Digital Literacy and Intention to Adopt E-Government (a Survey of Regional Inspectorate Employee in South Sumatra Province) in 2023

Firanda Meitania[1], Azhar[2], Alamsyah[3]

[1] Master of Public Administration Study Program, Sriwijaya University

[2,3] Faculty of Social and Political Sciences, Sriwijaya University

Email: firandameitania00@gmail.com, azhar@fisip.unsri.ac.id, alamsyah78@fisip.unsri.ac.id.

Abstract

This research aimed to analyze and determine employees' digital literacy and intention to adopt e-government at the regional inspectorate of South Sumatra Province. This study used perceived usefulness and perceived ease of use as intervening variables that influence an individual's intention to adopt e-government or not, either directly or indirectly. The research employed a quantitative method with data analyzed using SmartPLS version 3. Data were collected by distributing questionnaires to 80 employees of the Regional Inspectorate of South Sumatra Province using simple random sampling, and responses were measured on a Likert scale. The results indicated that digital literacy did not significantly affect the intention to adopt e-government. However, digital literacy influenced perceived usefulness, which in turn affected the intention to adopt e-government. Additionally, digital literacy affected perceived ease of use, and perceived ease of use influenced the intention to adopt e-government. Ultimately, digital literacy impacted the intention to adopt e-government through perceived usefulness and perceived ease of use.

INTRODUCTION

The development of information technology has experienced growth every year. The use of information technology makes it easier for everyone to access things through their electronic devices. Along with this development, information technology facilitates human life in areas such as payments, transportation, education, and even governance. The advancement of information technology requires the Indonesian government today to also implement innovations in line with the times, particularly in the provision of public services. Rukayat (Aswin & Mediyastuti Sofyan, 2022) argues that the government, as a service provider, must be responsible and continuously strive to deliver the best services to improve public services and community satisfaction. Therefore, the Indonesian government is currently vigorously undertaking bureaucratic transformation from a traditional governance system to an electronic-based governance by adopting information technology.

This transformation alters how public services are delivered by leveraging the Electronic Government (E-Government) system. E-Government refers to the use of technology to access and provide services to citizens, partners, and government employees (Silcock, 2001). According to Forman, as cited in (Utomo & Mulyanto, 2010), E-Government is defined as the use of digital technology in executing government activities to enhance effectiveness, efficiency, and public service. Achieving governmental objectives undoubtedly requires supporting variables. The shift from traditional working methods to those that rely on technology requires preparedness and resources, such as infrastructure and facilities, so that the public will feel satisfied with the services

provided. In addition, the spread of the internet throughout Indonesia is necessary to support the success of this E-Government system. APJII (Indonesian Internet Service Providers Association) recorded that in 2022, approximately 77.02% of the Indonesian population used the internet, up from 73.70% in 2020.

The increasing use of the internet marks an advancement in information technology, compelling the government to address the challenges of the digital era. The COVID-19 pandemic has also accelerated the development of internet-based technology. However, during implementation, there are obstacles due to the rapid pace of technological development, namely the lack of digital literacy among government employees in implementing e-government. Literacy is a concept that has existed from prehistoric times to the present. UNESCO (Law et al., 2018) defines literacy as the human ability to understand, identify, communicate, interpret, create, and use printed and written media in a particular context. Clifford in (Bawden, 2001) states that literacy is not merely about being literate or illiterate, but also involves logical thinking, good cognitive skills, and reasoning. Olsen and Coons, in (Bawden, 2001), also define literacy as "Literacy can be defined as having the skills one needs to make the connection to the information necessary to survive in society," which means the skills needed to connect with the information necessary to survive in society.

The development of information and communication technology, which is becoming increasingly complex, requires individuals to master digital literacy. The term digital literacy has been in use since the 1990s, referring to the ability to read and comprehend hypertextual and multimedia texts (Bawden, 2001). Lanham, as cited in (Bawden, 2001), states that digital literacy is synonymous with multimedia literacy, meaning the ability to understand presented information and to interpret images, sounds, texts, and numbers that are delivered not through print media. Sharma et al., as cited in(Rumata & Nugraha, 2020), also define digital literacy as the ability to use the internet and digital media to access and evaluate digital information, as well as to participate in activities such as content creation, communication, and information exchange.

