

TOWARDS CYBER CITY: DKI JAKARTA AND SURABAYA PROVINCIAL GOVERNMENT DIGITAL PUBLIC SERVICES

Mia Angeline¹; Lidia Evelina²; Vini Mariani Siregar³

^{1,2,3}Communication Department, Faculty of Economic and Communication, Bina Nusantara University
Jln. K.H Syahdan No. 9, Palmerah, Jakarta, 11480
¹f.angeline@gmail.com; ²lidiaevelina@yahoo.com; ³v.mariani2000@yahoo.com

ABSTRACT

The goal of this research was to do a comparative study on the use of information technology in DKI Jakarta Provincial Government through Jakarta.go.id website and Surabaya City Local Government through Surabaya.go.id website. This research focused on public services and interactive use of communication media. Research method used was descriptive qualitative. Data were collected through a depth interview with Jakarta.go.id and Surabaya.go.id website administrators, observation of digital data, literature review, and through secondary data. Data analysis was done through a constant comparative technique. The results indicates that diffusion innovation theory is used by provincial government to give digital public services. It means that the government is seeking people to adopt the use of information technology in the interaction with the government. Local and Provincial Government provides a media center for public services, which the public can access information and provide input to the government. Some of the challenges show that society is not fully ready to change from conventional public services to digital public services received from the government. There is a massive need to educate society while also providing free mobile internet services. Other than that, there is also a gap in internal governmental human resources skill and competences. As a solution to some of these problems, both DKI Jakarta and Surabaya Provincial Government need to apply information technology to achieve e-government and cyber city.

Keywords: cyber city, digital, public service, provincial government

INTRODUCTION

In today's era of information, public services face a huge challenge related to the relations between government, market, and society (Purnamasari, 2012). To create an effective and communicative public service, the government needs to change from conventional to e-government. The provincial government encourages and educates city and rural society about e-government, because the society does not have a habit to access or received public services digitally. Every Indonesian citizen must meet with their local government face to face for any kind of public administrative needs, ranging from civil registry to business documents. However, the services given by government are not yet viewed as satisfactory. The existence of One-Stop Service Unit or *Unit Pelayanan Satu Atap* (UPTSA) in the municipality or district level is currently considered ineffective nor communicative. Government agencies are still not able to provide superior service in providing public services such as Birth Certificate Management, Identity Card (KTP), Driving License (SIM), and Building Permit (IMB). In addition, people are still facing difficulties in obtaining information regarding other services, such as cheap with high quality education, health services, etc. It is a small part of the sample lack of information on public services by the government.

This research aims to look at the factors of the Surabaya and Jakarta city governments in the digital public service sector. Another aim is to look at the efforts that have been made by local

governments to provide solutions that can overcome these obstacles. It also aims to examine the readiness of human resources in carrying out public services through information technology. Expected results of this study could help disseminate e-government programs to the public, as well as the drafting of a guide book for the public about the Surabaya and Jakarta governments' website-related public services.

Surabaya city government's website can be accessed at www.surabaya.go.id, the site is divided into three categories: Public Service, Public Complaint and Public Info. These three categories are considered to have covered all the necessary aspects of society in digital public service. In the year 2013, Surabaya was awarded the Future Government in 2013 in the category of Data Center and Data Inclusion in information technology that successfully help public services. Excellent public service is a reflection of good urban planning. Meanwhile, the Jakarta city government's website, which can be accessed at www.jakarta.go.id, is divided into seven categories: Public Complaints, Licensing Services, Financial Information, Application of Public Information, Jakarta Statistics, Retribution, and Public Services. Web structure of the Jakarta's website is simpler, so chances are it is easily understood by the people who access the site.

Public services described in the website of Surabaya and Jakarta still need the support of human resources to perform optimally. Because those who will perform public services directly to the public is aided by information technology. Without adequate readiness of human resources, information technology used will be in vain. Therefore, this research also wants to examine the readiness of human resources in the use of information technology so as to provide optimal digital public services.

