Implementation of the Integrated One Way Data in Improving the Quality of Public Services in Rappang

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Abstract

AI is a type of computer science, the essence of it is to try to make computers or devices replicate the mechanism of knowledge of human cognition and thought, to think like a human being even exceeded human beings. Governments around the world are currently facing pressure from various parties to improve the quality of public services in providing information to the public. This makes the role of E-Government increasingly important for all decision-makers. This research found there are many influencing factors which become a big challenge in implementing artificial intelligence in government village. Human resources capability becomes a major factor that makes implementing artificial intelligence in the village is not going effective. In addition, the second factor is the limitation of data. It is multiple effects of human resource capability. The low capability makes the management data is not well integrated. The third factor is budget. It is because Village Government has not more budget for the maintenance system.

1. Introduction

Previous digital governance approaches have moved from digitizing internal operations to external digital service delivery (for an overview of the stages of digital governance [1]. Also in the public sector and local government organizations, the widespread use of information technology has resulted in considerable effort to manage the information generated and processed in an efficient manner [2]. The UN E-Government Survey describes the three stages of electronic participation, which are achieved by governments in sequence, by providing online information (electronic information), engaging citizens with public services and policies (e-consultation), and “empowering citizens through joint design of policy choices and co-production of service components and delivery modalities (Collaborative e-decision-making)[3]. A survey conducted by the UnitedNations in developing countries and found that around 190 countries around the world use internet services to provide more efficient and competent services to their citizens [4].

This research departs from the information and technology integrated based on public service method initiated by Muhammadiyah University Sidenreng Rappang in its student internship program. One of the methods used to improve the quality of public services is to create a village website in four villages in Sidenreng Rappang Regency. The program, which has been running for one semester, needs to be measured in terms of successes and obstacles found in the field. This is in line with Presidential Instruction No. 3 of 2003 on National E-Government Development Policies and Strategies. Several surveys by international survey agencies indicate that public services in Indonesia are still the worst in Asia. The same is true of various studies conducted by observers of public services, almost all of which concluded that public services through direct contact are vulnerable to mal-administration practices. Departing from the facts above, the authors
want to examine the implementation of the use of e-government in the provision of public services. The problem to be solved in this research is the inhibiting factors of implementing one way integrated data in the implementation of village website-based public services.

2. Research Methods

The research questions raised in this study require a qualitative approach [26]. The research was conducted in four villages in The districts of Sidenreng Rappang are Bulo, Panca Rijong, Carawali, Watang Pulu, Kanie, Maritengngae, and Lagading, Pitu Riasa. The data in this study are in the form of words or actions obtained by informants related to the research, then documents or other written sources are additional data. Sources of data in this study were village officials, hamlet heads, community leaders, PKK administrators, and business leaders. Data collection methods used in this study were observation, interviews, and documentation. The data in this study were analyzed using the steps of data collection, data reduction, data presentation, verification, and confirmation of conclusions. For the analysis, this research use NVivo 12 Plus.

3. Literature review

3.1. Implementation

In simple terms, implementation can be defined as operation or application. Browne and Wildavsky (Usman, 2004: 7) suggest that implementation is an extension of mutually adapting activities. Implementation is also intended to provide the means to make something and give practical results to others.[5]. According to Wahab, (2003: 45), several elements of implementation include a) the existence of an implemented program, b) the existence of a target group, such as the people who are targeted and are expected to receive benefits from the program, c) there is a good implementation, good organization, or an individual who is responsible for the management, implementation or supervision of the implementation process.[6]

3.2. Electronic Government

Today, terms such as e-government and e-governance are used interchangeably but have different meanings[7]. E-government is an integral part of administrative modernization, a challenge facing every government in the world in the information age. After more than a decade of cross-national empirical research, we know that a country's level of human and technological development is the driving force behind e-government.[8]. E-government is a new phenomenon that improves the provision of public services to citizens, improves public sector performance, and enriches the political arena[9]. It is known that technology is not free of value, but its application is driven by perceived values (Bannister & Connolly, 2014).[10] Public value theory shifts the focus of public sector management from within the boundaries of organizations to society - from how to produce better public services to how to provide public services that better satisfy those who will consume them. [11]. E-government aims to make interactions between government and citizens (G2C), government and business (G2B), and inter-agency relations (G2G) more cooperative, comfortable, and transparent (Mellouli & Bouslama, 2009), (Chourabi & Mellouli, 2011).[12]

Regardless of the efforts to reduce the size of the government [13], The quality of e-government services includes information, interconnectivity, and stakeholders as well as the general public's perception of their access to online government public service experiences (Kumar, Mukerji, Butt, & Persaud, 2007). [14]. While scientists have tried to calculate the likelihood of future events for centuries, it wasn't until the 1960s that risk became the field of applied science. Risk management is important for several fields, including health, industry, and the nuclear power sector (Ball, 2007). Like e-Government, multiple disciplines study risk. Rosa (1998) presents a synoptic framework combining ontology, epistemology, and methodology related to risk research and practice.[15] Electronic governance performance appraisal is a comprehensive process based on a systematic investigation and analysis of the construction, operations, management, and impact of a website. It aims to identify the existing deficiencies of the e-governance operational process and to take steps to address them for further e-governance development.
Assessment of e-government performance involves establishing a system of indicators and selecting an assessment method. Internationally, most studies follow the e-government standards set by the United Nations. Since 2002, the United Nations Division for Public Economy and Public Administration has released assessment reports on e-government of its member countries, ranking government websites based on 21 indicators of four main aspects: online information and service quality, content correlation, page and site functionality, effectiveness, and spontaneity of information dissemination and disclosure. E-Government was introduced in public institutions towards the end of the 20th century to be precise in the late 1990s. 

