

## INFORMATION RICHNESS, WEBSITE FEATURE, AND FINANCIAL TRANSPARENCY ON THE LOCAL GOVERNMENT WEBSITE IN INDONESIA

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### ABSTRACT

Local governments in Indonesia have received greater authority since the enactment of regional autonomy and fiscal decentralization. Most of them are running websites that should play important roles as public information access. This research measured financial information transparency as well as information or feature richness of the websites of 33 provinces, 395 districts and 96 cities. Generally, the result indicates the occurrence of the geographical digital divide between local authorities located in Java Island and those in other islands. Based on the series of two years data collection and measurements, there were no significant improvement on information richness and website features. This indicates that the most websites of local governments in Indonesia have not been fully utilized for public services.

**Keywords:** *E-Government, Digital Divide, Financial Disclosure Index, Feature Index*

### 1. INTRODUCTION

There are two regulations related to the policy of regional government website in Indonesia, namely, (1) the domain name structure for official government websites that is stated in the Ministry of Communications and Information Regulations number 28/Per/M.Kominfo/9/2006, and (2) The compulsion to provide financial related information on the government website that is stated in the Indonesian Government Regulation number 56 in year 2005 and number 65 in year 2010.

The openness and transparency of information on the sector or public institution are also regulated in the Law of the Republic of Indonesia Number 14 Year 2008 on Public Information. Implementation of law is set forth in the Republic of Indonesia with Government Regulation No. 61, 2010 on the Implementation of Law No. 14 of 2008 on Public Information. The regulations require the availability or disclosure of financial information on a website run by local governments in Indonesia. The aim of the study is to describe an overview of features of the website of local government in Indonesia and a metric of financial transparency disclosure based on Internet. The discussion focuses on the analysis of the digital divide of financial transparency on the

Internet, between Java and outside-Java, as well as between provincial government and municipal government.

### 2. THEORETICAL FRAMEWORK

According to the UN, e-government is the use of ICT and its application by the government to provide information and public services to the community. Kumar (2003) states that e-government allows greater public participation in politics and decision makings; something that is not possible to conduct in the past. Participation has increased the mutual trust between government and society and also among the public. Hanafi, Kasim, Ibrahim, and Hancock (2009) mentions that some of the research on corporate reports that is published on the Internet using various indices to measure the degree of disclosure. But the various indices used today still have the weakness in terms of its coverage, which is limited to disclosure of financial information. One of the important issues in financial management in Indonesia is transparency and public accountability. Therefore, the quality of financial information disclosures on the Internet is becoming an important issue. Generally, the evidence regarding determinants of voluntary disclosure in the public sector is less conclusive in

comparison with such evidence in the private sector. the nature of public sector organization, financial reporting practices and their agency relationships varies more considerably within and across countries in comparison with private sector organizations. (Laswad, Fisher, and Oyelere, 2001). For Indonesia case, there is a remarkable lack of transparency, and checks and balances in public financial affairs are largely absent in all districts (Kristiansen, Dwiyanto, Pramusinto and Putranto, 2008).

According to Rocheleau and Wu (2005), the biggest challenge of e-government applications is to allow the public or other users to perform financial transactions with the government related to the 24 hours per day, 7 days per week. The research indicates that online financial transactions continue to be offered as a promise in the future, although its success is not easy and still takes time. Stage of e-government development, according to Baum and Maio (2000) in the As-Saber et al (2006), consists of four phases: emergence, interaction, transaction, and transformation. These phases are chronological phases in developing e-government. One interesting concept in the implementation of e-government is how to integrate these various systems or applications between central and local government, between one department with another department, or between institutions that are related in function and authority. The concept of integration of various departments and various application systems in each of these institutions has been presented by Mak (2001). Another opinion about e-government state by Dwivedi and Bharti (2010) that e-governance is a way to solve the social, as well as economical problem exists in the developing countries.

Hermana, Budi and Widya Silfianti (2011) in the previous study doing research in the form of an exploratory study to identify the digital divide in Internet-based public service delivery by local governments in Indonesia. Numbers of local government websites are as many as 181 websites with consist of 32 provinces, 42 cities, and 107 districts. Data was collected on March 26, 2010. Website of local government has not provided good service for the four types of services: the FAQ, e-procurement, site, and location maps. All four types of those services are indeed very important for public service in the information age. Hermana, B., A. Tarigan, H. Medyawati and W. Silfianti (2011) found that local government has not utilized public services through the website optimally. The top-ten national rank on website features is dominated by 6

district government websites. Website feature that is the most widely deployed by local government is "news", while the feature which seldom available is "FAQ". Financial information disclosure index is relatively lower than website features index. This fact shows that policy of financial transparency and public accountability should be more promoted and implemented.

