ANALYSIS OF CITIZEN READINESS IN INDONESIA TOWARD E-GOV 2.0

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ABSTRACT

Nowadays, many government institutions are competing to increase the quality of public services being provided. Unfortunately, they more emphasized on technology side rather than on citizens side. During this e-Government initiative felt less involving the user as a result of the system designed less match with the expectations of users so that the level of adoption is low. T-Government or e-Gov 2.0 as a new generation of e-Government or Citizen Centric Government has a key element of citizen or user involvement in policy formulation. The objective of T-Government is to encourage more open and transparent government, in which the public has a greater role in e-Government initiatives. But unfortunately, the application of T-Government is still very limited. This study aims to determine the level of citizen adoption of e-Government as a picture of readiness towards the application of T-Government in Indonesia. The method used is a survey where the questionnaire is distributed electronically. The results of the study show two main parts of the level of citizen use of e-Government services and citizen perceptions related to e-participation. Key demographic findings are consistent with previous research that e-Government users in general do not come from category such as old age, low educated, low income and female. Based on the level of technology readiness, citizens can be said quite ready because the majority of respondents (90%) have Internet access from home. Citizens can also be considered as experienced users as more than 60% of respondents have used the Internet for more than 10 years. This is in line with the highly citizen interest in e-participation by 90%, although only about 40% of respondents said they had been involved in e-participation. The results of the analysis can be used as a basis to desaign T-Government based on user needs.

Keywords: *e-Gov 2.0, Citizen, Readiness, ELR, Transformational, Government*

1. INTRODUCTION

E-Government innovation in Indonesia has been initiated in recent years. In addition to the need, both central government and regional governments will have quality public services with integrated systems, e-government development in Indonesia is supported by Presidential Instruction No. 3/2003 on the National Policy and Strategy of e-Government Development and supported by related regulations such as Law no. 14 of 2008 on Public Information Disclosure, and Government Regulation No. 61 of 2010 on the Implementation of Public Information Disclosure Act. Public service is one of the key strategies that must be prioritized when the government has committed to developing good governance.

Good governance can be achieved by the government to provide public services that meet the interests of the public in all regions of the country, reliable and reliable, and easily accessible interactively [1]. In addition to demands for public services, it is important to recognize the importance of e-Government, among others, to (1) encourage a government that is responsive to the needs and aspirations of the community, (2) encourage more open and transparent forms of government and (3) encourage public participation in the system governance [2]. These three things are actually closely related to the interaction between

government and society (citizen-government interaction). More specifically, greater public role in policy formulation and governance becomes a critical element [3,4]. In other words, the purpose of e-Government development is to improve the relationship between government and society as a user by prioritizing public participation in decision making known as e-participation. Public participation, focusing on citizen-centric needs and aspirations is the hallmark of a new paradigm that emerged in the last decade called Transformational Government [5]. Transformational Government (T-Government) known as Open Government, Connected Government, Citizen-Centric Government or e-Gov 2.0 is a new concept that was born to transform government through one stop service and empower the community to create content and services as well as back office integration with utilization of ICT [6]. This concept is different from the previous e-Government model of e-Gov 1.0 which emphasizes the supply-side (technology) of e-Government rather than considering the related issues or needs or users of the e-Government (demand side) system. This departs from the wrong paradigm in which aspects of technology are too focused and tend to ignore the human aspect (user). Research has shown that when the technology has been installed it will not automatically user will use or adopt it and the system will run efficiently [7]. In fact, many e-Government development projects have failed because they focus too much on technology or supply-side issues [8,9,10]

