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Contents of e-Government for Pursuing Value in Indonesian Local Government

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Abstract

The purpose of this research is to explore contents of Indonesian e-Government in order to obtain expected value effectively by considering obstacles in implementing e-Government. A key element in this is the notion of service value based on simple e-Government stage model that emerge in successful e-government implementations at city/municipality best practices in Indonesia. The objective is achieved by reviewing basic and applied theory of e-Government development. The research entails compilation of emerged benefits by triangulation of extensive literature review, qualitative case study (of successful e-government implementation by best practices city/municipality in Indonesia), and focus group discussion with few experts/stakeholders. Some problems in implementing e-Government explored in this research can be solved through simple and creative ways. This research found that contents exploration of all relationships between 4 (four) elements which are government, users, system (e-Government), and environment, can be effective solution, which have been implemented by all successful cities/municipalities. Qualitative research which was applied in this research was using 7 cities/municipalities that have varied dissimilarity. Rich result could be obtained if the research used more cities with different characteristic.The finding of this research and most importantly, the contents explored based on findings would help government policy and decision makers design and implement policies and strategies to improve e-Government services. The research is undertaken at the local level of government in Indonesia. It is one of the first researches in Indonesian e-Government implementation by exploring best practice contents which emerged in each city/municipality. This research also used relationship between service model and e-Government stage to analyze contents.

Keywords: *e-Government, local government, contents of e-Government*

1. Introduction

Some definitions explained the main functions of e-Government while implemented in any government. E-Government has not only helped in improving service delivery [1-3] and increasing democratization [2, 3], but has also helped in reducing corruption and increasing government transparency [2, 4]. Governments are adopting new technologies to enhance service delivery to their citizens, and hence improving citizen-state relations. The aim of such large e-government project is to cater for different and reliable services and not profit [5].

Information Technology (IT) becomes a particularly effective tool of all businesses in their operation and in the way they create value for a range of external stakeholders. In e-Government circumstance, stakeholders are government, citizen, business, employee, and other government [6-8]. There are many wealthy opportunities for government to create value through the imaginative and effective use of technology (such as: internet, radio, cellular phone, etc.). Developing e-Government system becomes the main consideration to increase public service in all countries. They all realize that e-Government can be a best way for supporting national goals achievement.

In Indonesia, obligation of developing e-Government in cities or municipalities was fully on local government responsibility, based on Presidential Instruction No. 3/2003 [9]. Local government (city and municipality) has large authority in the lowest government level, including in implementing e-Government. It has been more than a decade local governments in Indonesia developing their own e-Government. However, it is still not optimal based on some assessment institution examination of their e-Government implementation. Less than 20%

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cities/municipalities were categorized as good achievement, and others were still categorized as poor (as reported by Indonesian e-Government Rank survey in 2013). Assessment of e-Government implementation in Indonesia has already conducted at least by 3 (three) survey programmes i.e: Indonesian e-Government Rank (PeGI), ICT (Information and Communication Technology) Pura, and e-Government Award, since 2003 till now. From those assessment methods, it showed that e-Government implementation in Indonesia especially in city/municipality level is still low.

In assessing implementation of e-Government we examine not only the readiness aspect but also the effectiveness of programmes in achieving goals. Some basic theories of e-Government stated e-Government implementation should be done step by step [10-13]. Then they called as e-Government maturity stage. The simplest stage model was explored by [11] which stated Publish, Interact, and Transact are the step for developing e-Government respectively. At the lowest stage, Publish, government typically posted simple and limited information through their web sites, such as the agency's vision and mission, office hours, contact information, and official documents. Governments only provide information on the web sites and no interaction is possible. Previous research found the quality of Indonesian government website in general was in medium level, both in terms of the quality of content and the level of ease-of-use [14]. In addition, it is also proved empirically that even in the lowest stage many cities/municipalities were still left behid while web metrics rank of local governments outside Java shows that the website of province is more dominant than the city or municipality website, while for Java Island, the website of the district or the city is more dominant than the provincial web. It showed that there were digital divide between Java and outside Java for a webpage, inbound links and traffic [15, 16].