Digital knowledge, or digital literacy, is essential for users of information and communication technology, especially in the use of digital media. The government must consider digital literacy, as a lack of understanding of digital media can hinder the development of e-government. Internet-based public services will be complicated to implement without a sense of digital literacy. In March 2019, the COVID-19 pandemic forced Indonesian society to work from home (WFH), including government employees. This WFH arrangement required all employees to work from home, using information and communication technology to carry out their tasks. The implementation of WFH, intended to enhance the use of E-government, has not gone smoothly. Acting Head of the National Civil Service Agency (BKN), Bima Haria Wibisana (Saputri & Febryan A, 2022), stated that around 30 percent of civil servants reported that the implementation of WFH was very challenging, 40 percent indicated that WFH made no difference compared to working in the office, and the remaining 30 percent did not respond to the survey. Acting Head of BKN, Bima Haria Wibisana, concluded that the 30 percent of civil servants who did not respond to the survey were those who did not work at all during WFH. Civil servants who did not perform their duties while working from home are suspected of being due to a lack of understanding of digital technology. Many civil servants cited not understanding digital technology due to their advanced age, and some also commented that they were not accustomed to the digital working methods.

Understanding digital literacy has become a matter the government must take seriously. The government of South Sumatra is actively promoting e-government by continuously enhancing public and government employees' understanding of digital literacy and technological advancements. It is recorded that the digital literacy index of South Sumatra has reached a good rating with a score of 3.46 based on 285 respondents. The digital literacy skills of government employees significantly impact the development of e-government, particularly for government oversight bodies such as the Regional Inspectorate of South Sumatra Province. The Regional Inspectorate of South Sumatra Province is an agency that carries out supervisory functions in the administration of the South Sumatra provincial government and is based on, and accountable to, the Governor through the Regional Secretary. The Regional Inspectorate of South Sumatra Province supervises the implementation of the Governor's duties and authorities, monitors efficiency and economy, provides early warnings, enhances risk management effectiveness, and participates in eradicating maladministration within the South Sumatra provincial government. The shift to an electronic-based system has led the Regional Inspectorate of South Sumatra Province to transition its system to an electronic-based one by adopting e-government.

The adoption system can be implemented gradually along with other preparations. The e-government adoption process here can be observed in how employees of the Regional Inspectorate of South Sumatra Province carry out their main duties and functions using e-government. Another adoption process can be seen in the office system that uses fingerprint identification for employee attendance at the Regional Inspectorate of South Sumatra Province. In addition, using a website as a guestbook accessible via gadgets can facilitate scheduling meetings with visitors and prevent sudden disruptions to work. The adoption process of e-government does not merely involve providing applications or websites used to support the work of employees at the Regional Inspectorate of South Sumatra Province, but also entails providing other infrastructure such as the availability of electronic media evenly across each sub-division within the office of the Regional Inspectorate of South Sumatra Province, adequate internet access in various parts of the office, as well as the knowledge and skills of the employees of the Regional Inspectorate of South Sumatra Province.

The system changes have been implemented by the Regional Inspectorate of South Sumatra Province using several e-government tools, including the Whistle Blowing System (WBS), an application for reporting corruption within government institutions. WBS detects fraud and is an internal employee integrity program (Haryanti, 2016); E-Sumsel, a website that records financial data, budgeting, official travel, and other matters; and LAPOR! (Public Service and Online Complaints) which is a service that provides a platform for the public to submit aspirations and complaints addressed to both regional and central government authorities (Kementerian PANRB, 2022). SIMDA (Regional Management Information System) is an application designed to manage regional finances, particularly in the preparation of local government budgets (APBD), serving as a reporting entity at the SKPKD level, and as an accounting entity at the SKPD level (Tim Aplikasi SIMDA, 2022). Meanwhile, SIMPEG (Employee Management Information System) provides data on government agency employees, including employee registration, staffing and workforce planning, credit score assessments, payroll management, and other human resources-related aspects (BKD Pemprov DKI Jakarta, 2022).

The government has strongly promoted computerization to more neatly organize work, from planning to reporting. At the Regional Inspectorate of South Sumatra Province, financial planning and reporting are carried out manually, reviewed by the head of the finance sub-division,

then by the Provincial Inspector of South Sumatra, and only after the report is approved is it entered into the SIMDA application and the SIPD website. The SIMDA application and the SIPD website facilitate the data entry process through financial reports (LK), enabling planning and reporting to be neatly organized. Although some processes are still carried out manually, e-government adoption continues. Employee performance assessments are also conducted manually, based on the Employee Performance Target (SKP) format issued in Minister of PAN-RB Regulation No. 8 of 2021 concerning the Civil Servants Performance Management System and Minister of PAN-RB Regulation No. 6 of 2022 regarding the Management of Civil Servants Performance. Based on the SKP results, there will be both rewards and punishments for civil servants who meet or fail to meet the evaluation standards. The form of reward for employees who meet the standards is not precisely known, whereas the punishment given can include moderate sanctions, suspension, and so forth.