Some e-Government development frameworks associated with e-Gov 1.0 include Layne & Lee (2001), Baum & Dimaio (2000) and Balutis (2001). Layne & Lee (2001) focuses on developing e-Government models for fully functional government with vertical and horizontal integration. Baum & Dimaio (2000) also emphasized the development of e-Government sites ranging from web presence to integrated systems [11]. Balutis (2000) proposed a model of e-Government development that paid more attention to the characteristics and capabilities of web services [12]. From the three best practice frameworks above there is no emphasis on the needs, aspirations and even the involvement of the community in the design of services or the formulation of government policies. Whereas many benefits can be gained by the existence of public participation, such as a better match between public services and citizens' expectations, better implementation of services by the citizens, or better control of the costs and delays in the implementation of new services. Based on the

literature, e-Government development framework that supports e-Gov 2.0 or Citizen-Centric Government such as Moon (2002) and United Nation (2010) models [13,14]. Model Moon (2002) adapting Hiller & Belanger's framework (2001), enables government implementers to classify the various ICT systems in use by the agency or department, and it allows scholars to track the overall level of adoption [15]. Both Moon (2002) and United Nations (2000) frameworks emphasize the transformation of communication between government and society by involving community participation in decision making. This is indicated on stage 5 in the framework of Moon (2002) called "political participation and state 4 on the framework of United Nations (2000) called" connected ", which is closely related to citizen engagement or participation. Therefore, citizen centric is an important issue and should be managed well in T-Government concept or e-Gov 2.0 era. In other words to design an effective Tansformational Government then the needs of the community should be a priority. A higher level of community satisfaction can be obtained if the government seeks input from the public before initiating e-Government initiatives. Feedback from the public is a top priority in developing online services and should be considered during the process of developing e-Government solutions for the community [8,16,17].

In addition, the concept of T-Government can emerge due to the support of Web 2.0 technology. There are various definitions of Web 2.0, as mentioned by Osimo (2010), Web 2.0 is a collection of technologies (e.g. AJAX, XML), applications (e.g. blogs, wikis, social networks) and values (collective intelligence, producer, perpetual beta) [18]. Frissen et al. (2008) explains that Web 2.0 consists of new platforms for interactions with extensive inputs from users, integration of knowledge and user participation in the production of web services. The applications or platforms of Web 2.0 [19] are often called social media, since they are organizing, editing, combining, sharing, commenting, and rating web content as well as to form a social network by interacting and linking one another [20]. In other words, Web 2.0 offers great potential to transform connections between government and the public into more open, social and citizen-centered relationships. This is the fundamental principle of T-Government [21].

Unfortunately, in practical T-Government can't be implemented optimally or still limited [22]. What is the cause? Is the concept of T-Government

an idea only? In fact, this concept is not easy to implement because it requires a fundamental process in the relationship between government and citizen. Therefore, this study aims to determine the level of e-Government adoption in Indonesia today as a picture of the readiness of Indonesian society towards the implementation of Transformational Government (T-Government). In other words, this research wants to find the needs of citizen or user as an important element of T-Government through empirical investigation in the field.

2.   RESEARCH METHODOLOGY

The methodology used in this study is a quantitative study by distributing questionnaires that have been designed to obtain a portrait of community adoption level of e-Government services in Indonesia today. This is the basis for the assessment of the readiness of Indonesian society towards the Transformational Government (T-Government). The questionnaires that are designed consist of two parts, namely section 1 contains the demographics of respondents covering age, gender, education level, income, internet usage period and internet access media. Part 2 of the questionnaire is about the level of community use of e-Government services and their associated e-participation perceptions. The questionnaire as an instrument in this research is disseminated to Indonesian Internet users through social media such as Facebook and WhatsApp.

This is because Internet users in Indonesia based on data APJII 2017 has reached 54.68% of the population of about 143.26 million people from 262 million people [23]. Of the total internet users, the most frequently accessed services are chatting (89.35%) and social media (87.13%). Thus the media distribution of the questionnaire is considered appropriate because the majority of respondents are Internet users. The underlying reason for the Internet users being the respondents in this study is that they are the earlier users in adopting T-Government services [24]. For this preliminary study, the number of respondents involved in the survey was 117 people. Respondents' answers will be analyzed using a descriptive approach to obtain the current use of e-Government services and their perceptions of the importance of e-participation. The results of the analysis are presented in the form of tables, graphs and percentages of each question. Previously disseminated, the instrument performed validation

by face-validity to see the content and appearance has been convincing and gives the impression able to uncover what to be measured in this research. The results of face validation show there are some changes to the face of questionnaire in the form of sentence structure of questions and also added some questions related to the gender and income level of respondents. This is in line with Gauld et al. (2010) who said that consumers are less likely to use e-government services [7]. Thus, the income level affects the use of e-Government services, considering that Indonesia is only free from low-income country and is entering the low-middle class country category, although the income of Indonesian people is still the lowest record in ASEAN [25]. In addition to influential income levels, gender, age and education levels also contribute to e-Government success.