Each city/municipality has different existing conditions; it makes sense that the achievements of each city/municipality are different. But some cities/municipalities still could caught up the optimal result with their limitation, since they implemented appropriate strategies effectively. Some innovative approaches came up and turned into the option since those ways are efficient and easy to implement. In the private sector, innovation is primarily motivated by competitive advantage, however, in the local authorities, the drivers are enhanced service delivery, and added monetary value for taxpayers. Efficiency is the strongest driver of innovation in local authorities [17].

Many studies have already revealed the critical success factors of cities/municipalities in developing their e-Government in Indonesia [18-20] and also in worldwide [21, 22]. Some factors are categorized as uncontrollable since local government could not involve to change, such as leadership, national roadmap, or inconsistency on central law and bureaucracy. In the other hand, other factors need high resources in making as a success factor, but there is one factor that has high opportunity to be exploited in constructing key factor efficiently, called as CONTENT of e-Government system.

Contents of e-Government are service and information which were provided and organized by government for their stakeholder. Then it appeared some questions, what service/information should be provided, to whom it should be delivered, and how to deliver. It entails analysis of each question thoroughly by considering e-Government stages as well. Theory of service process for e-Government answered those question and have already studied by previous researcher [11, 23] in which explained about typical service instances, whilst advanced research of service process called IT Service Model for Local Government [24] still need to be proved by doing a simulation. Is the result of this study can be implemented in Indonesian local government? Or is it already used? And how were benefits came up in that condition? The in-depth research has already done to analyze comprehensive condition of city/municipality best practices from the obstacles they faced, how to overcome problems, how they treated contents of e-Government system, until they attained value from it. This article will explain all queries by developing some research questions as follow: 1) How did city/municipality overcome the obstacle of e-Government implementation?; 2) How did they use contents in processing e-Government effectively?; and 3) What benefits did they get from implementing of e-Government?

Following this introduction is a research design analysis which explains how researcher analyzes the data for finding answer of research questions. Theory of public value of e-Government, e-Government service model in order to explore contents based on elements interrelation, e-Government obstacles and benefits is used for constructing scientific analysis

based on appropriate research methodology. Then this paper is continued with summaries of all finding in result and discussion, conclusion and recommendation respectively.

2. Research Design Analysis

To answer those research questions, researcher analyzed e-Government theory from service process aspect and the stage of e-Government. Service process aspect explained e-Government as a service (mediating) to manage information and service flow from government to users. At the same time, the stage of e-Government distinguished type of service process which goes to be established where the highest level offers full integration with public administration and will have needed the primary re-thinking and change of government and its basic components. Howard used three stages of e-Government Model [11], these are: (1) Publish: online information about government news and activities; (2) Interact: enables citizens to have simple interactions with the government e.g. e-mail, chat rooms, etc; (3) Transact: offers citizens full transactions over the internet, e.g. applications for programmes, subsidies and services, purchase of licenses and permits, etc. An advantage of having a staged approach is the ability to generate momentum that can then be maintained [5].

