenon of the digital divide is also indicated by studies Hermana et.al (2012) based on differences in the completeness of financial and non-financial in local government websites in Java and outside Java. Rahman (2014) examined the phenomenon of the digital divide seen from the user's perception of e-government system that is applied to the local governments in Indonesia.

4.1 Conclusion

Popularity and the number of municipalities in Indonesia website content is still low by world traffic rank, the number of web pages, and number of backlinks. Technically, the stage of the transaction in the context of e-government development have not been fully achieved. Interaction and two-way communication between the government and society are also rarely implemented in the municipality website and social media. In this study suggests that there is still a correlation between the use of social media by popoularitas webiste. A visit to the website is not caused by the availability of the website and use of social media, in other words, the popularity of a website is not caused by the use of social media. Social media has been used by 24% of the city government website. The most social media used is facebook followed by twitter and youtube.

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