3. RESULT AND DISCUSSIONS

Based on the results of data collection obtained 117 respondents who are Internet users from Indonesia who never use e-Government services. The demographics of the respondent's age can be presented in Figure 1 below:
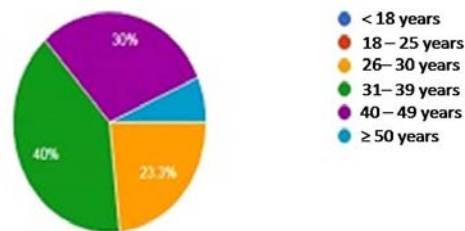

Figure 1: Age of Respondent

From the age distribution of respondents in Figure 1 above, it is seen that the age of majority of respondents are at 31-39 years by 40%. This age range is the productive age of most workers in Indonesia. Then followed by age 40-49 years by 30%, age 26-30 years obtained percentage 23.30% and the rest is age> = 50 years of 6.67%. This shows in general that the age of 31-39 years is the largest user adopting e-Government services in Indonesia. In addition, this data also supports the statement of Gauld et. al (2010) that those accessing e-Government services are not of old age.

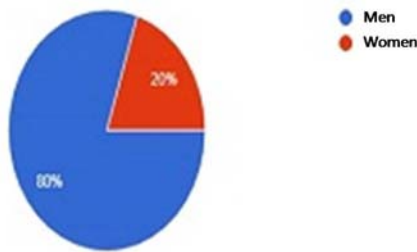Next is the profile of respondents seen from the gender as presented in Figure 2 below:

Figure 2 : Gender

Based on Figure 2 above, we can see that 80% of the total respondents in this research are men. While women only amounted to 20% only. Thus in line with Gauld et. al (2010), men are more likely to access e-Government services than women.

In addition to the survey, the education level of respondents could be shown in Figure 3 as follows:
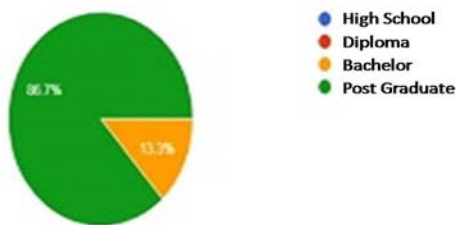

Figure 3 : Education Level

Description of the distribution of education level from the respondents above indicates the majority of respondents' education is at the level of Post Graduate about 86.7%. Then followed by Bachelor about 13.3%. None of the respondents had Diploma and High School education background in this survey. This is also in line with Gauld et. al (2010) that people that hold higher education tend to use e-Government services.

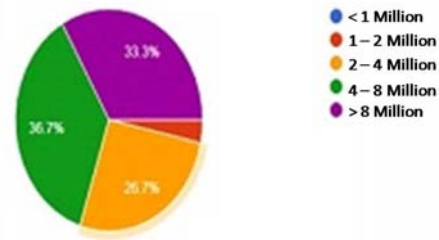The last demographic data is related to the income level of respondents as shown in Figure 4 as follows:

Figure 4 : Monthly Income

In Figure 4 above, it can be seen that the majority of respondents have income level between 4 million to 8 million rupiah per month equal to 36.7% Then followed by respondents who have income level above 8 million rupiah per month 33.3%. Furthermore, respondents with income level of 2-4 million rupiah per month amounted to 26.7%. The remaining 3.3% are respondents with income level of 1 million to 2 million rupiah per month. There are no respondents whose income is below 1 million rupiah per month. It also supports the statement of Gauld et. al (2010) that people with low income levels tend not to adopt e-Government services. According to BPS (2016), the majority of respondents with income level between 4 to 8 million rupiah are included in the middle up income category so that it can be said that majority of e-Government user respondents do not come from low income category as affirmed by Gauld (2010).