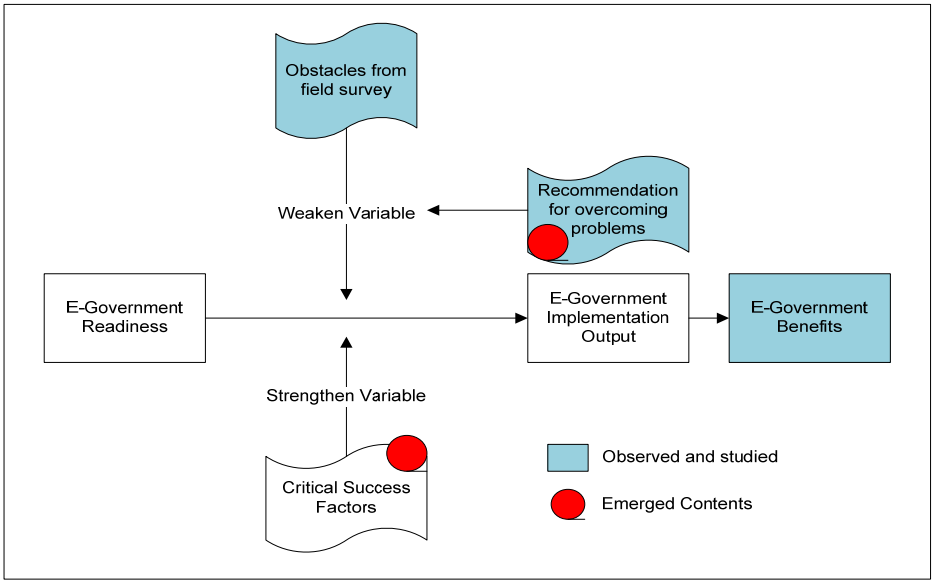


Figure 1. Research Model

The research entails compilation of emerged obstacles and solution whether they have used or should be used, benefits by triangulation of extensive literature review, qualitative case study (of successful e-government implementation by best practices city/municipality in Indonesia), and focus group discussion with few experts/stakeholders. At the same time, researcher also asked some questions for knowing what benefits they obtained from how they implemented e-Government up to now. The finding then are analyze with existing research which already studied.

Analysis of emerged contents was prepared after doing advanced investigation of data. Some strategies of local government used are identified as emerged value of improving common processes of e-Government. Literature review by Institute of Chartered Accountants in England and Wales (ICAEW) identified six broad ways in which IT can be used to create value [25]: (1) Create substantial efficiencies in the way that businesses undertake their activities; (2) Improve the search process between buyers and sellers, or the users of a service; (3) Reduce some of the constraints on businesses created by physical assets and high transaction costs; (4) Improve governance and control, by providing greater visibility of operations; (5) Enhance current value propositions, giving a better understanding of what customers want and improving

their overall experience; (6) Enable the creation of entirely new products and services, particularly information-based products and services. Those values can be applied in private and public sector. E-Government as an utilizing information and communication technology for delivering government information and services to citizen, had many ways in achieving optimal value as mentioned above.

Therefore, researcher used Conceptual model–called as IT service model for local government, which claimed as a model for gaining more value from e-Government system, to explain how they used contents in processing e-Government effectively. There is a need for defining a e-government service model that create value most and also suitable for local government, especially in Indonesia, which has specific condition such as: national culture, citizen characteristic, budget constraint, nature condition, type of Indonesian government, regulation, and specific national vision and mission [24].

The public value of IT was defined by Gartner as measures that demonstrate how IT-related changes and investments contribute over time to improved constituent service level, operational efficiency and political return [26].

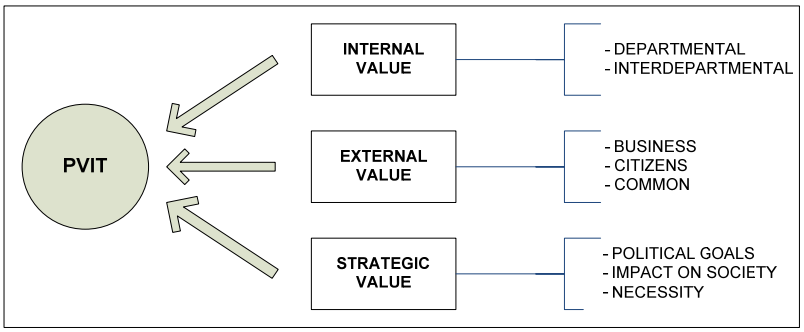


Figure 2. Principled Framework for Evaluating Public Value of IT

We analyzed literature, then we conducted interview as a data collection method. In order to preserve the objective of this research stage, researcher used semi structured interviews which develop open-ended questions in advance, along with prepared probes, unplanned and unanticipated probes may also be used. If the researcher knows enough about the phenomenon or the domain of inquiry to develop questions about the topic in advance of interviewing, but not enough to be able to anticipate the answer, then semi structured interview can be used [28].

