

# THE CITIZENS' READINESS FOR E-GOVERNMENT ON THE JOGJA SMART SERVICE (JSS) APPLICATION IN YOGYAKARTA CITY

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## Abstract

This study aims to analyze the citizens' readiness for e-Government on the Jogja smart service (JSS) application in the city of Yogyakarta. with indicators from Citizens' readiness for E-Government (CREG), namely ICT Infrastructure, ICT Usage, Human Capital, ICT Regulation, and Trust. The research method is quantitative, with questionnaire primary data totaling 100 respondents, and using Smart PLS software version 0.3. in conducting data analysis. The results show that ICT Infrastructure and ICT Usage have a significant influence on the citizens' readiness for e-Government in the Jogja Smart Service (JSS) application. Whereas Human Capital, ICT Regulation, and Trust have no significant influence on the citizens' readiness for e-Government in the Jogja Smart Service (JSS) application. The limitation of this study is the number of respondents and the limited number of respondent variables are expected to be used as recommendations for further research.

**Keywords:** E-Government, Information System, ICT, Jogja Smart Service Application, Citizens' readiness

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## INTRODUCTION

Electronic Government is an innovation of online government services to the public by utilizing the sophistication of information and communication technology [1]. Through the effective use of advanced information technology, there is a positive aspiration that the standard of government services provided to the citizens can be improved [2]. The implementation of e-Government is a way for the Government to adapt to technological advances in the global era [3]. In addition, e-Government-based government services certainly make services more effective, efficient, and transparent which is expected to increase citizens' satisfaction in receiving government services [4]–[6]. One of the Government's initiatives to improve the standard of services provided to citizens is the implementation of Government electronic-based services [7], [8]. This is because it utilizes technological sophistication, reduces the use of paper in services, and services can only be accessed by looking at a computer or cellphone screen, thereby saving time and lower costs [9], [10]. In addition, the implementation of electronic government-based government services increases transparency in government administration, thereby enabling the general

public to closely observe government performance [11], [12].

The implementation of e-Government in government services certainly requires readiness from both the government as a service provider and the citizens as users to accept transformative changes in the way services are delivered [13]. In this case, apart from considering the readiness of the infrastructure for the implementation of e-Government, the Government also needs to consider the citizens' readiness to welcome the implementation of e-Government [14]. This is because the readiness of citizens will affect the level of utilization of e-Government-based services [15]. Citizens's readiness to adopt e-Government can be assessed by looking at their perceptions of the benefits of e-Government, their self-confidence, proficiency in computer skills, and their level of awareness regarding the implementation of e-Government [16], [17]. In addition, the readiness for citizens to implement e-Government can also be measured from the Citizens' readiness for E-Government (CREG) indicators, namely: ICT Infrastructure, ICT Usage, Human Capital, ICT Regulations, and Trust [18]. The Citizens' readiness for E-Government (CREG) model is an indicator of e-Government achievement that focuses on services provided by the Government to its

citizens (G2C), incorporating a combination of electronic preparedness and factors related to trust, which have a direct influence on e-Government. This pertains to governmental efforts in developing nations. [19], [20].

Electronic Government-based service innovations have been implemented in various government sectors, both central and regional in Indonesia, one of which is in the Yogyakarta City [21]. The application of electronic-based government services is very efficient in Indonesia, especially in the Yogyakarta City [22]. The implementation of electronic-based services is guided by Yogyakarta Mayor Regulation Number 15 of 2015 concerning e-Government. Government service innovation based on e-Government principles in Yogyakarta is summarized through the Jogja Smart City Program [23]. The Jogja Smart City Initiative is an innovative approach to the service of the Yogyakarta City Government, which utilizes advances in information and communication technology in all city functions, one of which is implemented by presenting the Jogja Smart Service (JSS) application [24], [25].

The Jogja Smart Service (JSS) application was released in 2018 which is a digital transformation in the provision of public services in the Yogyakarta City [26]. With the presence of the Jogja Smart Service (JSS) application, citizens of the Yogyakarta City can more easily access various public services [27]. The main concepts used in this application are Single ID, Single Window, and Single Sign-On, which allow integrated and more efficient access to various services [28]. The Jogja Smart Service (JSS) application is compared to the online representation of the Yogyakarta City Government [29]. By utilizing the Jogja Smart Service (JSS) application, the public is given easy access to a variety of government services, all of which are easily consolidated in one integrated platform [30], [31]. The Jogja Smart Service (JSS) application for Jogja is seen as a promising factor in facilitating the successful implementation of smart service initiatives in the Yogyakarta City [22]. However, socialization and guidelines for using the Jogja Smart Service (JSS) application need to be carried out so that citizens' understanding of how to use the Jogja Smart Service application has increased [32]–[34][35].