The research questions discussed in this study are: (1) how can the use of information technology by the Jakarta Provincial Government through Jakarta.go.id optimally increase public service? And (2) how can the use of information technology by Surabaya City Government through Surabaya.go.id optimally increase public service? The aim of this study is the result of a comparative study between the use of information technology by the Regional Government of Jakarta and Surabaya City Government conducting public services.

Everett M. Rogers has stated that innovation is an idea, practice, or object perceived as new by the individual (Hamalainen & Heiskala, 2007). However, the adoption of an innovation occurs when there is a belief that the innovation will meet the needs. Diffusion Model was originally developed in the western culture due to the presence of the mass media (Depari & MacAndrews, 1982). Open government concept with the help of information technology can be discussed by Diffusion Innovation Theory as proposed by Everett M. Rogers. Diffusion itself is a process of an innovation which is communicated through certain channels within a certain period among the members of a societal system, or a special kind of communication related to the spread of messages as new ideas. New media through its websites can easily educate and persuade the public/public on issues relating to the interests of the state and society itself. According to Rogers, there are five stages to go through in the decision process of innovation, namely; knowledge, persuasion (trust), decision, implementation and confirmation. Diffusion of innovation of the present era utilizes Information Technology defined by Munir (2008) covers all-things related to the mechanism, the use of infrastructure devices, including the modification processing information.

With e-Government system speeds data services to be integrated, no manipulation, corruption and nepotism would any longer occur. The use of information technologies that provide public services has several different dimensions included in the public communication. Public service dimensions according to Nurmandi (2010) has several dimensions such as the political dimension, the economic dimension, the social dimension, the organization dimension and communication dimension. Dimension of communication discussed in this research is related to the performance of public service organizations, performance standards, implementing agency, the communication

between the user with the service provider. Barriers to the use of information technology are the Human Resources who will be able to operate the Websites for public services and also the readiness of the beneficiary communities and integrated systems. There are necessary needs of education and training for the officials who operate government websites.

It is also necessary to empower people with skills in the use of information technology to the needs of their lives individually and as members of the society. Thus, there is a need for the promotion via the education system in elementary schools and middle schools to get used to accessing information from the official website of the government. Thus, the public will have the ease and can also interact positively with the government, and the public can provide input in the form of suggestions and proposals for the interests and progress of society itself. On the other hand, communities and governments can also save time and effort in providing the public services. People do not need to spend time to go to the center of public services which will save energy as well.

Aesong (in Hamalainen & Heiskala, 2007) has stated that Electronic Government (E-Government) is a modern interaction mechanism between the government and citizens and other parties involving the use of information technology (especially the Internet) with the aim of improving the quality of service. Central and local governments have appropriately developed a system of "one stop service" and "one roof service". In addition to giving services to the community, the E-Government concept can also convey the aspirations of the people and information they encounter with the government. According to Aesong, the government can develop a "public choice" in the use of E-Government so that the needs and desires of a diverse society can be met by keeping in mind the aspect of justice.

The purpose of establishing the rule is to keep order in which people can live a life as normal. In other words, a modern government in essence is a service to the community. Thus, society as consumers of products dealing with the government administration as a producer and distributor in a parallel position. Through this parallel position, public can order, mandate, demand and control the government, so that public services can be felt by everyone when needed in sufficient quantity and quality (Velicu *et al.*, 2013).

According to SK Menpan No. 61/1993, it contains basic guidelines for the administration of public services by government institutions to the public. All public services are expected to contain eight elements (Nurmandi, 2010): (1) Simplicity: public services must be easy, fast, smooth, straightforward, easy to understand, and easy to implement, (2) Clarity and certainty: in terms of procedures, terms of service, unit and responsible officials, rights and obligations of workers and consumers, and the officer who handles complaints, (3) Security: the process and the results should be a safe and convenient service, and to provide legal certainty, (4) Openness: everything about the service process should be presented openly to the public, solicited or unsolicited, (5) Efficient: unnecessary duplication of requirements by several services at once, (6) Economical: reasonable service charges determined by considering the value of the service, purchasing power, and other laws, (7) Justice: care must be evenly distributed in terms of coverage and utilization, and lastly (8) Timeliness: providing fast service.

