



The effectiveness of e-government media by the special region of Yogyakarta's provincial government

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Abstract

A website is needed by the government as one of the e-government's media on public service. This study aimed to determine the effectiveness of the website provided by the special region of Yogyakarta's provincial government as e-government media on public services. This research used descriptive qualitative design through the analysis results of interviews, observations and documentation. The findings showed that the Provincial Government had determined the audience. The content has tried to serve some needs. The two-way interaction fits the needs of the audience but not fast response. A website is easy to use but there are weaknesses, such as upgrade efforts, creative ideas and innovations. From their aspects, the website of the Provincial Government of Yogyakarta, Indonesia has not been fully effective as an e-government media on public services. For improvement, the special region of Yogyakarta's provincial government should always continue making innovation to its website following the audience's needs with the aim to make it more interesting and valuable.

Keywords: Effectiveness, website, e-government.

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1. Introduction

Good governance is the development of management with the responsibility of following the principles of democracy effectively and efficiently. Good governance has the main goal of achieving the conditions of the government to guarantee the interests of services. Public services are carried out at every state institution, corporation and independent institution, which is established under the law for public service activities, and other legal entities established solely for public service activities. Public service is an activity or a series of activities to fit the service needs under the regulations for every citizen and resident of goods, services and administrative services provided by public service providers [14]. The emotional, behavioural and cognitive facets of engagement play an important role in the learning process and social development [30]. David McKeivitt discussed specifically the core public services that are the task of the Regional Government. Core public service may be defined as those services which are important for the protection and promotion of a citizen's well-being, but are in areas where the market is incapable of reaching or even approaching a socially optimal state; health, education, welfare and security provide the most obvious best-known example [13], [24]

Thus, public services might be defined as serving the needs of people or the community and/or interested parties that have an interest in the organisation under the basic rules and procedures determined on government regulations. The media becomes 'extended' human hands [12]. A way for the government to reach its goals is by using the internet. Internet applications used by the government are called 'Electronic Government' or known as 'e-government' or abbreviated as 'e-gov'. Public administrators and policy-makers have potential implications from the findings of the adoption behaviour of e-gov at different maturity levels [27].

e-Government is the use of information and telecommunications technology for government administration with the aim to provide efficient and effective services and provide transparency and facilitate public access. According to the World Bank, 'e-Government refers to the use by government agencies of information technologies (such as Wide Area Network, the internet, and mobile computing) that have the ability to transform relations with citizens, business, and other arms of government.' Thus, the results from e-government are namely the creation of good governance, reduced corruption, increased transparency, greater convenience, increased state revenue and reduced costs [15]. e-Government is the administration of the government by utilising information technology to provide various types of services to the community by providing easier access for the government and society [8].

e-Gov reduces costs whilst promoting economic development, increasing transparency in government, improving service delivery and public administration and facilitating the advancement of an information society [10]. Modes of collaboration in e-government may impact the particular types of expected benefits [21]. e-Government can make a valuable contribution to development [16]. There are several types of e-government services, such as publication, interaction and transactions [18]. The current development of e-government is classified into four levels:

- The first level: the government publishes information through the website.
- The second level: the interaction between the people and the government.
- The third level: the community makes transactions with the government.
- The final level: integration across government organisations, where people can easily make transactions.

Indonesia's initiative towards e-gov was established since 2001 as a serious step in utilising information and communication technology in the government process and creating an information-based Indonesian society. A website is a means of public facilities to ease accessing information. The implementation of public services by the government still faced with ineffective and inefficient service yet, as well as poor quality of human resources. Improving the quality of public services is a very

important issue because the demands of the community are getting bigger, but the organisers have not experienced significant changes.

e-Gov implementation by the government must be qualified. Qualities of e-gov are information quality, system quality, service quality and readiness of Information Technology infrastructure [23]. Also, it needs to highlight the advantages and challenges of e-gov for the successful implementation of the e-gov system [5]. e-Gov in Sragen Regency improves public services in the region [28]. Research conducted by the Congressional Management Foundation concluded that there are several important aspects considered by the government website developed with the aim to fulfil the functions of e-government [17]

- Audience: The website will operate effectively if the government determines the audience of the government following the website services. There are two types the audiences of an e-government website: seekers and recruits.
- Content: The government must provide content following the target, either for the community or stakeholders, with the aim to help the needs of users to create excellent public services.
- Interactivity: Every party involved in the website requires a 'two-way' communication. Interactivity is the process of a two-way interaction between the government and the community who access the website.
- Usability: The developer of the website must know that the technology and knowledge of information technology of the audience are very diverse, from the simplest to the most sophisticated. Providing easy access or a user-friendly website is a need. In short, the website must be user-friendly.
- Innovation: Innovation is not just an additional aspect but, broadly, many creative ideas from the developer of the website can directly or indirectly increase the 'context' of using websites for their visitors. The government must be creative from day-to-day in innovating and developing the website, making it more interesting and valuable.