Before discussing the pattern of use of e-Government services, firstly we want to know the background of respondents in using the Internet. This will illustrate the readiness of users in adopting e-Government services if they are already accustomed to using the Internet. The results of research related to how long Internet usage can be presented in Figure 5 as follows:
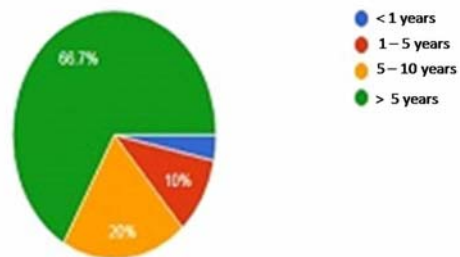

Figure 5 : Internet Usage

Based on Figure 5, it is shown that the majority of Internet usage is over 10 years old with a percentage of 66.7%. Then followed by the use of 6 to 10 years by 20%, Usage of 1 to 5 years by 10% and below 1 year only by 3.3%. The results indicated the high readiness of respondents in adopting e-Government services because the majority of respondents are experienced Internet users.

Furthermore, in this study also we want to know internet access point for e-Government service which can be shown in Figure 6 where the most access of Internet come from home that is equal to 90%. The next highest Internet access point is from the university by 80%. Then followed by the office of 73.3%, public place 63.3%, cafe by 46.47% and others by 16.67%. Other Internet access points are added by respondents themselves such as airports and shopping areas. The results of this study indicate that the readiness in terms of infrastructure is good enough because the majority of respondents have an Internet network at home. In addition, universities and offices of course provided Internet media, including public places and cafes that are now equipped with wifi facilities.
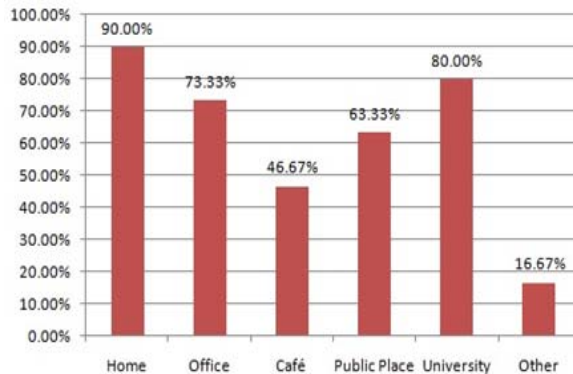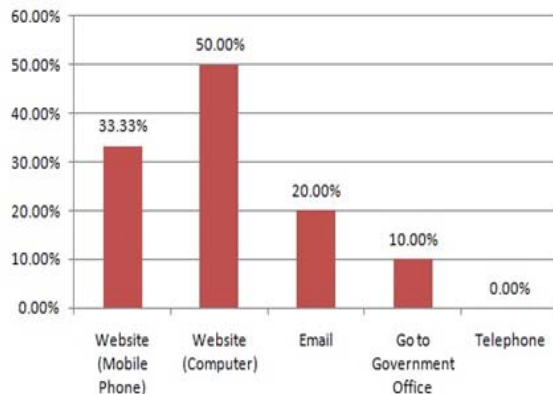

Figure 6 : Internet Access Point

Figure 7 : Access Media of E-Government Service

Figure 7 shows the type of media used to access e-Government services. The majority of respondents by 50% look for services or information about e-Government website through desktop computer. Then followed by mobile media usage 33.33%, email 20% and come directly to government office by 10%. From the survey results, no respondent contacted via fix telephone.

Figure 8 : Interaction of e-Government Service

In Figure 8 above, it can be shown that the majority of respondents in this case have publicly interacted or accessed government electronic services of 93.3%. While 6.7% of respondents have never access e-Government services. This shows the majority of the public in Indonesia can be said to have received the e-Government technology provided.