Based on The previous research above, shows that research related to the implementation of e-Government in the Jogja Smart Service (JSS) application analyzes a lot regarding the quality and effectiveness of the field of government readiness in implementing e-

Government based services. Considering this, the researcher takes a corner view different with analyze the citizens' readiness of Yogyakarta City to implementation of e-Government through the Jogja Smart Service (JSS) application in the Yogyakarta City using indicators from Citizens' readiness E-Government (CREG), namely indicators: ICT Infrastructure, ICT Use, Human Resources, ICT Regulation, and Trust [18]. The contribution and presence of this research is that researchers will examine the citizens' readiness of Yogyakarta City to receive e-Government-based services in the Jogja Smart Service (JSS) application in the Yogyakarta City. This research is interesting to discuss because it has not there is research that discusses about analysis of the implementation of e-Government in the Jogja Smart Service (JSS) application from the perspective of citizens' readiness.

This research is quantitative research that will be analyzed using Smart PLS version 0.3. The question in this study is to measure the citizens' readiness for E-Government implementation on the Jogja Smart Service (JSS) Application in the Yogyakarta City, with 5 hypothesis in this study namely H1: ICT Infrastructure significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application, H2: ICT Usage significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application, H3: Human Capital significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application, H4: significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application, H5: Trust significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application. The structure of this study follows the sequence in which the initial stage involves the introduction of the research article. This is followed by an explanation in the research methodology section. After that, the results will be displayed and discussed, leading to the final stage of presenting the research conclusions.

## METHOD

### A. RESEARCH METHOD DESIGN

The research method used in this study is quantitative using Smart PLS software version 0.3 [36], [37]. The data collection technique used is a survey technique, in which data is collected by distributing questionnaires online (Google Form) [38], [39]. The data collection process will involve steps such as designing a questionnaire, identifying a sample of respondents who represent the citizens in Yogyakarta City,

implementing the questionnaire, and collecting and processing the collected data. The data collected through this questionnaire will assist in evaluating citizens' readiness for e-Government on the Jogja Smart Service (JSS) application by describing the views and readiness of the citizens of Yogyakarta City in using the Jogja Smart Service (JSS) application. The location of this research is in the Yogyakarta City, Yogyakarta Special Province. The population in this study was the entire population of Yogyakarta City with productive age (17-50 years). The authors's reason uses the age range of 17-50 years in determining the population for this study is because the age range of 17-50 years covers most of the young adult and early adult population, so research results based on this sample tend to be more easily applied widely in the context of the general population. The number of respondents that the researcher obtained was 100 Citizens'.

## B. SAMPLING TECHNIQUE

The sampling technique in this study uses the Slovin formula to determine the number of samples with a sampling error of 10% with the slovin formula as follows:  $[n = N/(1 + Ne^2)]$  [40]. Based on data information provided by the Yogyakarta City Office of Communication, Informatics, and Encryption, the Jogja Smart Service (JSS) application had accumulated 220,479 users by April 2023 [41]. The results of calculating the determination of the sample in this study using the Slovin formula are as follows:

$$n = N / (1 + Ne^2) \quad (1)$$

$$n = 220479 / (1 + 220479(0.10^2)) \quad (2)$$

$$n = 220479 / (1 + 220479(0.01)) \quad (3)$$

$$n = 220479 / 2205.79 \quad (4)$$

$$n = 99,983 \quad (5)$$

As an empirical norm, it is not possible to have an individual fraction in the sample size. Based on this, to survey with a population of 220,479 respondents and an uncertainty level of 10%, the minimum sample size required is around 100 respondents. In practice, rounded sample sizes are usually used, so the sample size can be rounded up to 100 respondents. This study used a random sampling technique with

100 respondents. The random sampling technique selects respondents randomly from the population participating in the program. In this case, each program participant has the same opportunity to be selected as a respondent. By using random sampling, a fair representation of the participating population can be represented in a sample of 100 respondents. This enables the study to attain a more comprehensive perspective on the efficiency of these initiatives, considering the diversity among the involved participants. Engaging a group of 100 respondents allows this research to offer a more precise insight into the overall extent of citizens' readiness for e-Government through the Jogja Smart Service (JSS) application.