The special region of Yogyakarta's Province is a regional government implementing e-gov through a website providing services to the community. Internet becoming a necessity of life is the reason why government organisations have started to interact with citizens online [6]. Sadly, on the homepage for the most popular service on the website, it says 'no service'.

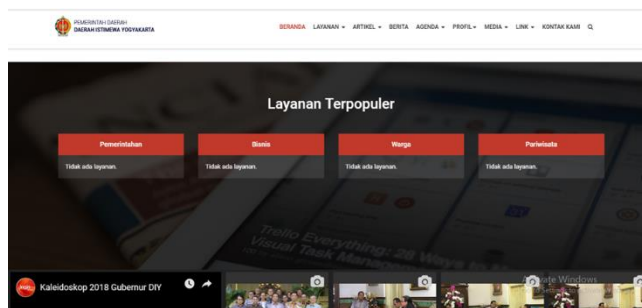


Figure 1. Homepage of the special region of Yogyakarta's Province's most popular service pages

Website is the level of implementation of e-gov in conveying information. Then, it may develop into interactions and transactions. However, there is no research on the effectiveness of the implementation of e-government in the Provincial Government of the Special Region of Yogyakarta, Indonesia through the website on service to the community. So, it needs a study on the effectiveness

of the website provided by the special region of Yogyakarta's provincial government as e-government media on public services.

2. Method

The particular research was a descriptive study using a qualitative approach. The population comprised website administrators as key informants, managers and users of the government of regency/city in the province of the special region of Yogyakarta and people as visitors to the website. Source of data consisted of primary data from secondary data. Primary data were obtained through informant interviews and observations, while secondary data were obtained from the website administrator, as well as literature studies or other information material.

The instruments were interview guide, recorder, documentation and literature study. The Congressional Management Foundation's research was used to find the effectiveness of the website provided by the special region of Yogyakarta's provincial government as e-government media on public services by examining on variables of audience, content, interactivity, usability and innovation. The triangulation technique was used and the data analysis technique was the taxonomy analysis technique.

3. Results

The website of the special region of Yogyakarta's provincial government as an e-government media is <https://www.jogjaprov.go.id>, which serves the community. In 2018, the Provincial Government of the Special Region of Yogyakarta, Indonesia began developing the website. The Provincial Government's website, and its administration, has two admins: one from the Office of Communication and Information and one from the Public Relations and Protocol Bureau, which by collaborating each other forms work teams on each party. The results and discussion will be examined from the aspects of the audience, content, interactivity, usability and innovation.

3.1. Audience

A website is a communication tool that will effectively administrate when the government defines the audience of the website. The Provincial Government of the Special Region of Yogyakarta, Indonesia has determined the audience so that the contents of the website are directed to serve it. The website's audience includes community audience, government audience, visitor audience and business audience. Generally, there are two types of audiences: seekers and recruits. The examples of seekers are citizens and the government. They use the website for personal interests including their profession, so that the information needed will adjust to their profession. Meanwhile, the recruits are visitors and businesses. This is expressed by the respondents as follows:

'The visitor segmentation is also divided into two, namely Special Region Yogyakarta residents (public services) and tourists.' (Resp 1).

'The Special Region Yogyakarta community at large, all groups who have an interest or want to read information related to the latest news from Yogyakarta Province' (Resp 2).