E-government shapes individual attitudes toward accepting or rejecting new technology, thus requiring an understanding of digitalization. This understanding can give rise to personal perceptions of e-government, which are influenced by various variables and indicators. Realizing a system change from manual operations to using a system (e-government) requires good management by creating a unit or group responsible for managing e-government. The Regional Inspectorate of South Sumatra Province also established a work unit responsible for managing e-government. However, the responsibility for managing e-government is often entrusted to a single officer who understands how e-government works or possesses digital literacy, resulting in situations in which an officer may hold more than 5 e-government management responsibilities. The delegation of this management is based on several reasons; according to research by Ngantung et al., (2014), there is a relationship between age and the level of proficiency in using technology. By age, more than 50% of the inspectorate employees are over 40 years old. According to the Revised Strategic Plan of the South Sumatra Provincial Regional Inspectorate for 2019-2023, there are 100 employees, comprising 54 men and 46 women, with educational backgrounds ranging from senior high school to the doctoral level.

An individual's proficiency in using digital technology significantly affects the quality of their performance. Rumata & Nugraha (2020) In their study, "Low Level of Digital Behavior of Ministry of Communication and Information ASN: Digital Literacy Survey in Government Agencies," they stated that at least the ability and knowledge of digital technology exist within ASN, as this would support their duties and functions in carrying out daily tasks. Rumata & Nugraha, (2020) Also stated that digital literacy is the core of digital government. This is also affirmed in research by Ngantung et al., (2014) on ICT Literacy Analysis of Civil Servants (ASN) in Manado City Government and Sumedang Regency, as well as in the study "ASN Digital Literacy (ASN Digital Literacy Improvement Strategy Sumedang Regency)" conducted by (Wulandari et al., 2022).

The development of electronic systems in government is not merely to keep up with the times, but rather to serve as a medium of communication between the government and the public. However, according to research by Nugraha, (2018) titled "Government and Public Services (A Study on the Success Elements of E-Government Development in the Sleman Regency Government)," the current development of e-government is limited to providing information. It lacks two-way communication between the public and the government due to insufficient facilities and understanding of e-government technology. Furthermore, in the study by Wirawan, (2020) on the Implementation of E-Government in Welcoming the Contemporary Industrial Revolution 4.0

Era in Indonesia, it is stated that the implementation of e-government in Indonesia is hindered by a lack of information-sharing and documentation culture, limited IT skills among human resources, inadequate infrastructure, and restricted access to information. This description illustrates that digital literacy significantly influences civil servants in carrying out their daily tasks, and that the government should take e-government enhancement seriously for those aiming to establish an electronic-based governance.

The researcher aims to explore digital literacy in relation to the adoption of e-government among employees of the Regional Inspectorate of South Sumatra Province, as a local government oversight agency in South Sumatra, by using the Technology Acceptance Model (TAM) developed by Davis in 1989. TAM is a model that explains individual acceptance of new systems or technologies. According to the TAM model, technology acceptance is based on two variables: perceived usefulness and perceived ease of use, where individuals are more likely to accept a system if it is both valuable and easy to use. Researchers aim to examine whether the two TAM variables drive the intention to adopt e-government. Studies using the TAM model have been extensively conducted by previous researchers, such as Akbar & mar'aini, (2020); Heryanta & Ayuni, (2019); Martunisa et al., (2021); Sensuse & Widiatmika, (2012) who conducted research using quantitative methods focusing on technology acceptance and usage influenced by users' perception of usefulness (perceived usefulness) and users' perception of ease of use (perceived ease of use). The study analyzed various aspects, including gender, age, educational background, and main duties and functions. However, in the study conducted by Khatimi et al., (2022) titled "Analysis of Factors Affecting the Acceptance and Use of the Palui Baiman Application Using the Technology Acceptance Model (TAM)," it was stated that perceived usefulness does not affect users' acceptance of the Palui Baiman application. In contrast, perceived ease of use does influence users' acceptance of the Palui Baiman application.