## C. RESEARCH INSTRUMENTS

The Research Instrument in this study uses a Likert scale, where Respondents rate their agreement with relevant statements ranging from "Strongly Disagree" to "Strongly Agree"[42]. Smart PLS analysis evaluates complex variable relationships, modeling causality. By employing Smart PLS 3, this research identifies influences and relationships within the Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application. Using quantitative surveys with Likert scales and Smart PLS 3 analysis provides a deeper understanding of factors and variable relationships in this study. The amalgamation of indicators regarding the potential facets of each construct is developed in alignment with the theoretical framework (Table 1). This research develops indicators of Citizens' readiness for e-Government (CREG), namely: ICT Infrastructure (II), ICT Usage (IU), Human Capital (HC), ICT Regulation (IR), and Trust (T) [18]. The structure of the questionnaire utilized in this research shown in Table 1.

## D. RESEARCH HYPOTHESIS

The hypothesis in this study was built based on five indicators from the Citizens' Ready for e-Government (CREG) theory, namely: ICT Infrastructure (II), ICT Usage (IU), Human Capital (HC), ICT Regulation (IR), and Trust (T) to measure Citizens' Readiness towards e-Government in the Jogja Smart Service (JSS) application. Figure 1, shows the hypothesis in this research is formulated.

Table 1. Indicator of Research Instrument

	Indicators of Research Instrument	
ICT Infrastructure (II)	II 1	Computer and Internet at home and work
	II 2	Internet speed
	II 3	Internet prices
ICT Usage (IU)	IU 1	Regular use of the Internet
	IU 2	Use of the Internet in public places
Human Capital (HC)	HC 1	computer knowledge
	HC 2	Internet knowledge
ICT Regulations (IR)	IR 1	Telecommunications regulation
	IR 2	E-signature law
	IR 3	Information protection commitment
Trust (T)	T 1	security
	T 2	privacy
	T 3	Credibility
	T 4	Customer statistics
	T 5	Response on time

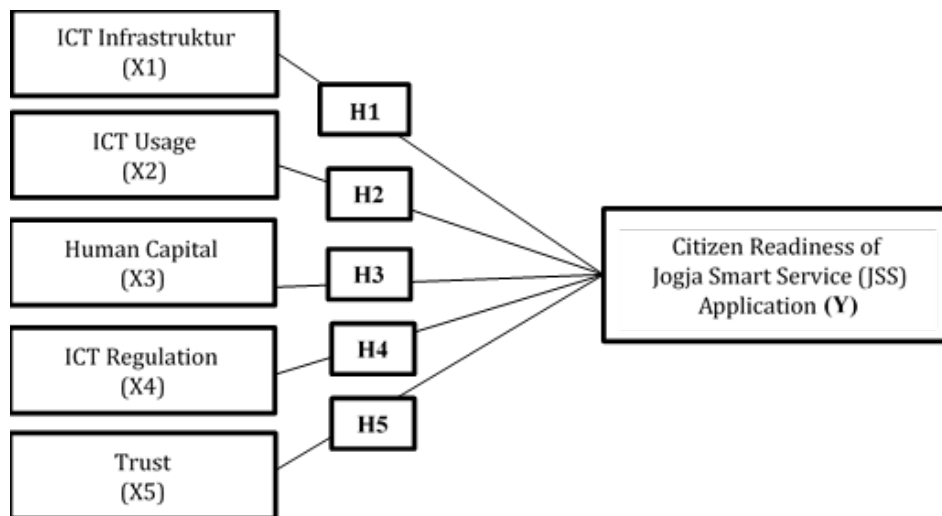


Figure 1. Research Hypothesis

From the perspective of the theoretical framework, within the context of citizens' readiness to implement E-Government in the Yogyakarta City Smart Service (JSS) application, The formulation of hypothesis is as stated below:  
 H1: ICT Infrastructure significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.  
 H2: ICT Usage significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.  
 H3: Human Capital significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.  
 H4: ICT Regulation significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.

H5: Trust significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.

Derived from the previously posited hypothesis, the variables employed in this investigation encompass the following:

1. Dependent Variables:1
  - a. ICT Infrastructure (II): This variable looks at the availability of ICT Infrastructure provided to citizens using e-Government services.
  - b. ICT Usage (IU): This variable looks at the level of education and knowledge of citizens in using computers and the internet.
  - c. Human Capital (HC): This variable examines the legal regulations impacting the utilization of e-Government services.

- d. ICT Regulation (IR): This variable looks at the extent to which legislation influences the use of e-Government.
  - e. Trust (T): This variable looks at the extent to which citizens trust in e-Government services.
2. Independent Variable: Citizens' Readiness for e-Government on Jogja Smart Service (JSS) Application: This variable looks at the readiness of Yogyakarta City residents to implement e-Government on the Yogyakarta City Jogja Smart Service (JSS) application.