3.3. Data Integration on Public Service

Service is the main task for the state apparatus as a servant of the state and a servant of the community. Public service is an effort made by a bureaucratic group or person to assist the community to achieve a certain goal. The concept of 'public service' can be defined as a state activity that involves interaction with citizens as customers. The delivery of public services is the institutional arrangement adopted by the government to provide public goods and services to its citizens. The success of a service based on the satisfaction of people who need service can be interpreted by comparing the views between the service received and the service expectations expected. The phenomenon of public services by the government bureaucracy is full of problems, such as long service procedures, the uncertainty of time, and prices that make services difficult to reach naturally by the community. Therefore, the choice of institutional arrangements affects public service delivery performance.

According to some experts, the motivation of public services can be different from changes in the public image of government services. Public service is an activity carried out by a person or group of people based on material factors through certain systems, procedures, and methods to fulfill the interests of others according to their rights. The purpose of public service is to prepare public services that the public wants or needs, and how to properly declare them to the public. Regarding their options and how to access them that is planned and provided by the government.

According to Verheijen (1998) cited in Bersisa, Zeleke, and Gebremedhin (2016: 27), there are various models used to reform public management or public administration. The author identifies three models: radical reform, incremental reform, and moderate managerialism. Public reform relates to the general structure of the public sector or policy, or the business function of all public organizations (such as in performance measurement, human resource management, etc.). The emergence of a public service quality model sparked lively scientific discussion, resulting in various concept definitions. According to Rhee and Rha (2009), for example, this concept has four main dimensions: design quality, process quality, result quality, and relationship quality.

3.4. The relevance of Artificial Intelligence with Electronic Government

Artificial Intelligence is very relevant to electronic government. E-government is a new phenomenon that improves the provision of public services to citizens, improves public sector performance, and enriches the political arena. Essentially, electronic government means changing the dominant role of humans in the process of providing public services. Activities that were once done by humans can now be carried out by man-made applications. In terms of effectiveness and efficiency in the use of time, the administrative process at the village office which usually takes two to three hours is now sufficient for ten to fifteen minutes. Village websites as a form of electronic government implementation can create a transparent and accountable public service model. Technically, People can do administrative arrangements simply by opening their cellphones at their homes. The village website is equipped with features that facilitate the process of providing services, such as writing correspondence services. The community only needs to open the village website and choose the type of letter needed. If the public has voted, data related to the contents of the letter, such as personal data, has been filled indirectly. The notification regarding administrative arrangements is directly connected to the operator at the village office so that it can be printed and signed by the authorized official. The community only needs to open the village website and choose the type of letter needed. If the public has voted, data related to the contents of the letter, such as personal data, has been filled indirectly. The notification regarding administrative arrangements is
directly connected to the operator at the village office so that it can be printed and signed by the authorized official. The community only needs to open the village website and choose the type of letter needed. If the public has voted, data related to the contents of the letter, such as personal data, has been filled indirectly. The notification regarding administrative arrangements is directly connected to the operator at the village office so that it can be printed and signed by the authorized official.

4. Results and Discussion

One Way Data integrated through Website Village Government is an internet-based artificial intelligence product. The main idea is the provision of integrated data in one website. With one-way data, is hoped the Village Government can provide actual and updated information. Thus, it can be a positive impact to improve public services. Besides, use one-way data integrated is make easier Province Government to monitoring the Village Government's activity, especially in the budgeting process.

Figure 1. The Problem in Implementing One Way Data Integrated in Four Villages

However, there is a lot of problem in implementing one-way data integrated on Village Government. Based on the result Figure 1, the most problem to implementing this system is human resource capability. This factor reaches 60% that indicates this factor has more impact to affect implementing one-way data integrated. The human resource capability is average only senior high school. The level of education awareness is still low in the four villages. Hence, to solve this problem, the village head was forced to recruit outsourcing workers.

Besides, the second problem is data limitations. The data limitations factor reaches 30%. Data storage mechanism that is not mutually coordinated between managers down to the individual level of data managers. The limited capacity of the village government in obtaining data that meets the concepts, rules, and standard procedures for data collection is cited as the most prominent weakness.

The last factor is the maintenance budget. It is also becoming the factor that obstacle to implementing one-way data integration. It is undeniable if the maintenance budget of artificial intelligence is the most expensive. It is because the village government has to prepare a lot of infrastructure such as the internet. Internet access has to have fast access to implementing artificial intelligence. It is the more serious problem to implement artificial intelligence in Indonesia because
almost the village location in Indonesia has not Internet access. Indonesia's characteristic as an archipelago is the main cause of internet access being a complicated problem.

5. Conclusion

This research found three factors that are hindering the implementation of artificial intelligence in Rappang government village. The first is human resources capability. It is becoming a major factor that makes implementing artificial intelligence in the village is not going effective. The human resource capability is average only senior high school. The level of education awareness is still low in the four villages. Hence, to solve this problem, the village head was forced to recruit outsourcing workers.

The second factor is the limitation of data. It is multiple effects of human resource capability. Data storage mechanism that is not mutually coordinated between managers down to the individual level of data managers. The low capability makes the management data is not well integrated. The third factor is budget. It is because Village Government has not more budget for the maintenance system. It is because the village government has to prepare a lot of infrastructure such as the internet.

6. References

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