Efforts to increase public participation in assessment information systems use User-Centered Design

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Abstract. Web-based information services in government agencies have various types of designations, such as public information and as a means of assisting the government in making decisions. However, the environment may affect the community so that the ability to comprehend information and the desire to provide information is not optimal. There are information gaps, and the government has difficulty in getting information directly from the public. Therefore, technology-based information systems are important to study in order to reduce information gaps in government institutions. The purpose of this research is for the public to understand easily and increase public participation in the use of technology-based information services using websites. This study discusses the desired website information system in the government based on the User-Centered Design concept to support the successful use in the future. Using a qualitative approach, the focus of this study is the Assessment Information System in the city of Bandung. The results of the study show that there is a need for improvement in terms of design, content, and competent human resources so as to increase public participation and be more optimal in the use of such websites.

1. Introduction
One of the essential elements in the public sector reform plan is the use of information technology, which is called electronic government. E-government is a socio-technical system composed of people, techniques, and social and organizational structures and processes [1]. The essence of e-government is more about “government” than about the technology itself. E-government uses technology to achieve reforms, one of which is to encourage transparency and affect people's lives [1,2]. Thus, there are various dimensions or relations of e-government that are derived from the function of the government itself. One dimension of e-government is e-democracy; the government should make efforts to realize more democratic governance providing people more opportunities to participate in the government’s decision making processes [3]. Furthermore, in its development, transparency, participation, collaboration, and community involvement are the core of open government and also the digital government. In the era of digital government, it is hoped that there will be an increase in public participation in government decision making, by providing easy tools (technology) for the community [4].

One means of public participation in the digital era in the city of Bandung is through the Information Assessment System (SIP). The Champion Information Assessment System (SIP) is a website-based information system. This system is used by the Bandung city government as consideration for evaluating the performance of sub-district and village heads [5], not only in value by the government, but the public can participate in assessing the performance of the state apparatus in their respective regions [6]. This program is essential to improve the quality of government administration and public service performance in the area so that it becomes much better. However, the lack of community participation in evaluating the performance of sub-districts and villages becomes a problem in this web-based technology system [7,8]. A web-based information system to invite the public to participate in providing performance appraisal of the state apparatus is still not getting the attention of the public. It can be seen from the lack of public participation in inputting performance appraisal inputs in each region [9].

Similar studies that have been carried out on increasing community participation include: discussing community participation-based policies in the city of Kupang [10], Discusses the extent of community...
participation in using the Assessment Information System in Bandung [7], discuss the influence of leadership style on community participation [11], and discuss government political strategies in increasing village community participation [12]. This research discusses the efforts in the technology side to increase community participation in each region using the Bandung Information System of Champion assessment.

The main problem of this research is the lack of public participation in the Champion Information System (SIP) of the Champion so that the performance evaluation of the Camat and Lurah in Bandung is not yet optimal. The purpose of this study is expected to be an evaluation material for improving the quality of the information system in Bandung Champion assessment to make it more interesting and be able to attract the public to be actively involved in performance evaluation. Using the concept of User-Centered Design, which is a concept that focuses on objects, communication, space, interfaces, and services, to find ways to ensure that it can meet user needs [13]. User-Centered Design is a term to describe design processes that focus on designing for and involving users in the design of applications [14].

2. Methods

The method used is a qualitative approach to describe narratively [15]. Researchers collect primary data and use secondary data as an aid in drawing conclusions. Researchers interpret this information, often in the form of design criteria, and interpret these criteria, usually through concept or scenario sketches. The focus continues developing the website design. In this study, using the concept of user-centered design that is designed that focuses on objects, communication, space, interfaces, and services, Analytical, logical, conceptual, and operational verification methods are used to achieve the reliability of this research [16]. In this user-centered study, users are not actually part of the research team but are the primary source of this research. First of all, this research will listen to the opinions of users, followed by analyzing the needs of users and making designs and scenarios to increase community participation.

3. Results and discussion

3.1. Bandung Champion assessment information system

The development of the SIP Champion Innovation Champion was initially made on the idea of Mayor Ridwan Kamil during his term of office in 2013 with the aim of the Bandung city government to have a basis to provide an assessment of the performance of the sub-district and outreach in the city of Bandung. Champion Evaluation. At the beginning of this system, the performance of sub-districts and villages was only assessed by residents, but based on evaluations conducted by residents, they could not describe anything because of the lack of community participation in this website-based service system. Lack of socialization is one of the causes of assessment data coming from residents is still very minimal. Therefore, to get a picture of the performance of the territory, the General Government Section requests activity reports from the sub-district and sub-district manually. After being re-evaluated in 2014, it turns out that there are still many districts and sub-districts that have not yet made a performance report.
Figure 2. Assessment information system mechanisms.

The first display on the SIP website (https://sip.bandung.go.id/) only shows the choice of Sub-Districts and Regencies there are still no supporting documents such as how to use an assessment information system with very little information, not all people can directly know the usefulness of this technology system with a little information on the start page will decrease the user's motivation in continuing in the next process, the need for further explanation about the impact of the results of this performance assessment, based on community interviews assume that filling performance only as a formality will not have an impact on apparatus performance.