## RESULT AND DISCUSSION

### A. RESPONDENT DEMOGRAPHIC PROFILES

Derived from a survey carried out by the researchers from citizens in the Yogyakarta City, a total of 100 respondents were obtained, with the demographic of the respondents can be seen in Table 2.

Table 2. Respondent Demographic Profiles

Characteristics	Frequency	%
<b>Gender</b>		
Man	64	0.64
Woman	36	0.36
<b>Age</b>		
17-30	57	0.57
31-40	32	0.32
40-50	12	0.12
<b>Last education</b>		
Elementary school/ Equivalent	5	0.05
Middle School/Equivalent	10	0.1
Senior High School/Equivalent	35	0.35
Bachelor degree	38	0.38
Master degree	12	0.12
<b>Experience using Jogja Smart Service (JSS) applications</b>		
<1 year	15	0.15
1-3 years	46	0.46
3-5 years	39	0.39

Based on Table 2 above, shows the characteristics of the respondents in this study, including gender, age, recent education, and experience using the Jogja Smart Service (JSS) application. The table above shows that the characteristics of the gender of the respondents in this study were 64 male respondents with a percentage of 64% of the total respondents and 36 female respondents with a percentage of 36% of the total respondents. Furthermore, namely the age characteristics of the respondents, around 57% of the total respondents were in the age range of 17 to 30 years, consisting of 57 respondents, the ages of respondents who were in the range of 31 to 40 years were 32 respondents (32%), while those aged 40 to 50 years consisted of 12 respondents (12%). On the last educational characteristic, the data shows

that 5 % of the total respondents have an elementary education background (Elementary School) with 5 respondents. Middle school/equivalent education (junior high school/equivalent) with 10% of respondents (10 Citizens'), high school/equivalent education (high school/equivalent) as much as 35% (35 Citizens'), while those with an undergraduate background cover 38% (38 Citizens'), and undergraduate education as much as 12% (12 Citizens'). The characteristics of the last respondent in this study experienced using the Jogja Smart Service (JSS) Application, the data table shows that respondents with less than 1 year of experience were 15% (15 Citizens'), respondents with 1-3 years of experience reached 46% (46 Citizens') than respondents who had used Jogja Smart Service (JSS)

application for 3-5 years were around 39% (39 Citizens') of the total respondents.

### B. VALIDITY TEST

The purpose of conducting validity tests is to establish benchmarks that enable researchers to determine whether a variable is valid or not when searching for findings [43]. In this research, the scholars introduced a model designed to examine data comprising various constructs: ICT Infrastructure (II), ICT Usage (IU), Human Capital (HC), ICT Regulation (IR), and Trust (T) in seeing the readiness of citizens for the implementation of E-Government in the Yogyakarta City Smart Service application. The evaluation of the

measurement model's efficacy centers around its credibility and dependability, which can be assessed through the indices of Convergent Validity and Discriminant Validity. These indices are derived from the results of the outer model, specifically the Average Variance Extracted (AVE) and outer loading. For the variables to be regarded as reliable, the AVE and outer loading values should go beyond 0.5. In terms of reliability, both Cronbach's Alpha and Composite Reliability values need to exceed 0.60 and 0.70, respectively, to ensure the consistency of the measurements [44]. The research model in this study is shown in the following figure :

