E-Service in government sector: To what extent has NTB.care affected as a smart citizen reporting site for raising government performance

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Abstract. ICT which stands for information and communication technology, is an integral aspect of government work to improve performance in areas such as leadership effectiveness, public engagement, and information disclosure. The main benefit of using ICT in government is that it provides a public forum for generating discussion between stakeholders or between governments. NTB.Care is a public complaint service apps on the performance of local governments in West Nusa Tenggara or NTB. In order to allow the government of the NTB province to report on the performance of the regional work units and regional work units that fall under its jurisdiction, this. The purpose of this research is to investigate the quality of E-government systems, information, and services, as well as the transparency of their operations. With the assistance of the SmartPLS software, the research approach is quantitative, and it involves evaluating the validity and reliability, as well as hypotheses and regression. This is done in order to create data that can then be correctly examined. According to the findings of our study, the use of e-government is influenced by two factors: the system quality variable and the services quality variable, both of which have a P value of 0.000. On the other hand, the information and transparency variables do not influence the use of e-government.

1. Introduction

Advances in information technology in today's age of globalization have altered every facet of human existence [1]. These shifts seem to be the norm for the vast majority of individuals nowadays [2]. As a consequence of public demand, the government's use of IT has also prompted shifts along these lines, and now it may provide info services by making good use of this tech [3].

Concentrated due to public demand by ICT reported, Indonesia as one of countries that has a high population and is included in the top five internet users in the world [4]. The high awareness of internet access by internet users can certainly make it easier to implement e-government. The government of Indonesia is actively implementing e-government through various systems, including the NTB.Care complaint service system. This system is expected to improve the performance of local governments in West Nusa Tenggara or NTB by providing a public forum for generating discussion between stakeholders or between governments.

The purpose of this research is to investigate the quality of E-government systems, information, and services, as well as the transparency of their operations. With the assistance of the SmartPLS software, the research approach is quantitative, and it involves evaluating the validity and reliability, as well as hypotheses and regression. This is done in order to create data that can then be correctly examined. According to the findings of our study, the use of e-government is influenced by two factors: the system quality variable and the services quality variable, both of which have a P value of 0.000. On the other hand, the information and transparency variables do not influence the use of e-government.
E-government as a new public model to accelerate complained

Government in Indonesia, meanwhile, the e-government site in Indonesia must be designed as easily as possible, so that various groups can participate in using e-government. The government's approach to serving the public has shifted due to the fast advancement of contemporary information technology. It more comprehensively distributes service products at all levels of society. Further, its goal is to make government services more efficient and transparent in order to accomplish the goals of e-government.

On the other hand, currently, businesses are now leveraging electronic services, which involve productivity enhancement via the use of information technologies. Since the 1990s, the concept of electronic government, digital government, or virtual state has been used to describe the increased use of ICT in public administration. E-government as an information technology that is used to facilitate and improve the effectiveness with which government services are delivered to individuals, corporations, and other organizations. Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems lays forth the legislative framework for the expansion of e-government in Indonesia. As an example, the West Nusa Tenggara Government Province (also known as NTB province) has begun the process of implementing e-government.

From an e-government standpoint, accessibility in adopting IT-based applications is frequently the cause of a community's poor desire to employ a technology. The availability of this can have an impact on public faith in government-provided IT-based services.

The use of smartphone applications has become the daily life of all groups. Android or iOS-based applications are people's main choice in their daily activities. Therefore, the NTB government issued the NTB Cares application, a media application to accommodate community aspirations and handle complaints about public service issues in NTB. However, the government is aware that it will accommodate complaints and input from the public to improve its policies and programs. In addition, our paper analyzes the influence of the community using the NTB Cares application within the West Nusa Tenggara provincial government.

System quality refers to how well and efficiently a system operates to produce output that is in accordance with the intended use of the system. System quality is defined as a set of rules or guidelines. More importantly, the quality expected for system and good quality information about a particular product. The quality of a system is the basis of any information system, software and hardware operating on the system, the quality of the system can be improved. A measure of the characteristics used when accessing the application such as usage.