### 3. METHODOLOGY

The data collection and measurement have been conducted to all 524 website (33 province, 395 districts and 96 cities). Compare with the year 2010, there were 443 official regional government websites that are accessible or an increase of 18.28%. The measurement includes the richness of features and services, as well as the degree of financial information disclosure. The observations were carried out by a research team along with a survey team who has competence in the field of website evaluation. Measurement was conducted for each parameter in the same period of time in June 2011. Furthermore, previously analyzed data by Hermana, Tarigan, Medyawati, dan Silfianti (2010, 2012) is also compared to analyze the trend.

The measurement uses worksheet of questionnaire that consists of two main parts, namely (a) The completeness of local government website features and services that is represented by a checklist of 18 features and services that might be in a local government website, ranging from standard feature like news to advanced one such as e-procurement; and (b) Financial information disclosure that is measured in 15 questions, for example, the availability of documents related to regional government budget, budget realizations, assets inventory, regional regulations, as well as tax information and levy taxes.

### 4. RESULT AND DISCUSSION

From 524 local government websites, only 424 websites were successfully analyzed. In 2010, there were 443 local government websites, and only 374 websites were successfully analyzed (Hermana, Avinanta Tarigan, Henny Medyawati, W. Silfianti, 2012). The rest of the websites were inaccessible during the period of data collection. All provinces in Indonesia have websites and most of them follow the standardization of government domain name in accordance with the Minister of Communications and Information Regulations number 28/Per/M.Kominfo/9/2006. However, there are 7

from 33 province websites that do not follow the naming standards, one of which is DKI Jakarta.

The value of website features completeness index has range between 0 and 1 with an averages national index of 0.629. The most common feature is “News” and the rare one is “FAQ”. Furthermore, financial information disclosure index is ranging from 0 to 0.8 with an average national index of 0.191. The most available document is regional government regulations with index of 0.536. The financial information that is rarely presented is fraud in regional government with index of 0.011. Data for the years 2010-2011 local government website in general experience with the following changes. Generally, the number of provinces that experienced a change (website feature index or financial index) there are 8 provinces. The number of districts that experienced a change there are 142 districts and the number of cities there are 27 cities. The number of provinces, districts and city that experienced a change in feature index are 8 provinces, 27 cities and 142 districts. The number of provinces, district hat experienced a change in financial index there are 7 provinces, 16 cities and 83 districts. Comparison between average of Feature Index in 2010 and 2011 can be seen in the picture below.

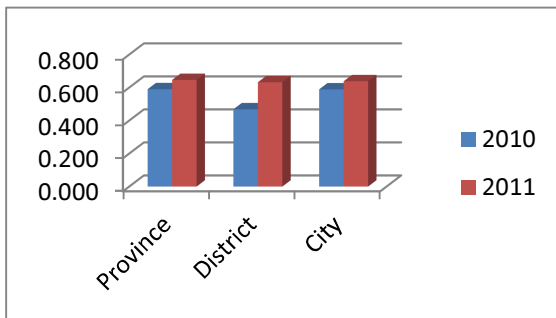


Fig.1. Average of Feature Index (2010-2011)

Based on Law No. 22/1999 about local government, regional autonomy is given to the district or city level. The policy puts the district or city became a central point in the delivery of services to the community by local governments. According to Hermana and Silfianti (2011), Regional autonomy led to differences between districts and provinces/cities in providing public services, but the differences were not significant, except for outside of Java. Web metrics rank variable for local governments in outside Java shows that the website of province is more dominant than the city or county website, while for Java Island, the website of the district or

the city is more dominant than the provincial web. This condition is in line with the results of Abraham and Reid (2008) and Brown (2002). This research also confirms the result obtained by Asogwa (2011) that a number of challenges that could prevent the chances of realizing the anticipated benefits in developing countries include disparities in income and lack of equal access to computers.

Satriya and Harijadi (2000) stated that Indonesia is still facing various constraints in implementing e-government. One of the factors that cause this condition is the low competence of human resources, especially the ability in the development and maintenance of website as well as the lack of telecommunication infrastructure that has not reached all parts of Indonesia (Hermana and Silfianti, 2011). These result support Farooque (2011) that reaping benefits from e-government implementation depends on the adequacy and quality of education, economy and ICT infrastructure and also in line with the research results of Silfianti, et. al (2010) that web productivity of the provinces website in outside Java is higher than the province in Java Island. Furuholt and Wahid (2008) state that human resource should be strengthen, either by competence transfer to permanent employees or by recruiting civil servants with necessary IT skills.