There have been numerous studies using the Technology Acceptance Model; however, few have considered digital literacy as a variable in e-government adoption. Therefore, the researcher is very interested in conducting a study entitled "Digital Literacy and the Intention to Adopt E-Government (A Survey of Employees at the Regional Inspectorate of South Sumatra Province)."

METHODS

The research design used in this study is quantitative and descriptive. Quantitative research is a method used to test a theory by relating variables measured numerically and analyzed using statistics (Cresswell, 2010). This study consists of two variables: digital literacy as the independent variable (X) and the quality of civil servants as the dependent variable (Y). Data collection was conducted through questionnaires, observations, and documentation. This research employed a simple random sampling technique, meaning the sample was selected at random without any particular grouping. The sample size was determined using the Slovin formula, with a 5% margin of error. Based on calculations using this Slovin formula, the sample in this study consisted of 80 employees from the Regional Inspectorate of South Sumatra Province.

RESULTS AND DISCUSSION

In this study, participants were categorized by gender, age, employment status, and education, and comprised 80 respondents drawn from the research scope, namely the Regional Inspectorate of South Sumatra Province. Based on the data, the number of male respondents exceeds that of female respondents. As much as 61.25% of the respondents in this study were male, while the remaining 38.75% were female. The largest age group was 46-55 years, consisting of 29 respondents, or 36.25%, followed by the age group 36-45 years with 28 respondents (35.00%), then the age group 26-35 years with 13 respondents (16.25%), and the smallest group was the 56-65 years age range with 10 respondents (12.50%). The classification of employment status at the research site is divided into two categories: civil servants (ASN), accounting for 91.25% of the research respondents, and contract employees, accounting for 8.75%. As many as 50.00% of respondents held a Bachelor's degree (S1), totaling 40 respondents, followed by 26 respondents (32.50%) having a Master's degree (S2). Other educational levels were below 10%, including high school or equivalent education held by seven respondents (8.75%), a diploma (D3) held by six respondents (7.50%), and, finally, a Doctorate (S3) held by one respondent (1.25%).

1. Response to Digital Literacy

Based on the results of the questionnaire distributed to employees of the Regional Inspectorate of South Sumatra Province, the response to digital literacy is shown in the following table:

Table 1 Responses to Digital Literacy

	digital literacy										
indicator	STS (1)		TS (2)		N (3)		S (4)		SS (5)		Mean
	F	%	F	%	F	%	F	%	F	%	
WK.1	0	0.0	8	10.0	27	33.8	32	40.0	13	16.3	3.63
WK.2	0	0.0	0	0.0	23	28.8	41	51.3	16	20.0	9.91
WK.3	0	0.0	1	1.3	27	33.8	26	45.0	16	20.0	3.84
KS.1	0	0.0	2	2.5	27	33.8	31	38.8	0	0.0	2.61
KS.2	0	0.0	4	5.0	30	40.0	32	40.0	14	17.5	3.70
KS.3	0	0.0	6	7.5	43	27.5	22	27.5	9	11.3	3.42
KS.4	0	0.0	10	12.5	28	37.5	30	37.5	12	15.0	3.55
KS.5	0	0.0	1	1.3	17	46.3	37	46.3	25	31.3	4.07
KS.6	0	0.0	3	3.8	22	43.8	35	43.8	20	25.0	3.90
PA.1	0	0.0	8	10.0	25	37.5	30	37.5	17	21.3	3.70
PA.2	0	0.0	9	11.3	22	45.0	36	45.0	13	16.3	3.66
PA.3	0	0.0	3	3.8	21	50.0	40	50.0	16	20.0	3.86
Sum	**0**	**0.0**	**55**	**5.7**	**312**	**32.5**	**402**	**41.9**	**191**	**19.9**	**3.76**

Source: Primary data processed by the researcher (2023)

2. Response to Perceived Ease of Use

Based on the results of the questionnaire conducted in this study, the following are the respondents' responses to Perceived Ease of Use:

Table 2 Response to Perceived Ease of Use

	Perceived Ease of Use										
indicator	STS (1)		TS (2)		N (3)		S (4)		SS (5)		Mean
	F	%	F	%	F	%	F	%	F	%	
PEOU.1	2	2.5	13	16.3	20	25.0	26	32.5	19	23.8	3.59