Figure 3. Start page of the assessment information system website.

With this view it is quite easy to understand but the guiding element must remain on the Assessment Information System website because the people of Bandung are diverse and have the ability to absorb different information, by providing additional guidance elements is one way to increase participation in increasing services that cause community satisfaction [17].

Every aspect has a range of assessments ranging from the lowest to the highest and each community can provide reasons / comments why giving low or high values in accordance with what is experienced by the community. Even the community can give a value of how well the public services provided / experienced for services in their respective areas for example: Management of ID cards, KK Management, Registration of land certificates, Arrangement of birth certificates, Moving certificates etc. This proves the existence of transparency and objectivity of assessment in provide services to the community.
This research was conducted in October 2019 by selecting eight sub-districts from 30 sub-districts in the city of Bandung. Four districts with the highest participation and 4 districts with the lowest participation were selected. Interviews with sub-districts and the community revealed that there were still some deficiencies in measuring instruments, namely assessments of bureaucratic services and it was hoped that there would be an evaluation in adding the menu.

3.2. Culture of participation
Building a culture of participation is something that is not easily needed by extra efforts from the government so that the community can participate in every activity carried out by the government, culture is a community behavior that is unwittingly carried out continuously [18], while participation is a person or group of people who participate in certain activities [19]. In Indonesia, the culture of community participation in every government activity is still considered lacking. This can be seen from several studies such as Kusmanto [20], Lubis [21] dan Mondong [22].

The number of residents of Bandung City based on BPS 2018 data is 2.5 million people. Therefore it certainly has a variety of different characteristics – as well as strategies in seeking increased public participation in every government activity. Currently, one that can make someone from every circle join every activity is through technology, one of which is the internet, the use of technology has begun to become a culture in Indonesia, especially the city of Bandung based on internet technology and this website has been popular among the people and even besides viewing information on the information media The community also participates in creating content on the media technology. Increasing community participation in the field of technology is utilized by the Bandung city government by creating a website-based service that is a service in the form of performance appraisal of the state apparatus, only to be optimized by the public is still not optimal, based on research results there is no interesting matter in terms of content and awards making people are not interested in conducting performance evaluations on this web-based service system so that the amount of community participation on this website is still very far from the population of Bandung.

3.3. User opinion
There are a number of important things that are what the user says. What users do, what users use, the extent to which users know the assessment information system, what users feel, and what users dream [13]. The website-based service system is a program that is considered more efficient and more effective, the community has motivation because without having to come to the government office. It's just that the government still has not insisted that this web-based assessment system must be filled by every community.

The use of technology media must also be considered because not every community has qualified technology media. The need for a media technology, application, or website that is lightweight enough to be entered by even the most straightforward technological tools. One of the increased participation that can be done is to give the sufficient public knowledge about the government program that is being carried out by conducting socialization because based on the results of interviews there are still many people who do not know about the assessment information system and the benefits of filling out the assessment. The community hopes for an integrated system, lightweight and with a structure that is easy to understand for users.
3.4. Efforts to increase community participation in the concept of User-Centered Design

Efforts are needed to invite the community to participate through the SIP voluntarily. It is necessary to understand that the community has the rights and responsibilities by providing information to the city government of Bandung. In addition, understanding and empathizing with differences can be used as a basis in the development of technological systems. Every person has certain limitations in technology, capturing certain information and preoccupations, so it is difficult to provide information.

The appraisal information system is participatory, intended in the process of making this system by involving all stakeholders so that it can know what needs that must be provided in this technology-based service system [23]. Increasing the number of technology users cannot be compared to increasing the ability to absorb information. The process of building a website that is well integrated and gets useful contributions from the community is certainly not short. It is best to combine design and art with applied social science and integrate both with new technology.

Three things can be done in increasing the participatory participation of citizens in the assessment information system program, namely:

- **First**, listening to people’s opinions and applying this process is usually referred to as trial and error, this process is carried out because public opinion as a user is very important for the operation of this system, trial and error will make the government gain various kinds of experience as evaluation material for future improvement so to products that can be used practically and liked by the public and pay attention to the communication between the implementator, the facilitator and the community [24].

- **Secondly**, in making a community-based participatory system, extra effort is needed, meaning that at least there are at least two experts who design and formulate a system, namely technology experts as the basis of the program and design and social experts as advisors for the needs of the content information system assessment results from direct research results to the community.

- **Third**, the need for useful human resources in each region as the program owner requires socialization that has the right consistency; lack of information makes people not aware of an ongoing system to assess government performance so that it impacts on the lack of community participation.

4. Conclusion

Bandung Champion Assessment Information System which has been running in Bandung City has been running since 2014, only until now it is not yet optimal in terms of assessment by the community, extra efforts are needed to get the community to participate in this program, there are three things that need serious attention to increase public participation, namely trial and error requests by the community/user, design and content creation should be based on user needs based on considerations from technologists and social experts as well as the need for good quality human resources of the state apparatus so that the assessment information system program can be socialized appropriately consistently and equally.

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