Researcher choose 7 (seven) best practices of local government in Indonesia, based on results of some e-Government performance assessments in Indonesia, these were: Kota Cimahi, Kota Bogor, Kota Yogyakarta, Kota Surabaya, Kota Malang, Kabupaten Jembrana, and Kabupaten Sragen. Purposive sampling of participants represent person who are responsible for the e-Government implementation and understand with the topic/questions. Participants for interview in exploratory research were persons in charge for e-Government implementation in local government, these were: Mayor/Regent or Vice Mayor/Regent or Regional Secretary (Sekda) as a highest decision maker at local government, Head of Planning and Development Agency (BAPPEDA) as a planner, Head of Department for Information and Communication as a field manager, and other relevant Head of Department as an user.

Focus Group Discussion (FGD) also conducted for confirming the findings from governments' interview and validating the results. FGD participants are scholars, practitioners, and experienced government people who work on e-Government projects**.** The transcripts from interview and FGD were coded and repeated until agreement on the assigned codes was reached. Multiple sources help reduce the problems associated with respondent bias or poor recall/articulation through the personal interview process. The multiple source approach also allows for consideration of a broader range of issues and within-method triangulation [29, 30].

3. Results and Discussion

From author previous study, it concluded that most of cities/municipalities have been only at Publish stage, and less than 20% have been at the second stage (interact) [16]. It also found that there was no significant relationship between e-Government implementation achievement and their financial capability, by which implementation achievement proxy was information disclosure level of Indonesian local government and financial capability proxy was regional government budget. Author concluded there was more than financial matter in making e-Government implementation succeed.

Rose explained the difficulties of implementing e-Government in Indonesian regional governments were: financing problems, few qualified people, lack of supporting infrastructures, and low attention from regional government offices [31]. The political will, laws and regional regulations are fundamental criteria for successful implementation of e-Government. In another study in Indonesia, Furuholt and Wahid found that management, infrastructure, human resources factors partake in ensuring successful implementation of e-Government [18].

From conclusion as result of interview and observation data reduction, we revealed obstacles that emerge at cities/municipalities and also explored solution used. Then, researcher analyzed those finding associated with related literature to recommend solutions for anticipating problems as following:

Table 1. Problems Exploration and Solutions

Problems	Solution Recommendations
	Publish Stage
Lack of information technology awareness	Consistency and continuity in communicating and socializing information technology (1)
Lack of willingness that hinder the achievement of goals	Developing tough system and training staff with high commitment (2)
Inequality leader vision among underneath official	Consistency and continuity in communicating and socializing vision and mission (1)
Information technology is not used as an enabler in the achievement on local government programs to comprehend its vision	By using service model and contents improvement on this research (3) Inserting information technology as supporting tool in all government activities (4)
No planning and scheduling process so that implementation is inefficient and ineffective	Comprehensive blueprint is prepared (5)
Incapable leader	Prepare ready system with capable staff (6)
Unprofessional in managing e-Government which caused implementation hampered	Chief of Information Officer is an obligation (7)
The difficulties in collecting information since most of department assumed that information is secret so deny to share it publicly	By using service model and contents improvement on this research (3) Law enforcement to bind all stakeholder in providing information (8)
Information is just only raw data, there was no improvement in order to create value added data so available information benefits was not optimal	By using service model and contents improvement on this research (3) Hired capable staff in organizing and creating value added data (9) Survey and analyze users need (10)
Official inconsistency in documenting and processing data collected caused a lot of data missed	Preparing standard operating procedure to control all staff job (11)
There was no official with job description as programmer in making data more valuable	Hired capable staff in organizing and creating value added data (9) Survey and analyze users need (10)
Not integrated projects development caused duplicating project happened	By using service model and contents improvement on this research (3) Neat documentation and archive storage (11)
Resource to create revenue in eliminating operational cost was not done	By using service model and contents improvement on this research (3) Providing open and creative environment in order to create innovative idea (12)
	Interact Stage
Government bear all development and operational cost by using regional government budget	By using service model and contents improvement on this research (3) Providing open and creative environment in order to create innovative idea (12) Making good relationship with all parties (13)
E-Government implementation still developed partially and individually	Comprehensive blueprint is prepared (5)
Official recruitment was not based on appropriate specification	Comprehensive blueprint is prepared (5) Mapping job requirement and staff capability (14)
Quantity of official government was not enough	By using service model and contents improvement on this research (3) Mapping job requirement and staff capability (14)