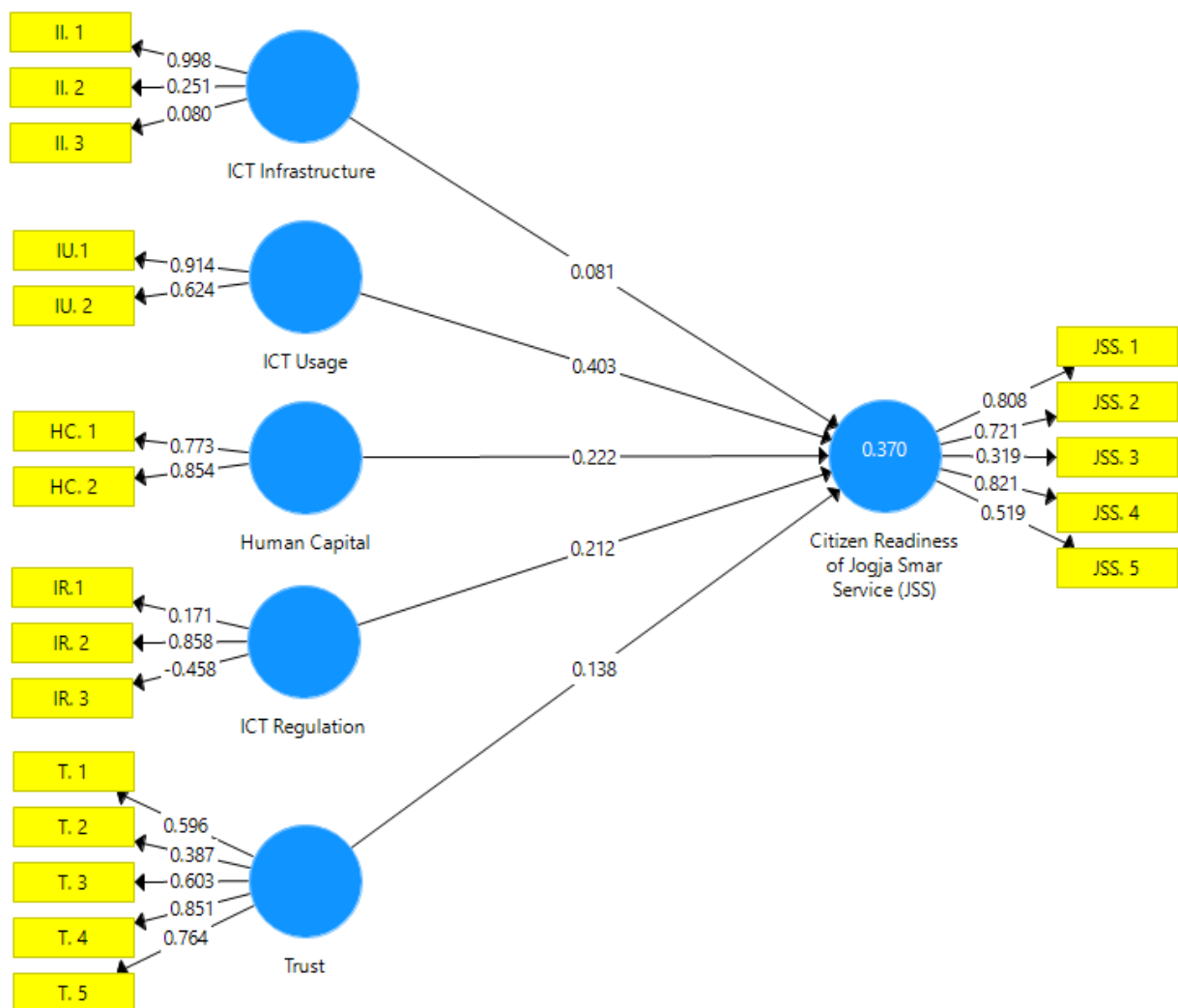


Figure 2. Research Model I

The results of the data validity test in this research model I are shown in the following table:

Table 3. Validity Test I

Variable	Indicator	Outer Loading	Information
Citizens' readiness of Jogja Smart Service (JSS) Application (Y)	JSS. 1	0.820	Valid
	JSS. 2	0.732	Valid
	JSS. 3	<b>0.319</b>	<b>Invalid</b>
	JSS. 4	0.814	Valid
	JSS. 5	<b>0.495</b>	<b>Invalid</b>
ICT Infrastructure (XI)	II. 1	0.713	Valid
	II. 2	0.808	Valid
	II. 3	<b>-0.473</b>	<b>Invalid</b>
ICT Usage (X2)	IU. 1	0.914	Valid
	IU. 2	<b>0.622</b>	<b>Invalid</b>
Human Capital (X3)	HC. 1	0.909	Valid
	HC. 2	<b>0.624</b>	<b>Invalid</b>
ICT Regulations (X4)	IR. 1	<b>0.130</b>	<b>Invalid</b>
	IR. 2	0.966	Valid
	IR. 3	<b>0.224</b>	<b>Invalid</b>
Trust (X5)	T.1	<b>0.597</b>	<b>Invalid</b>
	T. 2	<b>0.396</b>	<b>Invalid</b>
	T. 3	<b>0.600</b>	<b>Invalid</b>
	T. 4	0.851	Valid
	T. 5	0.761	Valid

Based on the Table 3, shows that for Variable Y (JSS) of the five indicators, there are two invalid indicators, namely JSS.3 with an outer loading of 0.319 and JSS.5 with an outer loading of 0.495. In variable X1 (II), of the three variable indicators there is one invalid indicator, namely indicator II.3 with an outer loading of -0.473. In variable X2 (IU), of the two variable indicators, there is one invalid indicator namely indicator IU.2 with an outer loading of 0.622. In variable X3 (HC), of the two variable indicators there is one invalid indicator namely indicator HC.2 with an outer loading of 0.624. In variable X4 (IR), of the three variable indicators there is one invalid indicator namely indicator IR.3 with an outer loading of 0.224. Variable X5 (T) of the five indicators there are three invalid indicators, namely T.1 with an outer loading of 0.597, T.2 with an outer loading of 0.396, and T. 3 with an

outer loading of 0.600. Based on the results of the validity test above, invalid indicators need to be removed from the model, which is then reprocessed using Smart PLS version 0.3 to produce research model II (Figure 3) and data validity test II (Table 4).