From the picture below we can indicate that there is a digital divide between Java province and outside Java. The condition in general can be explained that the technology infrastructure on the island of Java is better than outside Java. These result support the research of Brown (2002) that diversity culture is another factor affecting countries level and implementation of e-government as one of the major strategies for closing the digital divide. This condition also explained by Rokhman (2011) that e-government is compatible with their lifestyle and culture and they ready when public services will not be delivered by face to face.

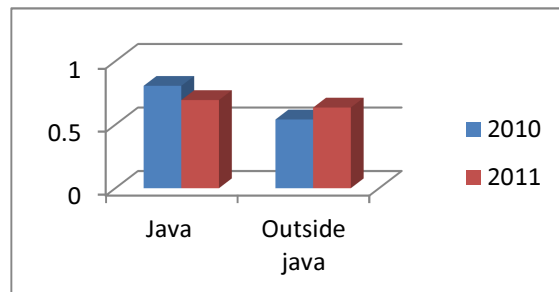


Fig.2. Financial Disclosure Index (Area, 2010-2011)

Financial information disclosure index of local government website is relatively lower than the index of completeness of features and services. This suggests that financial information policy and public accountability still needs improvement. The development of e-Government is part of the efforts to set up structure, system and administration which is efficient, effective transparently and accountable (Salahuddin and A. Rusli, 2005), (Basu, 2004). The result can also be explained that developing countries have some constraint such as limited financial resources, inappropriate political climate, lack of institutional framework, insufficient records and databases, insufficient knowledge base and knowledge network and poor infrastructure (F. Saghafi, B. Zarei, A. Aliahmadi and M.Fathian, 2009). Although the Government Regulation of Republic Indonesia Number 56 year 2005 on Regional Government Information System which has been amended by Government Regulation of Republic of Indonesia number 65 year 2010 article 13 paragraph (b) clearly states that government websites should promote the availability of financial information to public. The result of processing data from the year 2010 and 2011 can be seen below.

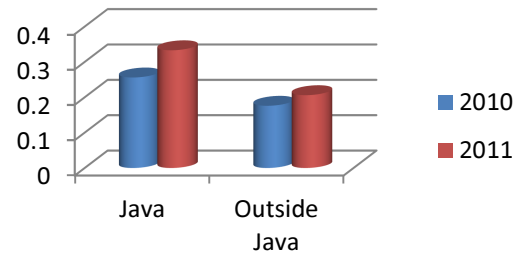


Fig.4. Financial Average Index (Area, 2010-2011)

The role of Indonesian Government in implementing public information service is still poor. These conditions correspond to the Networked Readiness Index published by World Economic Forum on Global Information Technology Report (GITR) for the 2011 edition. GITR is complete report of the development and implementation of ICT in the world and develops Networked Readiness Index (NRI) that measures the degree of ICT implementation in a country. This edition includes the rank of 138 countries and Indonesia is ranked 53<sup>rd</sup>. This position is better than the previous edition that Indonesia was ranked 67<sup>th</sup> of 133 countries.

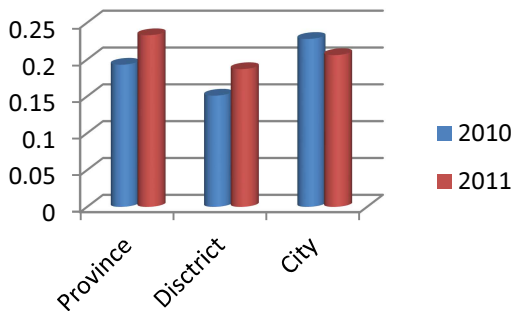


Fig.3. Financial Average Index (Level, 2010-2011)

In article 16, it is stated that financial information available in official website of regional government as referred to in article 13 paragraph b, at least consists information, as it is referred in article 4 paragraph 1, namely (a) Regional Revenue and Expenditure Budget as well as its realization in the level of province, district, and the city; (b) Regional Balance Sheet; (c) Statements of Cash Flow; (d) Note of the Financial Report; (e) Deconcentration and Task Fun; (f) Regional Corporate Financial Report; and (g) data related to the regional fiscal needs and fiscal capacity.