Next in this study, we want to know what services are used by the respondent. In Figure 9 below it can be seen that the tax reporting service is the most accessed type of service, which is 76.67%. Tax reporting is indeed mandatory in Indonesia. The second frequently used service is associated with 40% college or college enrollment. Furthermore, the job application service as a government employee (ASN) of 30%, 30% passport management, 26.67% tax payment, license processing 26.67%, birth certificate / death service 10% and the remaining 3.3%.
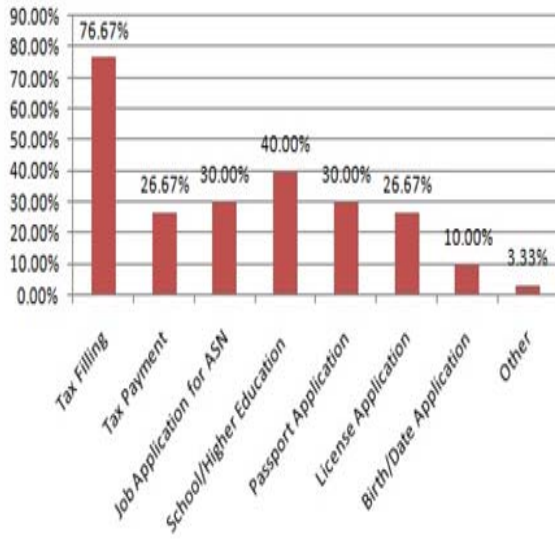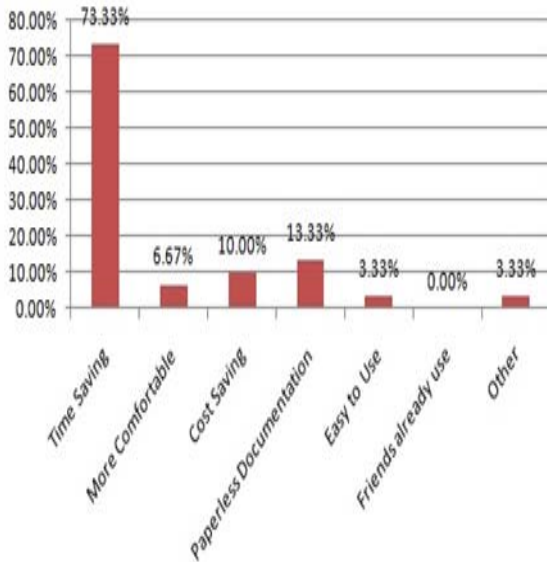
Figure 9 : E-Government Services Accessed

Figure 10 : Reason to Use E-Government Service

Various reasons or motivations why people want to use e-Government services can be presented in Figure 10 above. The most important reason chosen respondents when using e-Government services is to save time of 73.3%. It is chosen because by accessing online, people do not have to come to the government office to have to queue up, which incidentally wasting time. In addition, the paperless documentation is the second reason why they want to access e-Government services that is 13.3%. Followed by cost saving 10%, comfort factor 6.67%, easy to use 3.33% and others 3.33%. Factor

of friends or relatives already using the service is not considered to be a motivation to use e-Government services.
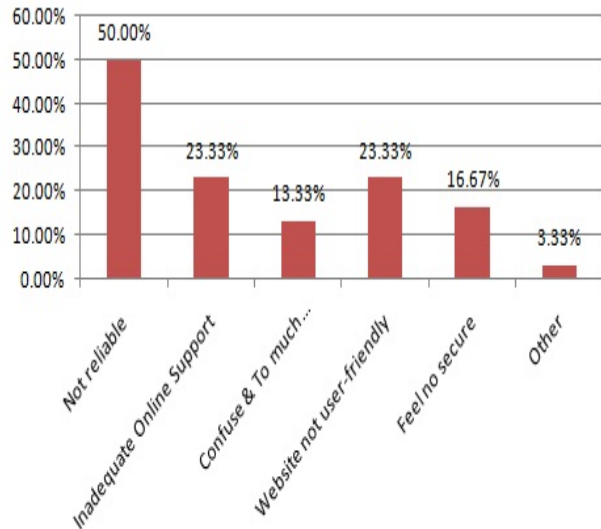

Figure 11 : Barriers in Using E-Government Service

Figure 11 also shows the obstacles that respondents encountered during the use of government electronic services. The biggest obstacle experienced by 50% respondents was unreliable service. It is not reliable that the service or information is often not accessible by the user. 23.33% not-user-friendly website is also the cause of difficult respondents to access e-Government services through the website. 23.33% of respondents also agreed that during this time online help is still considered less than service providers.