Based on Figure 3 and Table 4, show that all research variables in this study, namely Citizens' readiness for Jogja Smart Service (JSS) Application (Y), ICT Infrastructure (XI), ICT Usage (X2), Human Capital (X3), ICT Regulation (X4), and Trust (X5). If all research variables exhibit outer loading values exceeding 0.50 and AVE values surpassing 0.50, it can be inferred that all statements related to the research variables are deemed valid, satisfying the criteria for both convergent validity and discriminant validity.

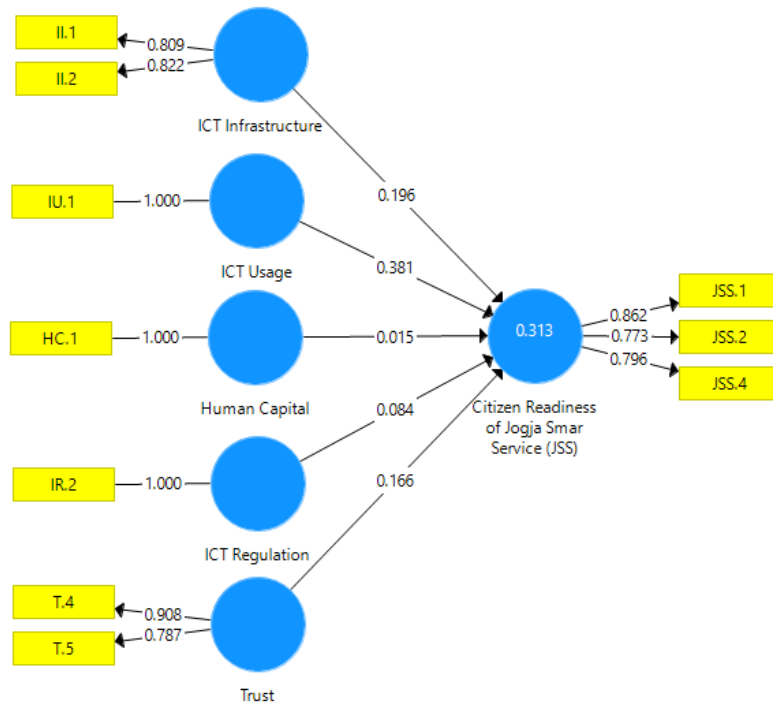


Figure 3. Research Model II

The results of the data validity test in this research model II are shown in the following table:

Table 4. Validity Test II

Variable	Indicator	Outer Loading	AVE	Information
Citizens' Readiness of Jogja Smart Service (JSS) Application (Y)	JSS. 1	0.862	0.658	Valid
	JSS. 2	0.773		
	JSS. 4	0.796		
ICT Infrastructure (X1)	II. 1	0.809	0.665	Valid
	II. 2	0.822		
ICT Usage (X2)	IU. 1	1.000	1.000	Valid
Human Capital (X3)	HC. 1	1.000	1.000	Valid
ICT Regulations (X4)	IR. 2	1,000	1.000	Valid
Trust (X5)	T. 4	0.908	0.722	Valid

### A. RELIABILITY TEST

A reliability test is a method used to assess the consistency and dependability of items within a measurement scale or instrument. Its primary objective is to ensure the reliability and stability of the measurement results obtained. In the context of this study, the research indicators undergo testing to demonstrate their reliability. Two commonly used measures for evaluating reliability are Cronbach's Alpha and Composite reliability. Cronbach's Alpha is employed to assess the internal consistency of the

measurement model. The interpretation of Cronbach's Alpha values includes different categories: 0.00–0.20 (very unreliable), 0.21–0.41 (unreliable), 0.42–0.60 (quite reliable), 0.61–0.80 (reliable), and 0.82–1.00 (very reliable). On the other hand, the Composite Reliability value typically surpasses Cronbach's Alpha and is considered reliable if it equals or exceeds 0.70 [45]. The reliability test in this study is shown in Table 5 as follows:



