E-government Service on Law & Legal Libraries : Case Study In Indonesia Government Agencies

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Abstract:

Democratization in Indonesia has new consequences one of it is an information blast especially in law and legal document in government agency and change the service of law and legal libraries. Since the development of information technology the law and legal libraries in government agencies has developing e-government services in law and legal documents. Most of the e-government service is using repository institutions their main service. This paper was meant to evaluate e-government service in law and regulation document in Indonesian government agencies, is it efficient enough to serve users?. Methodology on this paper was using survey in 34 government agencies with good ranks from ministry of information and communication assessment as a sample. Questionnaire *was use to evaluate e-government service in law and legal and repository components. Those components are human computer interface component, interoperability component, repositories management component. The paper shown, there are some aspect of the human computer interface component has not applied international standard such as only 4% of the sample provide controlled vocabulary on law and legal subject, on human computer interface, same as in the interoperability component most of the metadata is not applied standard metadata, only 10% using metadata standards and there are also inefficiency due to unorganized repository management. In the end of the paper, the e-government service on law and legal documents in Indonesia is not efficient and effective enough to serve people due to some institutional repositories component that has not standardized and in the future Indonesian government need to redesign the e-government on Law and legal document services.*

Keywords: *e-government services, Law and legal Libraries, Indonesia government publication*

Introduction

The downfall of Soeharto regime in 1998 opened a new gate of democracy and reformation of a nation in all aspect. Since that Indonesia has entering a new era called the reformation era. This era has opened the freedom of speech and result in a growing number of information sources. one source of information is influential on the development of information resources is a government publication on government institutions.

Since 2009 the Indonesian government launched the reformation bureaucracy program. This program aim to create effective and efficient bureaucracy with the principles of good governance. One method to improve good governance is to adopt information technology through the application of e-government through the provision of e-resources. E-government is the use of information technology by the public sector organizations, the definition of e-government is the use of information and communication technologies by Governments in the public services (Nurhadryani, 2009).

E-Government is a permanent commitment made by policy makers to improve the relationship between the citizen and the government agency through enhanced, cost-effective, and efficient delivery of services, information, and knowledge. Broadly defined, e-government includes the use of all information and communication technologies, from fax machines to wireless palm pilots, to facilitate the daily administration of government, exclusively as an Internet-driven activity that improves citizen's access to government information, services, and expertise to ensure citizen's participation in, and satisfaction with government process (UN & ASPA, 2001). Narrowly defined, e-government is the production and delivery of government services through IT applications, used to simplify and improve transactions between governments and constituents, businesses, and other government agencies (Wimmer, 2001).

One of the object of e-government services is serving the legal and regulatory publications and other publication containing information law, these information have different goals and intrinsic needs, usually represented by statute, case law doctrine and interpretation and cases (Perugnelli, 2005). Legal issue in perspective Indonesian government are all legal publications issued in Indonesian both inside and outside the country of Indonesia but about Indonesia. Types of legal documents in Indonesia consists of 1945 of Republic of Indonesia Constitution, Congress decrees, Act or Bills, government regulation, presidential decree and other such as judicial court, etc. Type of foreign legal issue includes legislation, government statutes, treaties, court decisions or arbitration bodies, a country of laws, decisions or statutes organs / international institutions. (Starke, 2006).

Indonesian legal are very complicated because since the autonomy regional act in 1999 the local government can create their own laws as also as central government. Indonesian laws and regulations is never centralize from the creation to dissemination so as also the repositories is never in one place. This paper will look forward to present condition of e-government services on Indonesia law and regulations repositories and challenges in Indonesia e-government law and regulations repositories.