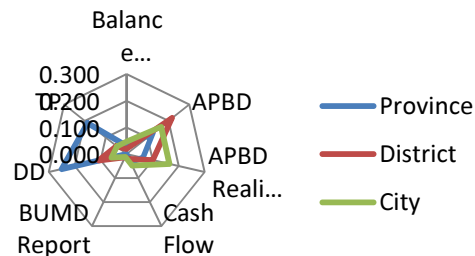


Fig.5. Financial Average Index (Level, 2010-2011)

In the implementation of ICT in public sector, Indonesia Government is left behind by individual and business. The government has not considered serious in promoting ICT (rank 65<sup>th</sup>), and even worse is implementation of ICT in context of efficiency (rank 72<sup>nd</sup>). The worse indicator is online public service and e-participation that place Indonesia in position of 99 and 80. This indicates that application of ICT is far from the public services and e-Government is considered to be the homework of the Indonesian Government. On the other hand, individual and business sector are relatively more than ready to take advantage of ICT. This condition can be caused by a serious barrier that the services were designed without taking into consideration the aspect of demand. In



simple words, they don't take in consideration what the citizen want (Delopoulos, 2010).

*Table 1. Local Government Cluster (2011)*

|                         | Cluster 1 (Low) | Cluster 2 (High) |
|-------------------------|-----------------|------------------|
| <b>Government Level</b> |                 |                  |
| Province                | 4               | 28               |
| District                | 57              | 250              |
| City                    | 14              | 71               |
| <b>Region/Location</b>  |                 |                  |
| Java                    | 18              | 103              |
| Outside java            | 57              | 246              |

The result of cluster analysis showed that the percentage of the province in the cluster 1 (high) is relatively higher compared with the percentage of both district and the city. From the data in 2010 (Hermana, et.al, 2010, 2012) the result show that the values are 50% for the province, 40.31% for the district and 45.23% for the city. Using location as a basis of grouping shows that local government located in Java Island are relatively more in cluster 1 compared to local governments outside of Java, which is 61.06% versus 33.85%. Distribution table of local government based on cluster analysis results is presented in Table 1.

The type of Indonesian local government websites is more informational rather than transactional. Feature of the website that is transactional is limited only on e-procurement or interactive public information service. Complex and advanced transactional interactions such as online payment system is not yet available as website features. In general, financial information disclosure index is relatively lower than website features index. This fact shows that policy of financial transparency and public accountability should be more promoted and implemented in Indonesian local government. These result support Schupan (2009) that e-government strategies and projects need to be adapted to account for factors such as illiteracy, rural area problems and weak infrastructure, through the development of adequate access methods.

One of the classical problem of the utilization of local government website is the content update that is usually relative late and not up to date. The other problem is accessibility and the richness of features in the web based public services. Website of local government in Indonesia has not provided good service for the four types of services: the FAQ, electronic procurement, site map, and location. According to Spremic, Simurina, Jakovic and Ivanov (2010), the service for citizens are: income taxes, social security benefits, personal documents, building permit and health-related

services. For the business subjects the following services have to be realized: public procurement, submission of data to the statistical office and social contribution for employees.

According to a road map of e-government development, as was quoted by Harijadi and Satriya (2000), this findings could also mean that e-government development has only reached the medium-term or third stage. There is few of local government that has reached the stage of public participation or phase 4 in which one of its services are business transactions and interactions with the community. The results of Yunis and Sun (2009) show that infrastructure, human capital, and the level of online presence and interactive services initiated by the government are significant determinants of e-government readiness. The other obstacle is the low degree of website utilization by the users. This can be measured using widely available traffic analysis tools, for example alexa.com. Furthermore, Silfianti, Suryadi, and Suhendra (2010) confirmed that popularity of a local government website has positive correlation with its richness of contents and features as well.

## 5. CONCLUSION

Evaluation model for financial information transparency uses 15 questions measuring the perception of respondent after observing local government website. During the research, there are 424 of 524 local government websites that had been measured. The financial transparency index is ranging from 0 to 0.8 with national average index of 0.171 (compared to 0.191 in 2010).

This condition shows that local governments in Indonesia are less considering in publishing financial information on their websites. Type of financial information that is most published is financial news with index of 1.293, while financial information that is rarely presented is opening balance with index of 0.0

Generally, website features index is better then financial information transparency index. The evaluation model measures 18 features that might be implemented in a local government website. In the year of 2011, evaluations were conducted on 424 of 524 local government websites (443 in 2010). However, there are 100 websites that were not accessible during evaluation. Index value is ranging from 0 to 1 with the national average index of 0.952. Feature that is most implemented is "Profile" and feature that is rarely presented is "FAQ", which is similar to the result of the evaluation in 2010.



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