E-government as a new public model to accelerate complained
ICT, which stands for information and communication technology, is now an vital part of government efforts to boost output in areas including executive efficacy, citizen participation, and data transparency [23]. However, the main benefit of using information technology in government is that it provides a public forum for the purpose of generating discussion between various stakeholders or between governments [24]. The function of civil society in cyberspace. The traditional or traditional approach is one that can be used to describe Jurgen Habermas's idea of the public sphere in politics and democracy. This theory as the classical approach. A new method in government electronics, technology in government is characterized by a two-way communication pattern [25].

The quality of service of e-government assistance

Quality of service is the level of service provided by the developer to the users [26]. The services obtained include, for example, application updates and reviews from relevant developers in case of problems with the application [27]. All assistance provided by system developers to consumers is referred to as service quality [28]. Customer satisfaction will soon grow if the services provided are of high quality. When customers are satisfied with an activated service, they will continue to use it. There are three indicators of service quality, namely responsiveness, certainty, and also empathy [29]. Service quality has its roots in increasing citizens' confidence in public electronic services is an important topic in the field of marketing, this concept may be thought of as a measure of how well e-government services live up to the expectations of its users. Services may include the use of any tool mediated by information technology [30]. Reforming and bettering governmental services supplied to the general public is the primary motivation for enhancing the quality of e-government offerings [31]. Providing services that are on par with or above the specified level of customer service expectations is considered high quality service [32]. The gap between the anticipated service level and the customer's impression of the level of service actually delivered is what constitutes perceived service quality [33]. To the extent Previous study has shown that there is a considerable influence of service quality on behavioral intentions to utilize services. If individuals believe that the services supplied by e-government are of excellent quality, it may also tend to encourage them to promote adoption of e-government services to others. e-government [7]. According to this guideline, transparency is the concept of openness that enables the general public to gain the greatest possible access to information about public services and to know about them [34]. Transparency is openness in providing information and information policies to ensure access for the public [35]. In obtaining this information and at the right time, transparency must be managed openly without anything being hidden from the public and carried out in accordance with existing laws, guidelines and rules that can be monitored and controlled by interested parties. Transparency is generally information that is available with a high degree of accuracy and timeliness in the process of making it related to public policy [36]. Individuals tend to associate various definitions with the notion of transparency as a result of this, ambiguity may arise as a direct consequence of this phenomenon [37]. Some people believe that transparency exists only when the public is able to understand and understand the data that is already available, while others believe that transparency exists regardless of whether the data is already available or not [34]. In addition, a person's perception of transparency may differ [38]. What is clear to one person may not be clear to another. For example, one individual may have an understanding of statistics and be able to analyze data, but another individual may lack the necessary information. Citizen even get the impression
Transparency is the “magic idea for everything” [39]. Despite the uncertainty around this idea, there is widespread agreement that making government-owned data publicly accessible is crucial to establishing open government. Transparency does not need the free flow of information; in fact, greater disclosure may lead to less comprehension, more ambiguity, and less trust. But E-government, which relies heavily on the internet and other forms of ICT to streamline government processes, is becoming more popular. The public, private sector, and other governments all win when the government uses ICT [42]. Scholars rarely use the perspective of citizens who use e-government, this study fills this knowledge gap. This study focuses on the Affecting of application NTB Care Site for Citizens Reporting of Regional Work Units Performance by using the Quantitative measures of system quality, data quality, service quality, and transparency whether or whether this has an effect on how the program works.

Hypothesis

H1: System Quality has a positive and significant effect on the use of E-government
H2: Information Quality has a positive and significant effect on the use of E-government
H3: Service Quality has a positive and significant effect on the use of E-government
H4: Transparency has a positive and significant effect on the use of E-government