Information source is just only one way information which is from government to users (citizen and business) thus there is limited information	By using service model and contents improvement on this research (3)
Illiterate technology or high reluctance in using technology	Consistency and continuity in communicating and socializing information technology (1) Developing tough system and training staff with high commitment (2) By using service model and contents improvement on this research (3)
There was no symbiosis mutualism cooperation	Generating innovative cooperation (15)
	Transact Stage
Lack of interrelationship that will retard comprehensive implementation	By using service model and contents improvement on this research (3) Generating innovative cooperation (15)
Relationship with other organization element is not clear as a result there is ineffective management	By using service model and contents improvement on this research (3) Provide rules of the role and manage the implementation (16)
Inappropriate technology alternative caused major grant invested is not comparable with the expected result	By using service model and contents improvement on this research (3) Prioritize optimization of staff and infrastructure capacity (17) Always pursue the improvement of knowledge and technology (18)
Reliance on vendor (third party) in improving and managing technology	By using service model and contents improvement on this research (3) Prioritize optimization of staff and infrastructure capacity (17)

Note:
- Number in parenthesis illustrated emerged solutions and recommendations from field survey and researcher analysis.
- Solution #3 is identified after completing this research as a main result.

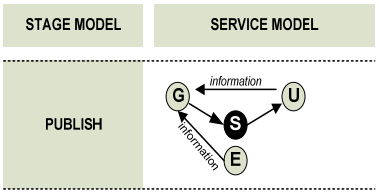
Researcher will align emerged content with solution recommendation and analyze how to get benefits by exploring those type of value as discussed above as a reference. Conclusion as a result of interview and observation data reduction about CONTENT is presented in table 2. It exposes the finding of field survey and document analysis compilation that corresponded with innovative way of thinking of local governments. They improved the content value more than regular deployment in order to increase public value. Value creation concept was built upon three basic questions which are: WHAT, TO WHOM and HOW [24]. Those three questions can be explained as follow:

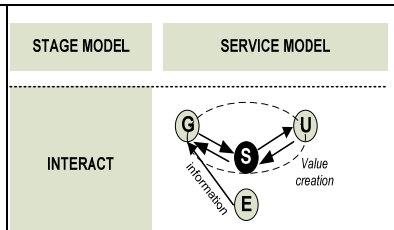
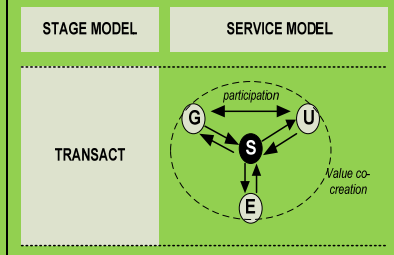
(1) Content will be the answer of what to deliver. By using definition above, it was defined that content of e-government consist of information and services. Most of e-Government implementation failure is lack of information of appropriate content required. By using service model framework, it obviously seems that user target is not merely as information consumer but also as information source. From data exploration, we found that city/municipality objects have already implemented the concept of e-government content. The detailed exploration was depicted below. Interesting aspect that emerged were contents which were provided innovatively.

(2) Users have to be defined to answer basic question to whom it deliver. Previous research of Singapore case determined user of e-Government can be distinguished into citizen and residence, business, and non residence. If we considered the relation of user and its content, then this was an appropriate approach to be selected.

(3) Service Model was used to explain how to deliver. From previous research, the authors have proposed IT service model for local government by which relationship among parties are considered explicitly to dissolve limitations of existing service model.