The seekers access the website for the benefit of their profession. Then, they access the subdomains according to their profession, including inputting data. Civil servants usually visit the website at the special region of Yogyakarta, Indonesia's training agency. The audience visited the CPNS vacancies, especially CPNS of the Provincial Government of the Special Region of Yogyakarta, Indonesia. Educators looked for information in the field of education, especially the content of educational basic data and *Jogja Belajar* to support the learning process in schools. The staff of the Labour and Transmigration Office and staff of Legal and Documentation actively visit the website in the employment section. Also, they visit the website to monitor the traffic situation for guidance on

choosing a path. CCTV content is quite useful even though find blank spots at some point. This is expressed by the respondents as follows:

‘Konten yang sering diakses mengenai informasi kesehatan dan data data kesehatan yang di publikasikan oleh pemerintah.’ (Resp 4)

‘Audience website Badan Diklat Special Region Yogyakarta lebih mengarah kepada ASM/PNS yang statusnya hendak melakukan pelatihan, juga untuk melatih kemampuan tertentu yang spesifik.’ (Reap 5)

‘Sering mengakses website untuk mencari lowongan pekerjaan.’ (Resp 6)

The recruits access the website to get the information they needed, such as data search, CCTV monitoring and so on. The website is considered to be an indicator that has successfully built up relationships between the government and the community. However, there are still weaknesses that need several improvements.

3.2. Content

The website's content is more formal and categorised into two aspects: static and dynamic. Static content is content that changes over a long period of time or rarely changes, such as organisational structure and policy data. And dynamic content is content that often changes or changes in a fairly faster period of time, such as news.

Starting in 2019, the Ministry of Communication and Information has involved local government organisations to post news content on the website. However, the obstacle faced is that the OPD is not actively posting on the Provincial Government's website because they are more focused on posting on the website of the regency/city government. This is expressed by a respondent as follows:

‘The government is less aware that people need to have macro access to the latest news from the Special Region Yogyakarta Government.’ (Resp 1)

The website of the Special Region of Yogyakarta's provincial government is a media for disseminating information of government-related activities. The contents of the website are information and services from e-government. The Provincial Government of the Special Region Yogyakarta, Indonesia has tried to serve a number of specific needs from various groups, even though it has not yet been realised to the fullest. The audience, in searching various data, does not need to come to the office, but simply access the website. However, there are some unopened links (broken links). Jobseeker audiences visit the website to find out information about job vacancies. The content often accessed by an educator in the Special Region of Yogyakarta is basic data on education and Jogja Belajar to support the learning process.

The staff of the Labour and Transmigration Office actively visits the website in the employment and transmigration section. And, the staff of Legal and Documentation also visit the subdomain of the legal department to prepare the RUPK at the beginning of the year. The content aims to achieve the vision and mission and goals of the Provincial Government of the Special Region of Yogyakarta, Indonesia. This is expressed by the respondents as follows:

‘This content is very helpful in carrying out work as a lecturer, especially information about events in Jogja. Including events about health and several events about culture, culinary and tourism.’ (Resp 8).

‘It is complete and all data has been directed to various sub domains as needed.’ (Resp 9).

The relationship between the government and the audience has been strongly established, especially the government audience. Some audiences, especially for millennial visitors, want more diverse content such as statistical data, news from each regency/city and entrepreneurs that are not

yet available. In addition, it needs improvements on links or subdomains with no content. The website is enough to save time and money for audience visitors in communicating with the government. It can also strengthen the level of public trust through a process of democratic openness.

3.3. Interactivity

Interaction on the website is expected to occur in two directions between the government and the community for government improvement. Every article on the Special Region of Yogyakarta's provincial government's website has a communication channel, although not directly or using other media. The public can provide input and the government can respond.

Some features available on the website are email (for official affairs), survey or online polls (under development), chat rooms, newsletters, search engines, Jogja TV streaming, Special Region of Yogyakarta's e-report, criticism and suggestions for content, government's Public Relations (GPR) to connect with news from the centre ministry, as well as announcements and agendas integrated with the application of Jogja Istimewa, which is often posted by the Tourism Office and the Culture Office. This is expressed by a respondent as follows:

'Each news article on the Provincial Government's website has been connected to social media so that readers can provide comments via Facebook or other social media.' (Resp 3).

For interaction between visitors and the government, the website provides links for the subdomain. Besides, there are already several features of the two-way interaction, but the response is slow to suggestion and needs of the community. Quick responses tend to occur through social media created by the Public Relations and Protocol Bureau. Expediting the interaction between the government and the community is not only through the features on the website, but also partnering with journalists to disseminate information quickly. The e-report feature is a superior feature to improve government services to the community. This is expressed by a respondent as follows:

'For example, there are complaints, reports, input about government performance, especially public services through jogjaprov.co.id' (Resp 5).