Next issue about insecure in using e-Government services amounted to 16.67%, confusing information about 13.33% and the remaining 3.33%.

Figure 12 : The Importance of Public Participation for Governments in Decision Making

In Figure 12 above shows how many public think the importance of public participation is involved by government in decision making and public policy. The results indicate that all respondents (100%) agree that it is important for the government to listen to the needs, aspirations and inputs of the community in the decision-making process and public policy. This is in stark contrast with the results presented in Figure 13 below. So far, the government still has not involved optimal public participation in decision making where the majority of respondents by 60% stated that they have never been involved in planning and formulating government policy either electronically or non-electronically.
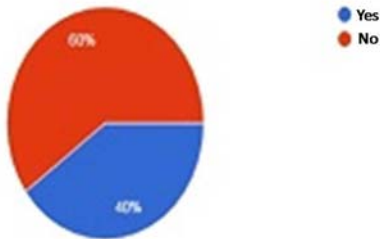

Figure 13 : Involvement in e-Participation

In this study, we also asked whether respondents interested to be involved in decision-making and public policy or not. Based on the results of data processing, the majority of respondents by 90% expressed interested in decision-making and policy especially in e-participation as shown in Figure 14 below.
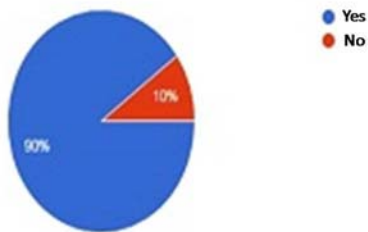

Figure 14 : Interested in e-Participation

This is highly contractually correlated with the results of the previous study in Figure 13 where more people are interested in e-Participation, but the opportunity for people to engage in public policy planning and formulation is still low.

Another result from this survey according to high intention to involve in e-participation that most respondent choose the preferred medium for the e-participation implementation in Indonesia was online survey about 75%. The medium such as online voting also had high percentage of 53%. Furthermore, online discussion forum chosen by 47% respondents, email about 42%, online chat 26% and others only 7%.

The difference of this research among previous literature is to fill gap of knowledge of Transformational Government (T-Government) or e-Gov 2.0 concept as a new generation of e-Government initiative. Many previous research still concerned about e-Government or e-Gov 1.0 that only focus how to provide public services through electronic means [26,27,28]. Unfortunately, they more emphasized on technology needs rather than on citizens needs. The citizen was less involved in the development of e-Government. Consequently, the level of e-Government adoption is also low. The lack of literature of T-Government made the implementation of T-Government still limited. T-Government has a key element of citizen or user involvement in policy formulation. The objective of T-Government is to encourage more open and transparent government, in which the public has a greater role in e-Government initiatives.

Therefore, this research could give some recommendation for the government to increase public involvement through e-participation, so that the services provided can really meet the demand-side needs especially for Indonesian citizen.

4. CONCLUSIONS

This study describes the condition of citizen readiness toward citizen centric government or T-Government. The needs of citizens are identified regarding the pattern of e-Government service adoption and user perceptions of e-participation. In general, people have been able to accept e-Government technology because the majority of respondents (93.3%) have accessed their electronic services while only 6.7% have never accessed. This is supported by the high availability of Internet access where 90% of users access the Internet from home and added to the fact that the majority of respondents (66.7%) are experienced Internet users for having used the Internet for more than 10 years. The most widely used service is tax reporting, which is mandatory for citizens in Indonesia. The reason users use e-Government is the time efficiency factor while the biggest obstacle experienced is less reliable service provided. An

encouraging finding is the positive perception of citizens towards e-participation and considers the importance of e-participation in the formulation of government policy. The results of this study indicate the initial readiness of citizen in designing T-Government in Indonesia. Further research needs to be done to develop a model of T-Government implementation that can be applied in Indonesia.

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