Table 5. Reliability Test

Variable	Cronbach's Alpha	Composite Reliability	Information
Citizens' Readiness of Jogja Smart Service (JSS) Application (Y)	0.741	0.852	Reliable
ICT Infrastructure (X1)	0.497	0.799	Reliable
ICT Usage (X2)	1.000	1.000	Reliable
Human Capital (X3)	1.000	1.000	Reliable
ICT Regulations (X4)	1.000	1.000	Reliable
Trust (X5)	0.626	0.838	Reliable

The mean value in Table 5 shows the suitability level of the five independent variables and one dependent variable. In Table 5, The research indicates values for Cronbach's Alpha and Composite Reliability, specifically greater than 0.60 and 0.70 respectively. Furthermore, all variables exhibit Composite Reliability values exceeding 0.82. This leads to the conclusion that

The hypothesis testing using the SEM-PLS bootstrapping technique on both independent and dependent variables. This was done to assess the reliability and validity of the research. The testing involved the utilization of T and P Values as statistical measures to evaluate the

all the research variables within this study fulfill these criteria: Citizens' readiness for Jogja Smart Service (JSS) Application (Y), ICT Infrastructure (X1), ICT Usage (X2), Human Capital (X3), ICT Regulation (X4), and Trust (X5) entered in the very reliable category.

#### B. HYPOTHESIS TESTING

hypothesis. The results are organized in tabular format. A validity value is considered satisfactory if it exceeds 1.96 (T-Statistic) and is less than 0.05 (P-Value)[46]. The outcomes of hypothesis testing within this research are displayed in Table 6.

Table 6. Hypothesis Test

	Original Sample (O)	Sample Means (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Information
ICT Infrastructure (X1) -> Citizens' readiness for Jogja Smart Service (JSS) application (Y)	0.196	0.207	0.086	2.269	0.024	Accepted
ICT Usage (X2) -> Citizens' readiness for Jogja Smart Service (JSS) application (Y)	0.381	0.376	0.093	4.084	0.000	Accepted
Human Capital (X3) -> Citizens' readiness for Jogja Smart Service (JSS) application (Y)	0.015	0.016	0.083	0.178	0.859	Rejected
ICT Regulation (X4) -> Citizens' readiness for Jogja Smart Service (JSS) application (Y)	0.084	0.080	0.094	0.901	0.368	Rejected
Trust (X5) -> Citizens' readiness for Jogja Smart Service (JSS) application (Y)	0.166	0.171	0.098	1.700	0.090	Rejected

Based on Table 6, the results of hypothesis testing in this study are as follows:

1. The P value of ICT Infrastructure is 0.024, with the T Statistic value is 2.269, then the hypothesis is accepted. It can be concluded that ICT Infrastructure (X1) is significantly influencing Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.
2. The P value of ICT Usage is 0.000, with the T Statistic value is 4.084, then the hypothesis is accepted. It can be concluded that ICT Usage (X2) significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.
3. The P value of Human Capital is 0.859, with the T Statistic value is 0.178, then the hypothesis is rejected. It can be concluded that Human Capital (X3) does not significantly influence Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.
4. The P value of the ICT Regulation is 0.368, with the T Statistic value is 0.901, then the hypothesis is rejected. It can be concluded that ICT Regulation (X4) is not significantly influencing Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.
5. The P value of Trust is 0.090, with the T Statistic value is 1.700, then the hypothesis is rejected. It can be concluded that Trust (X5) does not significantly influence Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application.

## E. DISCUSSION

This study empirically examines the theory of Citizens' readiness for E-Government (CREG) in the Jogja Smart Service (JSS) application in Yogyakarta City. Based on the results of hypothesis testing, the first hypothesis is ICT Infrastructure is significantly influencing Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application (accepted). ICT Infrastructure is an indicator in measuring the theory of Citizens' readiness for e-Government (CREG) which looks at the availability of ICT Infrastructure provided to citizens using e-Government services. This hypothesis testing is supported by data information provided by the Yogyakarta City Office of Communication, Informatics, and Encryption, the Jogja Smart Service (JSS) application had accumulated 220,479 users by April 2023. This was also reinforced by previous research which explained that the Jogja Smart Service application is a form of e-Government implementation as stipulated in Mayor Regulation No. 15 of 2015 which contains

a roadmap for e-government development, with the stages namely strengthening Network Infrastructure [47]. In Addition, in other literature, it is explained that infrastructure readiness in implementing e-Government in the Jogja Smart Service application is felt by citizens with a high number of Jogja Smart Service (JSS) application users [21], [48]. The Second hypothesis in this study shows that ICT Usage significantly influences Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application (accepted). ICT Usage is an indicator in measuring the theory of Citizens' readiness for e-Government (CREG) which looks at the level of education and knowledge of citizens in using computers and the internet. The results of the hypothesis in this study are supported by previous research which showed that 70.7% of Citizens' were able to access information from the JSS application by reading the main news on the JSS application page [32]. In Addition, the research hypothesis is also strengthened by previous research which showed an increase in the index of public satisfaction with government services since utilizing the Jogja Smart Service (JSS) application [26].