E-government In Law & Legal Repository In Indonesia

The application of e-government in Indonesia is currently ranked 106. Governments (UN E-government Survey, 2014) Indonesia itself through the Ministry of information and communication are also doing the assessment of the implementation of e-government. Just my assessment is done with the evaluation of the application performs a number of e-government at government agencies in Indonesia by looking at aspects of planning, policies, infrastructure, human resources and applications. Assessment results obtained by ni in 2015 are as follows:

Table 1. the number of government agencies and the number of repository of law in Indonesia (irhamni, 2015)

No.	Government Agency	Total Quantity of Government Agency	Description	
			Good grade egovt	Having Legal & Law Repository
1	Minsistry	34	12	12
2	Non Ministry Agency	28	14	10
3	Province	34	7	4
4	District/City	491	9	8
	Total	587	42	34

Table 1 above seen that from 587 government institution in Indonesia, there are only 42 are have a good grade, and only 34 that have law and legal repository. This paper are some components need to be considered in the implementation of e-government in the field repository. The first component is a good human computer interaction, it is supported by the application of ISO 8777 on Information and Documentation - command interface for text searching, while the second component is a standard interface that involves an information retrieval system as described in the repository as well as components. The second component is a component of interoperability has data component communication that is able to exchange data repository for metadata and protocols in a data centre. The third component relates to the content of the repository system consisting of feedback content, document management and promotion of digital information content (Central Library Research, 2007).

Survey conducted on an existing repository in Indonesian law against digital repository component areas of law and regulation. Survey conducted on 34 government agencies in Indonesia, which has a good services reputation on e-government from the assessment of e-government services both from the ministry of communication and informatics Republic Indonesian in 2014.

Survey results published by the legal system of the repository is done by conducting a survey of three (3) components namely component repository Human Computer Interaction, component interoperability, and component repository management, with the following results:

- *Component Survey of Human Computer Interaction*
Human Computer Interaction (HCI) aims to develop a good relationship between humans and machines as well as help improve the efficiency of tasks that involve them. The main goal of HCI is the development of human ability to use the machine and to design and build the interface, as well as the optimization of the execution of tasks by humans and machines in order to better communication between humans and machines (Junianto, 2004).

In more HCI repository serves as a means of information retrieval. ISO 8777 on information and documentation commands for interactive text searching regulates the display in the search procedure that determines the retrieval of information should include the use of Boolean operators, especially in complex search and use the index in particular controlled vocabulary index in the repository so that documents can be more specific search that is able to function as a tool to seek information that enables users of a system can be directly traced

through the subject of legislation or through regulatory. Based on a survey conducted in 2014 to 34 repositories law on government agencies obtained the following results:

Table 1 Results of the survey of Human Computer Interaction component availability (Irhamni, 2015).

No.	Feature	Availability
	Simple Search	83%
	Advance Search	38%
	controlled vocabulary	4%

The Survey's results are most of the 83 % of Indonesian government agencies provide simple search tools repository, while 38 % providing advance search fascility on their a legal repository. Surveys also discover that only 4% of government agencies doesn't provide controlled vocabulary searching feature for their users (Ali, 2014). Controlled vocabulary features is a very important requirement for the history of law in Indonesia, because most of the law was adopted from Netherlands which resulted in a lot of foreign terms that make it difficult for users to search for information. In addition, many of government agencies change their names and it would be very difficult for users to seek information by publisher, this would complicate users to surf on the repository (Ali, 2014).

- *Survey Component Interoperability*
     Interoperability component was to make sure if metadata in the repository laws and regulations in Indonesia. Survey was aim to see interoperable metadata, and secondly whether they use standard metadata such as MARC or Dublin Core, the results of the survey are:

Table 2 Result of Survey the availability of metadata in a repository of government agencies (Irhamni, 2015)

No.	Feature	Availability
1	Metadata Availability	31%
2	Structured Metadata Availibility	3%

Table 2 above shows that almost all the metadata repositories using metadata that is used but not standard, metadata used are Ministry of Law and Human Right Regulation No.2 year 2013 on the standardization of the management of legal documents. This makes it difficult to perform repository interoperability between agencies because not supported by standard data exchange protocol. The real problem in terms of interoperability on legal repository in government agencies is a problem on the technical dimension and a social dimension, the dimension of the techniques focus on how technology interoperability is maintained and developed, while the social dimension emphasizes cooperation or networking among institutional repository in government agencies (Ali, 2014).