Table 2. Content Exploration

Stage	Concept	Relation	Regular Content	Emerged Content
Publish	Service is static information only. It means government delivered services to user electronically while information from user and environment is delivered manually.  	G → S → U	- News - Government Official Agenda - Government Official Contact - Vision and Mission - History - Organization Structure - Question and Answer - Search engine - Link - Map - Information of House of Representatives - Forum - Pooling - Document of Regional Government Regulation - Regional Financial Regulation - Middle Period Development Plan (RPJMD) - Regional Government Budget (APBD) - Financial Report Notes (CaLK) - Balance Sheet - Cash flow - Government Performance Report (LAKIP) - Asset Inventory - Government Strategic Plan	- Promotion of local product (SME product) - Promotion of local tourism destination - Promotion of local events - Promotion of local citizen achievement - Information of growing season - Information of product market price - Information of citizen meeting - Information of license procedure - Information of loan/grants for business - Information of loan/grant for higher education - Educational materials - information sharing in the health sector - information of job vacancy - information of weather condition
		U → G	None	- Information of personal identity - Information of medical record - Information of product profile - Information of business activities - Obstacle of business activities - Performance Report of each department - Users complaint - Users suggestion/idea
		E → G	None	- Information of potential consumer - Information of world requirement of local capability - Information of national/international economic indicators condition - Information of market competition
Interact	e-Government development has already accommodated two way interaction of user, when system has capability to receive information input from user.	G ⇄ S	- e-Procurement - e-Filling Tax - Interactive channel for complaint and suggestion - e-License	- Direct official government respond on answering users complaint and suggestion - Online based connection among official government (official email/chatting room) - Online based connection

		S → U		between users and government (official email/chatting room) - Interactive information on license proposal tracking - Interactive information on tax payment procedures - Interactive information on procurement stage execution - e-Voting - e-Security - e-Filling business document - Interactive information of medical service/hospital
		E → G	None	- Information of potential consumer - Information of world requirement of local capability - Information of national/international economic indicators condition - Information of market competition
Transact	At this stage broader interaction allowed among government, user, and environment. Also payment transaction is provided. 	G ← S	- e-Tax with payment transaction - e-License with payment transaction - e-Procurement with payment transaction	- enables electronic identification and authentication through the use of electronic signatures - registration for training/program - purchase of licenses and permits
		S → U		
		S ← E	- e-Supplier - e-Partners	
		G ↔ U	e-Democracy e-Participation	

Note:
- All figures above are result of previous research by Irawan et all [24]
- G = government; U = Users; S = System (e-Government); E = Environment.
- Green box means this stage (transact) has not achieved yet (excluding Kabupaten Jembrana via e-Voting in village chief election), so the contents came up from research analysis.
- Environment is any direct and indirect party which has interest with service offering (such as: other agencies, institutions, etc.).
- Service as mediating is to relate information or service among parties and in this research we analogize e-Government as a service.

All cities/municipalities of this research in which in depth interview and observation was employed stated benefits (values) of their e-government implementation as follow:

Table 3. Benefits Exploration

Output		Outcome
- Cheap operational cost - Fast service time - Cheap tariff - Easy license procedure	- Easy form filling - Efficient Budget - Ease the work burden - Efficient communication	**Efficient time and effective goal**
- Up to date news - Easier to get information - Faster to catch information - Easier to search data	- Easier to disseminate meeting information - Download license form - Download Regional Regulation	**Better data and information availability**
- Increased Investment - Increased people bargaining - Less subsidies	- Increased Public income/profit - Increased public revenue	**Increased Public welfare/Growth Domestic Bruto (GDP)**

- Easy to make semester report - Easy for monitoring activity to report - Easy for controlling Investment	- Easier to report to central government - Minimize entry data error - Easy for monitoring and controlling on work implementation	**Increased official Government Performance**
- Positive management change - To encourage real good governance - Some parties could monitor and control activity target achievement	- Official government performance assessment is more transparent - As guidance for achieving target - Knowing official government agenda/activity - Auction/procurement activity is more transparent	**Built transparency and accountable culture**
- Storage for keeping and managing information/knowledge - As media for developing staff skill and capability - Free knowledge resource		**Knowledge storage**

From finding above, researcher claim that there was emergent benefits that came up after digging deeper interview with paticipants, which have not revealed yet at previous research. The benefit was knowledge storage, which came up from all cities/municipalities, and it referred government best practices had already understand how to use e-Government effectively.