According to Kim (2012), the website has two important characteristics, namely the content and flow of information. Details of the characteristics can be seen as follows: (1) Content which should firstly be easily understandable and accessible, namely the features that can effectively facilitate the user's performance. For example, features a shopping cart or a search engine. It also includes the design, security and loading speed of the website. Secondly, it has useful information submitted to early readers. The last one is that it should be up to date. (2) The flow of information which concerns about how the information set forth on the website, about the layout of website, and the effectiveness of hyperlinks.

In addition to the above characteristics, the website can also be assessed from the performance of the website. Performance included in this website are: (1) the frequency - the number of people accessing the website, (2) loyalty - how often the same individuals accessing the website. Both of these are important in assessing the performance of the website due to gauge how widespread the reach, and how well-known the website is (Tarafdar & Zhang, 2007).

METHODS

The method used is a descriptive qualitative method. Qualitative research is research that uses inductive way of thinking, which departs from the special things (empirical facts) toward general things. According to Kriyantono (2012), the type of descriptive research makes a systematic description, factual and accurate information about the facts and the properties of a particular object. Data was collected through literature and documents from a number of articles in the media. Data was analyzed using content analysis of qualitative forms of words, sentences or narratives that can be obtained through observation (Kriyantono, 2012) and the technique used for the analysis is a constant comparative technique covering the stages as follows: placing events/data categories and compared with each other. Then, expand the category, so the data does not overlap. Additionally, looking for relationships between categories. Lastly, simplifying and integrating the data into a coherent structure, reasonable, logically interrelated (Kriyantono, 2012).

As the first step, the research activities were carried out by way of formulating problems to be investigated and the objectives to be achieved in this research article. Researchers also took references from studies or journals. After the data was collected, researchers will draft interview questions. Respondents from this interview are the representatives from the city government offices in Jakarta and Surabaya who deal with the digital public service, representatives of the community who used public service and those who never access Jakarta and Surabaya government websites. After the interview, data collected will be processed and analyzed, including checking the validity of data, data reduction, and data analysis using the method of triangulation. The conclusions of the research after data processing, covered with writing research reports.

RESULTS AND DISCUSSIONS

Interview about Surabaya.go.id website was conducted in October 2014 to the Surabaya City Government and the Media Center administration of Surabaya.go.id. The question in the interview is divided into several categories, namely e-government, the socialization of public services through the website, the barriers and the readiness of human resources, as well as future planning.

According to the Surabaya City Government, e-government is an attempt to develop electronic-based government with the use of information technology, so that the government can deliver services to citizens more efficiently. E-Government in Surabaya today has become a unified and integrated system between the Department of Work Units (SKPD). Some examples of e-government that has been developed by the city of Surabaya from 2002 to the present, among others: (1) e-budgeting, (2) e-project, (3) e-procurement, (4) e-controlling, (5) e-delivery, and (6) e-performance, as seen in Figure 1.

Currently, central and local government agencies have started using a media center for example, as a website owned by Surabaya City Government which obtained two awards. This website belongs to the Surabaya City Government has three (3) categories of public service: the public service,

public complaints and the information society. Web pages are also connected to Facebook via Sapawarga Surabaya (Surabaya Government Social Media). Positive feedbacks can be seen from the comments on Facebook said by Triyono Susilo: "Thanks for the attention. I am proud to be a citizen of Surabaya. Service and complaints are extraordinary ... direct response and action."

Similarly, many people who asked for information related to the need as citizens of the city of Surabaya. Aside from e-sapawarga, Surabaya City Government has opened access to other public services such as e-licensing, e-musrenbang, and complaints electronically. For example, Surabaya residents can now take care of the birth certificate administration faster. Residents do not have to stand in line to fill out forms or commute to the district office for the maintenance of a birth certificate can be done via online. For the online birth certificate, citizens of Surabaya simply access the website dispdukcapil.surabaya.go.id.