The audience requires a two-way communication but it has not been fully due to slow response from the government in responding to the input and needs of the community through the website. So, through the website, good governance has not been carried out as seen from the increasing public participation and democratisation process in the country. However, the government responded through other media besides the website.

3.4. Usability

The content organising system on the website of the Special Region of Yogyakarta's Provincial Government is a clear and logically structured architecture. The navigation button on the website is user-friendly. The content is up to date and always relevant to the needs. However, young millennials still expect more information. In addition, the content for regency news is rarely updated. Nevertheless, the content is easy to read and comfortable on the eyes. Content search is also easy because it has been categorised according to its classification.

'Navigation on the website makes it easier to find information, for example, I want to know the Transjogja route, it has been provided in detail about this public transportation information service.' (Resp 10).

'Navigation is simple and attractive.' (Resp 11)

The time needed to load a full page is very short. The website's appearance is pleasing to the audience. The first appearance on the website's portal is good and attractive. However, when entering the main website, it is almost the same as the other government websites in appearance. Thus, it was

considered unfit for the millennial generation with the wishes, and the audience was less interested to further visit the website. The images on the website are considered to have poor quality due to low image resolution which create broken and unsharp images. The website is enjoyed by everyone, regardless of differences in age, religion, language or other factors, in the community (no element of discrimination). The sentences and language on the website are easy to use and understand by the audience. On the website, there is no element of ethnicity, religion, race and class (SARA) and everyone enjoys it.

The element of privacy has been considered as a means for the visitor feel to confident that there are no things that will harm him or his privacy. Especially for teaching staff when accessing Jogja Belajar, they must log in using an NPSN. Not only the appearance but also the website needs improvement on the link aspect, with the aim that all the links can be accessed by the audience, as there were some broken links.

3.5. Innovation

The website of the Special Region of Yogyakarta's Provincial Government has been upgraded with creative ideas to increase the interesting and attractive aspects. Innovation in the education domain is very helpful for teaching staff. Educators often access Jogja Belajar to support the learning process. The website continues to be upgraded to adjust the needs of the community, policy changes and administrative changes. Innovations are considered to be getting better from the appearance to the features provided.

'Currently the development of the website continues to progress until the current portal form.' (Resp 1).

'From year to year the appearance of the website is better.' (Resp 7).

The Public Relations Bureau is currently establishing a team to support innovation of the website that consists of one photographer, one videographer and one reporter. The results of the team will be chosen by the person in charge of the pictures, videos and writing that will be published on the website and social media. The display on the website uses the official concept, while the display on social media adapts to the development of the millennial generation.

The website of the Special Region of Yogyakarta's Provincial Government has been upgraded with creative ideas to increase the interesting and attractive aspects. Innovations aim to improve the 'context' of visitors. Some features have been added to make the website user-friendly. The improvement and development of the website are always carried out with the aim to increase the interesting and valuable aspects so that the community can always access websites owned by the government.

4. Discussion

The effectiveness of the website provided by the Special Region of Yogyakarta's Provincial Government as e-government media on public services will be discussed in terms of audience, content, interactivity, usability and innovation.

4.1. Audience

The Provincial Government of the Special Region of Yogyakarta, Indonesia has determined the audience so that the contents of the website are directed to serve it. Generally, there are two types of audiences: seekers and recruits. The example of seekers are citizens and government. e-Government users react against failures, while e-government projects will impact and attract decision-makers' attention that influence audience behaviour [7]. Failure to conduct appropriate usability testing with a

representative audience can substantially reduce use and value of the website [22]. They use the website for personal interests including their profession, so that the information needed will adjust to their profession. Meanwhile, the recruits are visitors and businesses. The website is considered to be an indicator that has successfully built up relationships between the government and the community. Thus, there are still weaknesses and need several improvements.

4.2. Content

The website's content is more formal and categorised into two aspects: static and dynamic. Static content is content that changes over a long period of time or rarely changes, such as organisational structure and policy data. And, dynamic content is content that often changes or changes in a fairly faster period of time, such as news. The contents of the website are information and services from e-government. Web content has been identified as one of the main factors contributing to repeat visits [25]. The general content and appearance dimensions of a website are most important for users [4]. The Provincial Government of the Special Region of Yogyakarta, Indonesia has tried to serve a number of specific needs from various groups, even though it has not yet been realised to the fullest. The key cultural parameters that are likely to have an impact on local website design for Asian-Eastern culture, in a high power distance and high context [2]. The audience, in searching various data, do not need to come to the office, but simply access the website. However, there are some unopened links (broken links).