The third hypothesis in this study shows that Human Capital significantly does not influence Citizens' readiness for e-Government on the Jogja Smart Service (JSS) application (rejected). Human Capital is an indicator in measuring the theory of Citizens' readiness for e-Government (CREG) which looks at the extent to which Citizens' know about the internet in utilizing the Jogja Smart Service application. The results of this research hypothesis indicate that the citizens' knowledge of internet access in the Yogyakarta City is still lacking in accessing the Jogja Smart Service application. The results of this research hypothesis are strengthened by the results of previous studies which show that many Citizens' submit complaints regarding how to use the Jogja Smart Service (JSS) application submitted by the majority of elderly Citizens' because of technological stuttering [22], [26]. The fourth hypothesis in this study shows that ICT regulations have no significant effect on citizens' readiness for the implementation of e-Government in Jogja Smart Service (JSS). ICT regulations is an indicator in measuring the theory of Citizens' readiness for e-Government (CREG) which looks at the extent to which legislation influences the use of e-Government. The results of this research hypothesis are different from previous studies which explain that public service regulations in implementing e-Government are easily accepted by citizens [49].

The Fifth hypothesis in this study shows that Trust is not significantly influencing Citizens'

readiness for e-Government on the Jogja Smart Service (JSS) application (rejected). Trust is an indicator in measuring the theory of Citizens' readiness for e-Government (CREG) which looks at the extent to which citizens trust in e-Government services. The results of this research hypothesis are strengthened by previous research which shows that many Citizens' in Yogyakarta City still do not utilize the Jogja Smart Service (JSS) application in utilizing services and feel more secure and easier to receive face-to-face services [22], [35]. In Addition, many complaints from the citizens of Yogyakarta City on the Play Store regarding the problems that often occur in the Jogja Smart Service application, including the problem that the application runs slowly even though the internet is stable, the application service response is long, the application is often experiencing bugs/errors occur, and the service flow is too difficult [33], [34], [50]. The hypothesis accepted and rejected in this study indicate that there are affirmations and negations on the variables of previous studies which have similarities and differences in different research focuses.

## CONCLUSION

This study looks at the readiness of the Citizens' of Yogyakarta City for implementing e-Government in the Jogja Smart Service (JSS) application as measured using the theory of Citizens' readiness of E-Government (CREG) which consists of indicators of ICT Infrastructure, ICT Usage, Human Capital, ICT Regulation and Trust. The results of the research can be concluded that the citizens of Yogyakarta City are ready to receive e-Government services but their readiness still need improvement. This is based on the results of hypothesis testing which shows that ICT Infrastructure and ICT Usage have a significant influence on the citizens' readiness for e-Government in the Jogja Smart Service (JSS) application. Whereas Human Capital, ICT Regulation, and Trust have no significant influence on the citizens' readiness for e-Government in the Jogja Smart Service (JSS) application.

Based on the results of this research hypothesis test, Yogyakarta City Government needs to pay attention to citizens' readiness by conducting outreach and guidelines for using the Jogja Smart Service (JSS) application to increase the citizens' readiness and knowledge in using the Jogja Smart Service (JSS) application. Apart from that, the government also needs to improve the response quality of the Jogja Smart Service (JSS) application so that citizens' trust and satisfaction with e-

Government-based services in the Jogja Smart Service (JSS) application increases.

The main contribution of this research is to test empirically the citizens' readiness of the Yogyakarta City for the implementation of E-Government in the Jogja Smart Service (JSS) application. This is because research related to citizens' readiness in implementing e-Government has not been widely studied in the Jogja Smart Service (JSS) application with the hope that this research can contribute to improving the quality of e-Government services in the Jogja Smart Service (JSS) application. This study has several limitations because the research time is relatively short (1 month), the several limitations as follows; the number of respondents who are not too large, the number of variable respondents is limited and need for analysis using qualitative descriptive methods to strengthen the results of hypothesis testing. For this reason, the limitations of this study are expected to be used as recommendations for further studies.

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