Figure 1 Surabaya.go.id Front Page

Other public services that can be accessed is online building permit (IMB) handling, online grievance, Surabaya Single Windows (SSW), and Surabaya Enterprise Collaboration System (S-ECS). Many online complaints submitted are about public facilities, such as bad roads or street lights that were off. Complaints like these can be handled directly with a maximum of 1 x 24 hours. While SSW is the application for permitting/non-permitting which are faster, easier and safer. SSW is the system that allows for: (1) submission of data and information in a single, (2) the processing of data and information in sync, and (3) a single decision-making and integrated through the integration of information and integrate workflow processes. Lastly, S-ECS can simplify the process of making the permitting/non-permitting by using shared data that can be accessed from their respective work units Office (SKPD).

Associated with the positive response of the people of Surabaya, the Mayor of Surabaya, Tri Rismaharini managed to bring Surabaya the award of 'Future Government Award 2013'. Tri Rismaharini, Surabaya Mayor, first woman to serve for the period 2010-2015 successfully utilized information technology for public services in the city of Surabaya. The award is an indicator that the Surabaya city government already has the ability to manage how to communicate with the three million people through Broadband Learning.

Tri Rismaharini was able to apply innovation to the welfare of society by familiarizing the public to access information and interact through the media center. Surabaya City Government Media Center, is one implementation of open government model with open access to effective and efficient communication with the public related to the development process and services, implemented since November 2011. According to the Public Relations of Surabaya City Government, M.Fikser, Surabaya won 2 (two) awards for Data center and Digital Inclusion category. Surabaya has been considered able to innovate, and has superior efficiency in project management at the data center. Meanwhile, for the category of Digital Inclusion, Surabaya City Government has a program that excels in using technology to bridge the digital gap. The award followed by all cities in the world (Detik, 2013).

Along with the rapid advancement of electronic administration of Surabaya City Government, it must be balanced with providing knowledge to the public. One way for the socialization of public services from Surabaya City Government is to provide Broadband Learning Center at several locations so that people can learn IT. The Broadband Learning Center (BLC) in the city of Surabaya is an IT learning facilities that can be enjoyed by the public with no charge. Surabaya IT literacy, is an effort to accelerate information towards the Surabaya Cyber City. People are expected to be able to learn many things about the computer to avoid digital gap in society. The Surabaya city itself has 11 BLC to embody the city of Surabaya as the Multimedia City, particularly in the context of the intellectual life of the nation and fostering innovation in the education system. Some activities undertaken by the BLC, includes free information technology learning for school dropouts, especially for poor families and children with disabilities.

Additionally, Wahono (2010) has written about the results of research conducted by Ericsson showing a positive correlation between the use of broadband internet services with its state of progress. The research discusses the relationship between broadband and the level of prosperity and employment, as said by Hardyana Syintawati who served as VP of Marketing and Communications of Ericsson. According to Tri Rismarini, Surabaya became the only institution in the Asia Pacific region, which is capable of receiving two awards. Remarkably, Surabaya is managed to surpass some developed countries that have been more favored in the field of information technology (Detik, 2013).

Another socialization conducted by Surabaya City Government is through the Media Center. Media Center is an integrated care system for the people of Surabaya who want to participate in the development of the construction of the city of Surabaya. Forms of participation can be complaints, suggestions, and feedback on the development process of Surabaya. Through the Media Center, community can also find out the extent to which stage of development drafted by the government of Surabaya. Socialization conducted by the Media Center includes inviting people for a demo of Surabaya.go.id website. And also cooperate with schools to deliver information to students. Socialization is done regularly 2-3 times a month. According to the Media Center, Surabaya.go.id website nowadays is a reservoir of complaints from the public. Nowadays, more people are filing a complaint through the website rather than coming directly to the Surabaya City Government. Only 1% of the people who complain directly.

According to the Surabaya City Government, some obstacles perceived in this e-government system, partly because the Surabaya.go.id website is the only form of interface-related information from the related SKPD, it means service greatly depends on each SKPD. For example, if there is no updated information on education, it will have an impact on Surabaya.go.id website. The second obstacle is the gap in society that have not been fully IT literate, which is being addressed by the Surabaya City Government through outreach programs to the community. The third barrier is the investment in information technology is not cheap to implement e-government. Surabaya City Government spending on the procurement of technology is quite high. Regarding the readiness of the human resources factor, namely the workers in the Media Center and behind the scenes of Surabaya.go.id website also has disadvantages. Among these are a gap of knowledge and skills,

investment, technology procurement should also be coupled with considerable skill, and the employee must be in regular training to close this gap.