Methods

Quantitative research methods were used to compile these results. To put it another way, quantitative research serves three main functions: testing a hypothesis, providing a fact or explaining statistics, and demonstrating the connection between two variables. Ideas generation, knowledge construction, and exhaustive description are all possible outcomes of quantitative study. Primary data was collected by a survey in this study on the topics of E-government system quality factors, Information quality, Service quality, and E-government transparency. In order to collect firsthand information on the local populace through E-government, a survey methodology was developed. In contrast to studies that use probability sampling, this one employed a non-probability sampling strategy known as random sampling. The population is all the individuals who make use of the NTB Care app. Sampling technique, often known as the sampling method, makes use of the Slovin formula. The sample size for this study was 100 participants. A questionnaire served as the primary data collection tool for this study. Questionnaires are a kind of data collection tool in which a list of written questions is given to respondents, who are then expected to reply to each and every question. The survey that was sent out was made using a Google form. Up to a hundred respondents are selected at random among those who use the NTB Care app, and then given Google Forms to fill out. Quantitative survey questions are used to gather information for this investigation. The questionnaire responses in this research are also measured using a Likert scale. A Likert scale allows for a variety of responses, from “very untrue in fact” (with a 1) to “not true in fact” (with a 2) to “somewhat true in fact” (with a 3) to “true in fact” (with a 4). 5 indicates “In reality, that is a pretty accurate statement. Data validity and trustworthiness may be examined using SEM-PLS’s regression and hypothesis testing capabilities.
Table 1. Demographic profile of respondents (n=100)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 35 years old</td>
<td>36.4</td>
<td>36.4%</td>
</tr>
<tr>
<td>36 - 51 yrs</td>
<td>44.4</td>
<td>44.4%</td>
</tr>
<tr>
<td>52 years and over</td>
<td>19.2</td>
<td>19.2%</td>
</tr>
<tr>
<td>Education level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD - SMP</td>
<td>66</td>
<td>66%</td>
</tr>
<tr>
<td>SMA - S1</td>
<td>13</td>
<td>13%</td>
</tr>
<tr>
<td>S2 - S3</td>
<td>31</td>
<td>31%</td>
</tr>
</tbody>
</table>

Based on Table 1, it explains some of the respondents' ages from the age of 20 - 52 years and over. In this study, the age group that participated the most in filling out the questionnaires was 36 - 51 years old, the number of respondents who participated at the age of 36 - 51 years was 44.4 respondents, while at the age of 52 years 19.2 respondents and age 20 - 35 as many as 36.4 respondents. While at the education level there are several levels of education of respondents from Elementary School to Strata 3. The education level of respondents in this study can be interpreted as the number of respondents at the SD - SMP level as many as 66 respondents, while at the SMA - S1 level as many as 13 respondents and at the S2 - S3 level.

Furthermore, in the experience of using e-government there are various experience experienced by respondents, from <1 to >3 years. In this study, the experience of using e-government is at most <1 year. Respondents' experience in using e-government will be described as follows. Experience <1 year as many as 66 respondents while 1 - 3 years as many as 23 respondents and the last >3 years as many as 11 respondents.

Fig 1. Validated and reliable research model, Outer loading
Figure 1. is the output of the outer loading which will be used as a basis for measuring and knowing the results and interpretation. The AVE value corresponds to value assigned by external model. A threshold value is associated with the reliability of AVE data, which must be reached before the data can be trusted. Average Value Excessing 0.50. If the AVE is less than 0.50, we cannot conclude that the data are trustworthy. Cronbach's Alpha confirms that the internal consistency model is sufficiently large to be reliable according to the established criteria of the existing literature on reflective measurement models. When a variable's Cronbach's Alpha is more than 0.700, it is considered credible. All variables in this study are reliable, as shown in Table 2.

Table 2. Reliability and validity constructs, SmartPLS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of E-Government</td>
<td>0.725</td>
<td>0.846</td>
<td>0.648</td>
</tr>
<tr>
<td>System Quality</td>
<td>0.745</td>
<td>0.855</td>
<td>0.664</td>
</tr>
<tr>
<td>Information Quality</td>
<td>0.734</td>
<td>0.805</td>
<td>0.589</td>
</tr>
<tr>
<td>Service Quality</td>
<td>0.799</td>
<td>0.822</td>
<td>0.713</td>
</tr>
<tr>
<td>Transparency</td>
<td>0.778</td>
<td>0.849</td>
<td>0.530</td>
</tr>
</tbody>
</table>

Table 2 demonstrates the validity and trustworthiness of all variables utilizing e-government's Cronbach's Alpha is 0.725, Composite Reliability is 0.846, and Average Validity Estimate (AVE) is 0.648. proves that a deeper comprehension of the quality measures in use may be expected as a consequence of the construct validity test’s results. However, prior to conducting a significance test on the amount of impact on the E-Government Use variable.