PEOU.2	0	0.0	6	7.5	19	23.8	37	46.3	18	22.5	3.84
PEOU.3	0	0.0	3	3.8	27	33.8	34	42.5	16	20.0	3.79
PEOU.4	0	0.0	14	17.5	12	15.0	23	28.8	31	38.8	3.89
SUM	**2**	**0.6**	**36**	**11.3**	**78**	**24.4**	**120**	**37.5**	**84**	**26.3**	**3.77**

Source: Primary data processed by the researcher (2023)

3. Response to Perceived Usefulness

Based on the research conducted by the researcher, the questionnaire data regarding Perceived Usefulness are as follows:

Table 3 Response to Perceived Usefulness

Perceived Usefulness											
indicator	STS (1)		TS (2)		N (3)		S (4)		SS (5)		Mean
	F	%	F	%	F	%	F	%	F	%	
PU.1	0	0.0	9	11.3	15	18.8	32	40.0	24	30.0	3.89
PU.2	0	0.0	6	7.5	25	31.3	23	28.8	26	32.5	3.86
PU.3	2	2.5	6	7.5	25	31.3	20	25.0	27	33.8	3.80
PU.4	0	0.0	9	11.3	14	17.5	34	42.5	23	28.8	3.89
SUM	**2**	**0.6**	**30**	**7.5**	**79**	**26.9**	**109**	**35.9**	**100**	**29.1**	**3.86**

Source: Primary data processed by the researcher (2023)

4. Response to the Intention to Adopt E-Government

Based on the results of the questionnaire, the respondents' responses to the intention to adopt e-government are as follows:

Table 4 Response to the Intention to Adopt E-Government

Intention to Adopt E-Government											
indicator	STS (1)		TS (2)		N (3)		S (4)		SS (5)		Mean
	F	%	F	%	F	%	F	%	F	%	
BU.1	7	8.8	5	6.3	26	32.5	21	26.3	21	26.3	3.55
BU.2	5	6.3	5	6.3	23	28.8	31	38.8	16	20.0	3.60
BU.3	4	5.0	5	6.3	33	41.3	24	30.0	14	17.5	3.49
BU.4	21	26.3	12	15.0	22	27.5	14	17.5	11	13.8	2.78
BU.5	0	0.0	6	7.5	22	27.5	35	43.8	17	21.3	3.79
SUM	**37**	**9.3**	**33**	**8.3**	**126**	**31.5**	**125**	**31.3**	**79**	**19.8**	**3.44**

Source : Primary data processed by the researcher (2023)

Research Result

The research results were obtained through the distribution of questionnaires conducted by the researcher to the employees of the Regional Inspectorate of South Sumatra Province. However, before conducting the research, the researcher carried out a trial of the questionnaire with several respondents and obtained valid and reliable results. The research results were then processed using the SmartPLS 3 application, yielding the following results:
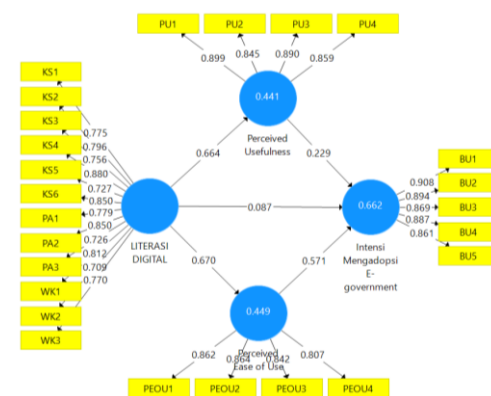
Figure 1 First Order

Based on the first-order structure of the variable interrelationships calculation, the analysis of the inner model and outer model is obtained, which will be described as follows.

1. Outer Model

In the SmartPLS application, the data analysis technique for the outer model is carried out in three stages: convergent validity, discriminant validity, and reliability testing.