- *Survey component repository management*
     Availability of component repository management survey conducted by looking at the availability of statistical information collection features, ease of file downloaders, the ease of use of the files that have been downloaded, whether the portal provides links to related information? and whether the user can request feedback by passing the required

information. The results obtained are:

Tabel 3. Result on availibility on management repository components survey
(Irhamni, 2015)

No.	Feature	Availibility
1	Collection information Statistics	29%
2	Files Downloading	96%
3	File using	94%
4	Links to related information	10%
5	Customer Relationship Manager Availability	66%

The Survey's results are about 96 % of legal document from repository can be download and user can use and see the legal files about 94%. But about 29% of the government agencies provide collection information statistics, while only 10 % providing hyperlinks to related legal documents. Surveys also discover that 66% of government agencies doesn't provide customer relationship managements. Information searching is a very complex activity that involves a lot of consideration and thought whether the information found compliant or not. For that good repository should provide a link to the users of the system to provide an informed choice. The provision of hyperlinks can improve information retrieval bde3swy combining information from various sources based hierarchical structure information (Irhamni, 2015).

The evaluation of existing systems in the ministries / agencies, provincial, district, city state e-government services laws and regulations published by Human Computer Interaction was not efficient on legal information retrieval, browsing methods rely solely on the information one by one and search with a simple search. Interoperability issues that have not adopted the structured metadata so that the data can not be exchanged for recently of information in the field of national legal publications. Besides not supported by supported by interoperability at the policy level so that the measures taken for the repository has not been uniformed.

Challenges In Law & Legal Repository In Indonesia

Challenges in the future for e-government service on laws and regulation have to be more structured, more flexible, and integrated with any law and regulation document provider in Indonesia. The trend of increased online resources has brought with it the problem of disseminating them in a way that is convenient to the user. Users, especially novices, are confused by multiple search interfaces. users face a steep learning curve to figure out where to look for the most relevant information, and then understand how to construct the most effective search query for each separate system.

One of the solution offered are one search system. These techniques, called "metasearch" or "federated search," eliminates the need to query one information collection after another sequentially to find the right answer. Through a simple user interface, federated search tools allow an individual to launch dozens or hundreds of searches with one query. The federated search engine translates the search into the required protocol and search language for each target source, returning a single set of results.

There are several problems and challenges that face by Indonesian government in creating an integrated egovernment service in law and regulations. Problem with interoperability is the main challenge. "Interoperability is the capability to communicate, execute programs, or transfer data among various functional units in a manner that requires

the user to have little or no knowledge of the unique characteristics of those units." (ISO/IEC 2382 Information Technology Vocabulary). Every single government agency have its variety of law and legal documents such as bills, executive orders, supremen courts adjustments, ministry regulations, and other legal documents. The collections format and database system are also become obstacle in creating interoperable systems (Fahmi, 2015).

Currently government institutions in Indonesia, which has e-government services in legal documents is divided into two types. The first type is a government body that has had a system that implements the standard metadata i.e. MARC, DUBLIN CORE. The second type is a government body that has the system had not yet implemented the metadata standard (Wiratna, 2015). This is a challenge to perform interoperability between e-government services at law and legal services in Indonesia.