The relationship between the government and the audience has been strongly established, especially the government audience. Some audiences, especially for millennial visitors, want more diverse content such as statistical data, news from each regency / city and entrepreneurs that are not yet available. In addition, it needs improvements on links or subdomains with no content. The website is enough to save time and money from the audience visitors in communicating with the government. It also can strengthen the level of public trust through a process of democratic openness.

4.3. Interactivity

Interaction on the website is expected to occur in two directions between the government and the community for government improvement. The public can provide input and the government gives the response. Perception on hotel website interactivity influences customer perceived value and intention to revisit the hotel website in the future [1]. Some features available on the website are email (for official affairs), survey or online polls (under development), chat rooms, newsletters, search engines, Jogja TV streaming, Special Region of Yogyakarta e-report, criticism and suggestions for content, GPR to connect with news from the centre ministry, as well as announcements and agendas integrated with the application of Jogja Istimewa, which is often posted by the Tourism Office and the Culture Office.

Besides, there are already several features of two-way interactions, but the response is slow to suggestion and needs of the community. Website interactivity (active control and reciprocal communication) can impact purchase intention through website involvement [19]. Collaboration and transparency have a positive influence on citizen's intentions to use e-government websites, and participation has a negative influence [3]. Quick responses tend to occur through social media created by the Public Relations and Protocol Bureau. So, through the website, good governance has not been held as seen from the increasing of public participation and democratisation process in the country. However, the government responded through other media besides the website.

4.4. Usability

The website of the Special Region of Yogyakarta's Provincial Government is user-friendly, so the visitors intend to revisit the website to look for information. The website's usability affects satisfaction

which in turn affects the intention to use [9], understanding the importance of usability on the web and consequently the need for its evaluation [11]. The content organising system on the website of the Special Region of Yogyakarta's Provincial Government is a clear and logically structured architecture. The navigation button on the website is user-friendly. The content is easy to read and comfortable on the eyes, even though some articles use low-resolution images. However, the millennial generation assumes the website is not up to date with the content. The homepage of the website loads fast, with less than 10 seconds to load the full-page with good internet conditions. The appearance of the website is very interesting and different from other government websites. But, again, the young generation assumes that the main website is poor and unattractive. The website can be enjoyed by everyone and user's privacy has been noted.

4.5. Innovation

The website of the Special Region of Yogyakarta's provincial government has been upgraded with creative ideas to increase the interesting and attractive aspects. Innovations aim to improve the 'context' of visitors. Personal innovativeness is a significant antecedent of perceived ease of use, usefulness and trust [29]. Some features have been added to be user-friendly and its benefit, including *Jogja Belajar*. The online professional development practice contributed positively to teachers' use of ICT and the use of metacognitive learning strategies [26]. The mobile technology integrated healthcare system will ensure that the framework is user- and environment-friendly (Karim & Gide, 2018). The improvement and development of the website are always carried out with the aim to increase the interesting and valuable aspects so that the community can always access websites owned by the government.

5. Conclusion and recommendation

The website of the Provincial Government of the Special Region of Yogyakarta, Indonesia has determined the audience. The contents of the website are information and services from e-government even though they have not yet been realised to the fullest. There are already several features of two-way interactions, but the response is slow. The website is user-friendly, but the millennial generation assumes the website is not up to date with the content. Innovation increases the interesting and attractive aspects, as well as the 'context' of visitors. From the aspects of audience, content, interactivity, usability and innovation, the website of the Provincial Government of Yogyakarta has not been fully effective as an e-government media on public services.

The two-way interaction feature on the website needs to be optimised to create a reciprocal process between the government and the people. For website improvement, interaction features need to be optimised to create a reciprocal process between the government and its people. The content of the website needs to always be improved, developed and updated in terms of activities, topics, coverage areas, image resolution, links and subdomains. The website's appearance needs to be updated on its attractive aspect, especially for young people. The Special Region of Yogyakarta's Provincial Government should always continue making innovations in its website following the audience's needs with the aim to make it more interesting and valuable so that the community can always access the websites owned by the government.

This research is limited to e-gov at the website level which is the first level of the government and government-published information. Then, it can be continued with further levels of research up to the last level, namely integration between government organisations, so that people can easily make transactions.

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