4. Conclusion

This research applied a qualitative approach to explore simultaneously problems, contents, and benefits were gained from 7 cities/municipalities. Indonesian e-Government best practices was chosen from some e-Government implementation assessment, e.g. Kota Cimahi, Kota Bogor, Kota Yogyakarta, Kota Surabaya, Kota Malang, Kabupaten Jembrana, and Kabupaten Sragen. It is one of the first researches in Indonesian e-Government implementation by exploring best practice contents which emerged in each city/municipality.

From exploring research, it was revealed that problems are categorized as planning (vision alignment, roadmap), human resources and organization (leader, head of department, staff, organization structure), information contents (availability, information value, manager), technology (in choosing effective technology, programmers), and financial (sources, management). Therefore in this study also explored recommendation on how to anticipated all problems and then created innovative and creative contents in order to achieve expected value.

By using service model and e-Government stage model, we analyze emerged contents such as information of growing season and product market price, educational materials, information of medical record, users' complaint, information of worldwide potential consumer, e-Voting, interactive information of medical service/hospital, purchase of licenses and permits. Participants also stated some values achieved by implementing e-Government, those are: efficient time and effective goal, better data and information availability, increased public welfare, increased official government performance, built transparency and accountable culture, and knowledge storage.

Researcher concluded innovative and creative way in creating contents became important alternative solutions for government to implement successful e-Government. Since the purpose of implementing e-Government were 1) to provide more convenient access to government information and services, 2) to improve the quality of the services and 3) to provide greater opportunities to participate in democratic institutions and processes, we are certain there were many ways to create effective contents to achieve goals beside contents that was common in use previously.

5. Further Research

This research was one of the bundle researches in completing dissertation research. In-depth interview and observation that have already done contain of a lot of data that can be describe as broad map of e-Government implementation at city/municipality best practices. We learned about their original recipes in making their effort succeed. Even some of their

experiences were just based on logical thinking and understanding of their society, also from local characteristic.

For further research, author has planning to proposed knowledge adaption on Indonesian e-Government implementation, since this area of research is as new paradigm trend and obviously emerge in in-depth interviews and observations data collection.

References

[1] Fang Z. E-government in Digital Era: Concept, Practice, and Development. *International Journal of the Computer, The Internet and Management.* 2002; 10(2): 1-22.

[2] Von Haldenwang C. *Electronic Government (E-Government) and Development: Does the Digital Divide Contribute to the Governance Divide?*. Paper to be presented at the EADI-conference in Ljubljana, German Development Institute. 2002.

[3] West DM. e-Government and the Transformation of Service Delivery and Citizen Attitude. *Public Administration Review*. 2004; 64(1): 15.

[4] Banerjee P, Chau PYK. An Evaluative Framework for Analysing E-Government Convergence Capability in Developing Countries. *Electronic Government*. 2004; 1(1): 29-49.

[5] Irani Z, Love PED, Elliman T, Jones S, Themisstocleous M. Evaluating e-government: learning from the experiences of two UK local authorities. *Information Systems Journal*. 2005; Vol. 15: pp. 61-82.

[6] Siau K, Long Y. Synthesizing e-Government Stage Models – A Meta-Synthesis Based on Meta-Ethnography Approach, *Industrial Management & Data Systems.* 2005; 105(4): 443-458.

[7] Esteves J, Joseph RC. A comprehensive framework for the assessment of eGovernment projects, Government Information Quarterly. 2008; 25: 118–132.

[8] Lowery LM Developing a Successful E-Government Strategy. 2009, UNPAN, http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan000343.pdf [accessed 30 June 2011].

[9] Presidential Instruction Republic of Indonesia No. 3 Year 2003 National Policy and Strategy Development of e-Government.