A brand new strategies has offered by National Library Of Indonesia breakhthrough with create new ways of e-government service at law and legal documents in indonesia. This strategies perform within a single interface. A new architecture designed to search legal documents in order to improve e-government services at law and legal libraries in government agencies in Indonesia (Fahmi,2015).
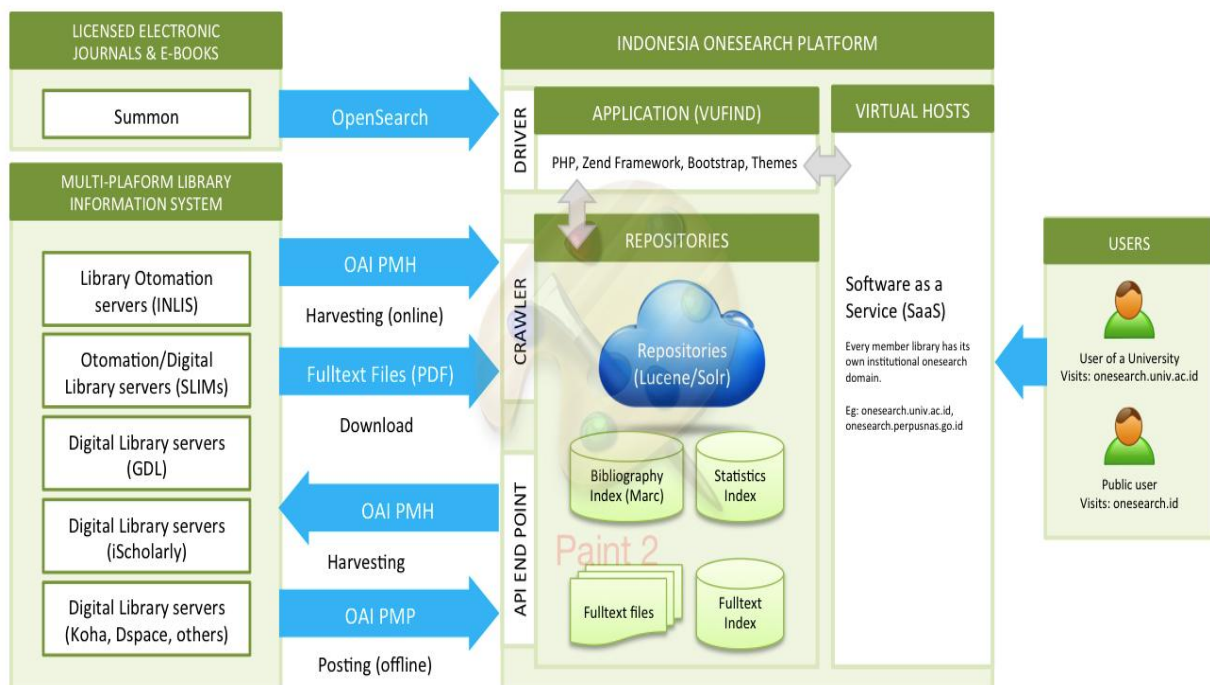

Figure 1. Interoperability Architecture (Fahmi, 2015)

The architecture systems allows metadata harvester to record the metadata of existing national laws on legal product database on ministries / agencies, provincial and district / city. In this ha metadata harvesting process is also commonly referred to aspects of interoperability, for it takes the right tools to harvest metadata called protocols. Currently there are two kinds of standard protocols in the protocol z.3950 bibliographic and open archives initiative protocol also called OAI. OAI protocol used will be the repository of national law because it is more easily used by the repository manager in the area and this ministry because the system provides a standard protocol OAI interoperability framework that can be used by various communities that require the exchange of metadata information across the web, which means the process of data exchange (in this case an XML document) is

via the WEB in addition to the OAI protocol supports a wide variety of metadata formats, such as Dublin Core (without qualification), MARC, or rfc18071 format. In addition, OAI protocol is open source so it would be more efficient to use in terms of the budget in ministries / agencies, provincial, district / city.

The System adopting module for federated searching of e-content that applies four different protocols to search remote resources: Z39.50; XML Gateways; Web services; and HTTP searching. Because it searches for multiple formats of resources, user productivity is enhanced with improved integrated search results. Users get a single-source solution for searching all available e-resources, including licensed content and local digital content. The development and implementation of such a technology requires database providers to enable linking of resources they provide to the libraries. Libraries will also have to make elaborate preparations necessary to adapt existing library records to the new technology. In addition, many libraries may opt to wait for the new and advanced technologies to stabilize and mature with regard to performance before deciding to adapt them. Furthermore, the cost of this new technology is expected to be high due to its complexity and newness.

Conclusions and Recommendation.

E-government service on laws and legal repository in Indonesia is not effective and efficient. There are some component need to be notice there are human computer interaction, the use of metadata and repository management. Those component need to be notice in designing a new e-government service in law and legal repository. The recommendations of this paper is upon Indonesia should do the Designing system of e-government legal repository is done by adopting the standard repository of the institution in terms of the components of human computer interaction in order to search and information retrieval can be efficient. The design of the system will also need to adopt standards for metadata repository institutions for data interoperability level bibliographic publications law could walk, as well as adopting a standard repository management so that the legal issue of dissemination of information in Indonesia is running efficiently. Through the draft system according standards then the dimensions of reusability and dimensions would be better service and be able to provide better satisfaction to the users of the system.

Acknowledgments

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