Today, the city of Surabaya is preparing a new innovation in the field of information technology-based services, namely e-mail and e-health. E-mail is a letter of transformation in digital form that was created in response to incoming and outgoing information. E-mail using digital applications based on open source and is integrated with SMS that is useful to accelerate the delivery of information to the addressee's letter. With the e-health system, people do not need to carry a medical card to the clinic or hospital due to fingerprints, which medical records of patients already has. The Surabaya City Government expectation of the future is to be able to continue improving services to the community with non stop innovation. In addition, the existing system will continue to be developed to make it easier to serve the public.

Interview with the Jakarta Government was conducted in September 2014. The interview questions were also divided as the same category as interviews with the Surabaya City Government. According to the Jakarta Government, e-government can be generally defined as the application of information and communication technology (ICT) to improve the performance of traditional government functions and services. More specifically, e-government is the use of digital technologies to transform government activities aimed at improving the effectiveness, efficiency, and service delivery. Jakarta.go.id website, like Surabaya, just as the interface that connects the community with related SKPD. So far, the performance of the website is also very dependent on the performance of each SKPD.

In Jakarta regional government's website which can be accessed at www.jakarta.go.id, the website is divided into seven categories; Public Complaints, Licensing Services, Financial Information, Application of Public Information, Statistics, Retribution, and Public Services (Figure 2). Views on the city's website are simpler, so chances are easier to be understood by the people who access the site. The Jakarta regional government's website contains a lot of information addressed to the public, one of which is the registration of employees for the city government and environmental requirements. Other information that can be accessed on the website of Jakarta city government is on budget allocations, city budget that totally opened by former Jakarta Governor Joko Widodo, on the city government's website. The purpose of disclosure centrally through this site is to facilitate the public and city government showed openness to the public.

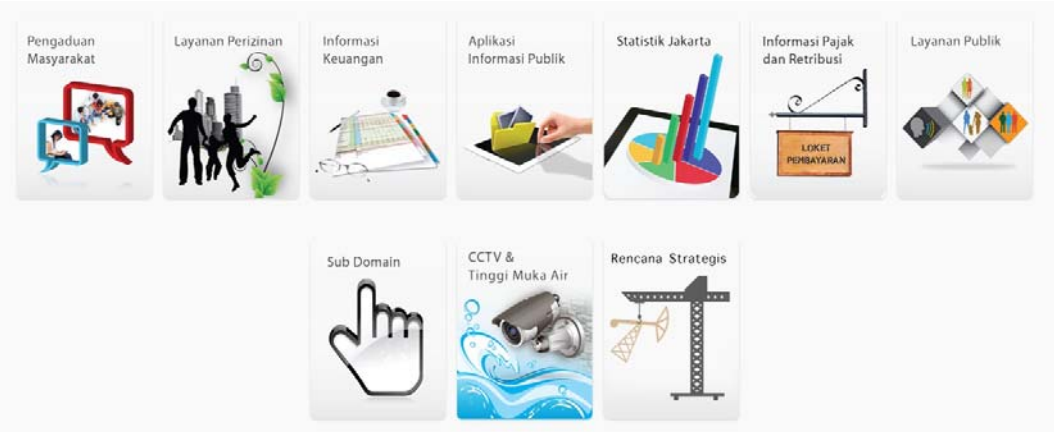


Figure 2 Website Menu in Jakarta.go.id

Some applications of online public services available on the website Jakarta.go.id are: (1) SAMSAT online that caters renewal of license and registration, (2) Intelligent Transportation System that is integrated with the TransJakarta Busway, (3) online building permit, (4) ID card online and (5) channel public complaints. To channel public complaints themselves, the local government of Jakarta has 11 digital channels that can be used by people to express their grievances. Among these are the SMS to the Vice Governor and the Call Center 164. Just like Surabaya, most complaints have been submitted regarding public facilities, particularly bad roads, traffic jams, and flood.