[10] Baum CH, Di Maio A. Gartner's Four Phases of E-Government Model. 2000. http://www.gartner.com [accessed 28 January 2010]

[11] Howard M. E-Government across the Globe: How will 'e' change government. *Government Finance Review*. 2001; 17(4): 6-9.

[12] Layne K, Lee J. Developing Fully Functional e-Government: A Four Stage Model. *Government Information Quarterly*. 2001; 18(2): 122-136.

[13] Wescot C. E-Government in the Asia-Pasific Region. Asian Journal of Political Science. 2001; 9(2): 1-24.

[14] Wahid F. *Evaluating Focus and Quality of Indonesian e-Government Websites*. Proceedings of Seminar Nasional Aplikasi Teknologi Informasi 2008 (SNATI 2008). Yogyakarta. 2008.

[15] Hermana B, Silfianti W. Evaluating e-Government Implementation by Local Government: Digital Divide in Internet Based Public Services in Indonesia. *International Journal of Business and Social Science*. 2011; 2(3): 156-163.

[16] Sofia A, Husen B. Analisis Transparansi dan Akuntabilitas Pemerintah Daerah melalui Pengungkapan Informasi pada Website (Studi pada Kota/Kabupaten seluruh Indonesia). *Jurnal Management Indonesia*. 2013; 12(4): 297-308.

[17] Orange G, Elliman T, Kor AL, Tassabehji R. Local Government and Social or Innovation Value, Transforming Government: People, Process and Policy. 2007; 1(3): 242-254.

[18] Furuholt B, Wahid F. E-government Challenges and the Role of Political Leadership in Indonesia: the Case of Sragen. *Proceedings of the 41th Hawaii International Conference on System Sciences* (HICSS). Hawaii. 2008.

[19] Wahid F. Pelajaran dari Implementasi e-Government di Sragen, *Prosiding Seminar Nasional Aplikasi Teknologi Informasi 2007*, Yogyakarta, K35-K37 (Lessons from e-Government Implementation in Sragen).

[20] Wahid F, Lessons from E-Government Initiatives in Indonesia, *Media Informatika. 2004*; 2(2): 13-21

[21] Shin S, Song H, Kang M. Implementing e-government in developing countries: its unique and common success factors, Paper prepared for presentation at the Annual Meetings of the American Political Science Association. 2008.

[22] Wang YS, Liao YW. Assessing eGovernment systems success: A validation of the DeLone and McLean model of information systems success, *Government Information Quarterly.* 2008; 25: 717–733.

[23] Lee KJ, Hong JH. Development of an e-Government Service Model: a Business Model Approach, *International Review of Public Administration.* 2002*;* 7(2): 109-118.

[24] Irawan H, Suhardi, Sofia A. IT Value Creation in Indonesian Local Government: A Service Model. IRSA Book Series on Regional Development. 2012; 10: 213-225.

[25] Barua A, Brooks L, Gillon K, Hodgkinson R, Kohli R. Creating, Capturing, and Measuring Value from IT Investments: Could We Do Better?. *Communications of the Association for Information Systems*. 2010; 27(1).
[26] Worldbank. http://siteresources.worldbank.org/EXTINFORMATIONANDCOMMUNICATI-ONANDTECHNOLOGIES/Resources/282822-1188575147431/PublicValue_ITFrameworks-2007.pdf [downloaded: March, 1st 2010].
[27] Kancijan D, Vrcek N. Proposing Mehodology Pattern for Measuring Public Value of IT Projects, JIOS. 2011; 35(1): 31-58.
[28] Morse JN, Richards L. Readme First for a User's Guide to Qualitative Methods. Sage Publications, Inc. 2002.
[29] Bonoma TV. Case research in marketing: opportunities: problems, and a process. *Journal of Marketing Research*. 1985; XXII: 199-208.
[30] Yin RK. Case Study Research. Sage. Thousand Oaks. CA. 1994.
[31] Rose M. Democratizing Information and Communication by Implementing e-Government in Indonesian Regional Government. *International Information & Library Review.* 2004*;* 36(3): 219-226.