1.1. Convergent Validity

Convergent validity testing using SmartPLS 3 can be considered valid if a construct's loading factor is greater than 0.70. If a construct exceeds 0.70, it indicates that the indicator has a high correlation with the construct being measured. However, an indicator can also be considered valid if its value is greater than 0.50, as this indicates that it explains half of the indicator. The loading factor values in this study can be seen in the following table:

Table 5 Loading factor

Variable	Indicator	Loading Factor	Summary
Digital Literacy	WK.1	0.812	Valid
	WK.2	0.709	Valid
	WK.3	0.770	Valid
	KS.1	0.775	Valid
	KS.2	0.796	Valid
	KS.3	0.756	Valid
	KS.4	0.880	Valid
	KS.5	0.727	Valid
	KS.6	0.850	Valid
	PA.1	0.779	Valid
	PA.2	0.850	Valid
	PA.3	0.726	Valid
Perceived Usefulness	PU.1	0.899	Valid
	PU.2	0.845	Valid
	PU.3	0.890	Valid
	PU.4	0.859	Valid
Perceived Ease Of Use	PEOU.1	0.862	Valid
	PEOU.2	0.864	Valid
	PEOU.3	0.842	Valid
	PEOU.4	0.807	Valid
Intention to adopt e-goverment	BU.1	0.908	Valid

	BU.2	0.894	Valid
	BU.3	0.869	Valid
	BU.4	0.887	Valid
	BU.5	0.861	Valid

Source : data processed in SmartPLS 3 (2023)

The table above shows that the indicators for each variable are considered valid, as they each have a value greater than 0.70. Therefore, the 25 existing indicators can be used in the study. Based on the rules of thumb, the Average Variance Extracted (AVE) value in the convergent validity test should also be considered. The following are the AVE values for the variables.

Table 6 Average Variance Extracted

Variable	Average Variance Extracted (AVE)
Digital Literacy	0.620
Perceived Ease of Use	0.712
Perceived Usefulness	0.763
Intention to Adopt E-government	0.781

Source: data processed in SmartPLS 3 (2023)

The AVE values shown in the table above indicate values >0.5, hence it is stated that these 25 indicators are valid, with the highest value found in the intention to adopt e-government.

1.2. Discriminant Validity

Discriminant validity is assessed by examining cross-loadings obtained with SmartPLS 3. For validity, the cross-loading values must be greater than 0.70. Cross-loading is obtained when indicators measure their own constructs (variables) more strongly than other constructs. The highest cross-loading value is found in indicator BU.1 of the intention to adopt e-government variable, at 0.908, while the lowest cross-loading value is in indicator WK.2 of the digital literacy variable, at 0.709, which is close to the threshold of 0.70. Based on the results of the discriminant validity test, all indicators meet the criteria and can proceed to further research.

1.3. Reliability Test

A construct can be considered reliable if the Cronbach's Alpha and Composite Reliability values are greater than 0.70 (>0.70) with a minimum threshold of 0.60.

Table 7 Cronbach's Alpha and Composite Reliability

Variable	Conbranch Alpha	Composite Reliability	Summary
Digital Literacy	0.930	0.947	Reliabel
Perceived Usefulness	0.945	0.951	Reliabel
Perceived Ease Of Use	0.865	0.908	Reliabel
Intention to Adopt E-government	0.896	0.928	Reliabel

Source: data processed in SmartPLS 3 (2023)

Based on the table above, each variable has a value greater than 0.70, indicating they are reliable. The variable of perceived usefulness has the highest values for Cronbach's alpha and composite reliability, at 0.945 and 0.951, respectively.

2. Inner model

Inner model analysis is conducted to understand the cause-and-effect (causal) relationships between variables by examining the R-squared(R^2), the path coefficient values or significance tests, and the F-squared value.

2.1. R-square (R^2)

Table 8 R-square

	R Square	R Square Adjusted
Intention to Adopt E-government	0.662	0.648

Source: : data processed in SmartPLS 3 (2023)

Based on the adjusted R-square value in the table above, it indicates that the intention to adopt e-government accounts for only 0.648 (64.8%). Therefore, the variable of intention to adopt e-government falls into the moderate category.

2.2. Path Coeficient dan t-value

Table 9 Path Coefficient dan T-Value

	T Statistics (|O/STDEV|)	P Values
Digital Literacy -> Intention to Adopt *E-Government*	0.759	0.450
Digital Literacy -> *Perceived Ease Of Use*	12.651	0.000
Digital Literacy -> *Perceived Usefulness*	12.241	0.000
Perceived Ease Of Use -> Intention to Adopt *E-Government*	5.661	0.000
Perceived Usefulness -> Intention to Adopt *E-Government*	1.998	0.049

Source: data processed in SmartPLS 3 (2023

Based on the table above, digital literacy does not have a direct effect on the intention to adopt e-government, and that effect is not significant. However, digital literacy positively affects perceived ease of use, PU, and the intention to adopt e-government; perceived ease of use positively affects PU; PU positively affects the intention to adopt e-government; and the T-statistic is significant.