The administration also has a special social media called Citizens Hall. Unlike Surabaya, which are using Facebook to connect with citizens, Jakarta chooses to make their own social media applications. The rationale for this is that the Citizens Hall administration can set their own content and get user statistics data. In addition, the Jakarta Government has also issued a mobile application that can be downloaded by the public. The latest named SafetyPin. This application allows users to report incidents that violate the law in Jakarta; for example, if an act of racketeering or extortion in an area, then the citizens can report through SafetyPin application, and will be immediately looked at by the Jakarta administration.

As for the socialization of online public services, the Jakarta Government put through several activities. One is the Freedom of Information seminars held regularly for the people of Jakarta. For training on the internet to the community, the Jakarta Government still relies on BPAD which has free mobile internet services. Jakarta.go.id does not have its own Media Center but has been incorporated with other elements on the website. Statistical data is also displayed to be viewed by the public in Statistics menu. Socialization of public services online is not a priority Government of DKI Jakarta, because their assumption is that almost the entire population of Jakarta already has an internet literacy. Priority is given to revamping the website content and integration with related SKPD in Jakarta.go.id website.

In this interview, the Jakarta Government explained the major obstacle in managing online public services is integrated with any related SKPD. For example, Intelligent Transportation System that contains all information related to the transportation system in Jakarta, such as congestion, accidents, CCTV, railways, strike, and others (Figure 3). If the information provided by the relevant SKPD in Intelligent Transportation System is not up-to-date then the citizens will get the wrong information, and will make it difficult for citizens, and does not help reduce congestion in Jakarta. The only solution, if there is a problem with SKPD, each SKPD unit needs to wait for disposition from their respective leaders. Awaiting disposition itself has sometimes been a problem because the disposition letter usually takes long time, and the problem cannot be solved without the decree from the leader.



Figure 3 Intelligent Transportation System Webpage

The second perceived obstacle is uneven awareness about information technology among the citizens of Jakarta. As the capital city, Jakarta is the main goal of local communities who want to find a better job. Therefore, according to the Jakarta Government, this problem cannot be solved by the Government alone, but needs the intervention of the central government to equalize awareness about information technology to all the people of Indonesia. In terms of human resources, the Jakarta Government is optimistic with the ability of its employees. Jakarta.go.id has about 30 employees, mostly software developers, graphic designs, data analysts, and multimedia designers. Powered by skilled workers, the Jakarta Government optimistic Jakarta.go.id website can provide maximum service according to its function.

Two plans for the future by the Jakarta Government, in the short term, the Jakarta Government intends to conduct an audit of CCTV as many as 3,000 units in all corners of Jakarta until Pulau Seribu. Later Jakarta residents can access all this CCTV to monitor what is happening in every corner of Jakarta. Basuki Purnama, as Governor of Jakarta, wants to monitor across Jakarta via CCTV. Long-term plan is to make the website Jakarta.go.id as the holding of information technology in 2017. It is expected that by the year 2017, this website has been seamlessly integrated with all SKPD and have real-time information, so that Jakarta residents can access this website for full information about Jakarta.

Both websites, Surabaya.go.id and Jakarta.go.id, are easily accessible and have a layout that is easy to understand. The look of the site of Jakarta.go.id is simpler as shown in Figure 2 compared to Figure 1. The website is simple and clean, also easier for users to understand the structure of the website and in the search for the required information.

But the second website also has a drawback, i.e. information that is not up-to-date. Especially when transferred to a website related SKPD, information tends not up-to-date. From the observation of the second access this website from April to October 2014, there is a tangible difference in Jakarta.go.id. The difference is mainly in terms of appearance, layout, and hyperlinks effective than ever before. Information on the web SKPD is also gradually undergone an update. Figure 4 and 5 present a difference in the display for ID card settlement services online.