Table 3. Regression results, SmartPLS

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-square</th>
<th>R square Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of E-government</td>
<td>0.436</td>
<td>0.412</td>
</tr>
</tbody>
</table>

Table 3 displays an R-squared value of 0.436 for the variable of e-government use, which shows that system quality, information quality, service quality, and transparency each have a 43.6% influence on e-government use. Whether the R-square (R2) result of the structural model is consistent with the Rule of Thumb for R-square Testing ([44]). Three R-squared levels, 19%–33% (low), 33%–67% (moderate), and >67% (big) were determined using regression analysis to determine the magnitude of the variables’ effects. The results of the regression analysis are shown in Figure 3. Figure 3 shows that the usage of e-government has a modest degree of effect, with an influence value of 43.6%.

Table 4. Hypothesis testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Original samples</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>T-statistics</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>(H2)</td>
<td>Information Quality</td>
<td>0.115</td>
<td>0.109</td>
<td>0.097</td>
<td>1.185</td>
</tr>
<tr>
<td>(H3)</td>
<td>Services Quality</td>
<td>0.200</td>
<td>0.192</td>
<td>0.140</td>
<td>1.976</td>
</tr>
<tr>
<td>(H1)</td>
<td>System Quality</td>
<td>0.346</td>
<td>0.353</td>
<td>0.091</td>
<td>3.780</td>
</tr>
<tr>
<td>(H4)</td>
<td>Transparency</td>
<td>0.226</td>
<td>0.227</td>
<td>0.150</td>
<td>1.503</td>
</tr>
</tbody>
</table>
Table 3’s numbers make it clear that two variables have an impact on the others that pass muster. Services quality was one of the two factors provided, with a T statistic of 1.976 and a significance level of less than 0.05. The p-values for the two variables used to measure system quality are both 0.000, and the T-statistic’s value is 3.780. This is in addition to the fact that there are two independent variables. The first information quality variable, for example, has a T statistic of 1.185 and a probability of error of just 0.237. The other has a p-value of 0.237 and is the second information quality variable. The following results are obtained for the second transparency variable: T = 1.503, p = 0.133.

It has been shown that H3, which states that people are more likely to accept e-government if they are satisfied with the quality of the services they get, is correct. This suggests that the claim made in the introduction, namely, that service quality affects the uptake of e-government, is supported by the results of the study. This study’s findings provide credence to the notion of the relationship between system quality and e-government adoption.

The findings of this research contradict Hypothesis H2, which states that information quality has a significant and favorable effect on e-government adoption. This study challenges the notion that there is a correlation between information quality and e-government adoption. An integral aspect of the work governments undertake to improve performance in a variety of areas, including leadership effectiveness and citizen engagement. This study’s findings are inapplicable to the circumstances at hand. Since the results of this study reject Hypothesis H4, which states that transparency has a positive and significant effect on the use of e-government, the theories that suggest that transparency has such an influence are not supported.

Conclusion

This means in terms of theory is summed up here. Both system quality and system quality have a p value of 0.000, indicating that they strongly impact the usage of e-government, out of the four variables System Quality, Information Quality, Service Quality, and Transparency. This case study rules out using the concepts of information quality and transparency. Some ramifications of this study’s conclusions are as follows. To begin, it is incumbent upon local government authorities to enact laws outlining the process through which citizens may access and use government-issued technologies. The public needs greater education and outreach from the two municipal administrations about e-government before it will begin to see its positive effects. If the provincial government wants more people to utilize government-provided technologies, it has to invest in better infrastructure. The study’s limitations include a limited sample size that may not accurately represent the population at large and a brief time frame in which the research was conducted. The small number of study areas precludes generalization to the whole country of Indonesia. Here are some questions that might be explored in the future. New independent constructs, such as expectations, dangers, and facilitation conditions, culture, should be studied in the future to see how they influence e-government use and public acceptance in Indonesia. In order to provide a more comprehensive picture, future studies will collaborate with many municipal agencies. To evaluate the reliability of respondents’ opinions in future studies, it will be necessary to use bigger samples. Finally, future research might utilize the longitudinal data to verify the reliability of the proposed model.

References