ALUR	PERSYARATAN / BLANKO	WAKTU
Pemohon	Membawa persyaratan : 1. Fotocopy KK; 2. Fotocopy Akta Kawin (bagi penduduk yang belum berusia 17 tahun namun sudah kawin); 3. Fotocopy Akta Kelahiran; 4. Surat Keterangan Datang dari Luar Negeri yang diterbitkan oleh Instansi Pelaksanan bagi WNI yang datang dari	

Figure 4 Online ID Card Settlement from Surabaya.go.id



Figure 5 Online ID Card Settlement from Jakarta.go.id

CONCLUSIONS

The use of information technology to the regional and provincial government through the website Jakarta.go.id and Surabaya.go.id in performing public services are easily accessible and also has a layout that is easy to understand. But both websites also has drawbacks, namely, the information tends to be not up to date. Especially when redirected to the related SKPD sites. The main obstacle in managing public services online is the integration with each related SKPD. When problems occurs with related SKPD, disposition letter from the leaders are needed and this could take some time. The second obstacle is the uneven awareness regarding information technologies among the citizens in both cities. As the capital city, Jakarta became the main goal of rural communities who would like to get a better job. The existence of a gap in the community who have not yet entirely IT literate, is being addressed by both Governments through programmes of IT dissemination to the public. The last obstacle is the investment in information technology that is not cheap. To fully implement e-government system, the regional and provincial government of Jakarta and Surabaya have to pay high cost of procurement.

As for suggestions, both regional and city governments need to encourage educational system in schools through events. Thus, the public will get the ease and also be able to interact positively with the Government, and giving feedback for the benefit and advancement of society itself. On the other hand, the public and the Government can also save people time and effort in giving public services.

REFERENCES

- Depari, E., & MacAndrews, C. (1982). *Peranan Komunikasi Massa dalam Pembangunan*. Yogyakarta: Gajah Mada University Press.
- Detik. (2013). *Risma Sebut Pelayanan Publik Surabaya Lebih Baik Dibandingkan Negara Lain*. Retrieved from <http://news.detik.com/surabaya/read/2013/10/27/133300/2396588/475/risma-sebut-pelayanan-publik-surabaya-lebih-baik-dibandingkan-negara-lain>.

- Hamalainen, T. J., & Heiskala, R. (2007). *Social Innovations, Institutional Change and Economic Performance: Making Sense of Structural Adjustment Process in Industrial Sectors Region and Societies*. United Kingdom: Edward Elgar Publishing Limited.
- Kim, N. S. (2012). Website Design and Liability. *Jurimetrics*, 52, 383-431.
- Kriyantono, R. (2012). *Teknis Praktis Riset Komunikasi*. Jakarta: Kencana Prenanda Media Group.
- Munir. (2008). *Kurikulum Berbasis Teknologi Informasi dan Komunikasi*. Bandung: Penerbit Alfabeta.
- Nurmandi, A. (2010). *Manajemen Pelayanan Publik*. Yogyakarta: PT Sinergi Visi Utama.
- Purnamasari, N. (2012). *E-Government System dalam Pelayanan Publik*. Retrieved February 2nd, 2016, from http://www.kompasiana.com/nurulpurnama07/e-government-system-dalam-pelayanan-publik_5512a8bf813311476cbc601f
- Sekretariat Negara RI. (1993). *Keputusan Menteri Negara Pendayagunaan Aparatur Negara Republik Indonesia No. 84 tahun 1993 tentang Jabatan Fungsional Guru dan Angka Kreditnya*. KEPMENPAN 1993 No. 084. Sekretariat Negara. Jakarta.
- Tarafdar, M., & Zhang, J. (2007). Determinants of Reach and Loyalty - A Study of Website Performance and Implications for Website Design. *Journal of Computer Information Systems*, 48(2), 16-24.
- Velicu, B. C., Munthiu, M. C., & Zara, I. A. (2013). Are Public Employees in Romania Prepared for e-Government? *International Journal of Academic Research in Business and Social Sciences*, 3(4), 350-360.
- Wahono, T. (2010). *Broadband Oke, Pasti Bangsaanya Maju*. Retrieved February 2nd, 2016, from <http://bisniskeuangan.kompas.com/read/2010/12/14/15481573/broadband.oke.pasti.bangsanya.a.maju>