2.3. F-square

Table 10 F-square

	Intention To Adopt E-Government	Digital Literacy	Perceived Ease Of Use	Perceived Usefulness
Intention To Adopt E-Government				
Digital Literacy	0.011		0.816	0.789
Perceived Ease Of Use	0.418			
Perceived Usefulness	0.068			

Source: data processed in SmartPLS 3 (2023)

The table shows that digital literacy does not affect the intention to adopt e-government; however, it does influence perceived ease of use and perceived usefulness. Perceived ease of use and perceived usefulness, as intervening variables, affect the intention to adopt e-government.

3. Hypothesis Testing

Hypothesis testing is conducted to determine the influence or relationship between variables by examining the original sample value, the T-statistic, and the p-value. The original sample value in the SmartPLS application is used to identify positive or negative relationships between variables: values close to +1 indicate a positive relationship, and values close to -1 indicate a negative relationship. The T-statistic value to be considered should be greater than 1.96, and a p-value is considered significant if it is less than 0.05. In this study, hypothesis testing will examine both direct effects and indirect effects (intervening variables), and the results of the hypothesis testing can be seen in the following table:

Table 11 Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Digital Literacy -> Intention to Adopt E-Government	0.087	0.082	0.123	0.713	**0.478**
Digital Literacy -> Perceived Ease Of Use	0.670	0.674	0.059	11.360	**0.000**
Digital Literacy -> Perceived Usefulness	0.664	0.668	0.054	12.210	**0.000**
Perceived Ease Of Use -> Intention to Adopt E-Government	0.571	0.583	0.106	5.360	**0.000**
Perceived Usefulness -> Intention to Adopt E-Government	0.229	0.220	0.107	2.147	**0.035**

Source: data processed in SmartPLS 3 (2023)

Table 12 Hypothesis Testing of Intervening Variables

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Digital Literacy -> Perceived Ease Of Use -> Intention to Adopt E-Government	0.383	0.393	0.082	4.693	**0.000**
Digital Literacy -> Perceived Usefulness -> Intention to Adopt E-Government	0.152	0.147	0.072	2.110	**0.038**

Source: data processed in SmartPLS 3 (2023)

Based on the two tables above, it can be shown that there is an influence among the constructs, which can be described as follows:

3.1. Hypothesis 1

Based on the table, it is known that literacy on the intention to adopt e-government has a P-value greater than 0.05 (0.478), with a T-statistic of 0.713, which is also less than 1.96. Therefore, the first hypothesis is rejected because digital literacy does not have a significant effect on the intention to adopt e-government, even though the original sample value is positive.

3.2. Hypothesis 2

Hypothesis two has a P-value of 0.000 (< 0.05) and a T-statistic of 12.210 (> 1.96), indicating that hypothesis two has an effect. This hypothesis is further supported by an original sample value of 0.664, which is close to 1, indicating a positive effect. It can be concluded that hypothesis 2 is accepted: digital literacy has a significant positive influence on perceived usefulness.

3.3. Hypothesis 3

Table 11 shows that perceived usefulness has an effect on the intention to adopt e-government, as indicated by a P-value of 0.035, which is below 0.05. This hypothesis is also considered significant because its T-statistic is 2.147, which, according to the rules of thumb, should be above 1.96. Furthermore, this effect is supported by an original sample value of 0.229, which is considered positive. Therefore, the hypothesis is accepted, with results indicating that perceived usefulness has a significant positive effect on the intention to adopt e-government.

3.4. Hypothesis 4

Hypothesis 4 indicates that the independent variable affects the dependent variable through an intervening (mediating) variable. The hypothesis was tested using an intervening variable through the bootstrapping procedure in SmartPLS, as shown in Table 20. The table shows a P-value of 0.038, indicating a significant effect, with a T-statistic of 2.110, further supported by an original sample value of 0.152. The hypothesis is accepted: digital literacy significantly influences the intention to adopt e-government through perceived usefulness.

3.5. Hypothesis 5

Based on Table 12, digital literacy has a positive and significant effect on perceived ease of use, as indicated by a P-value of 0.000 (below 0.05), a T-statistic of 11.360 (above 1.96), and an original sample value of 0.670 (close to +1). Therefore, Hypothesis 5 is accepted.

3.6. Hypothesis 6

Based on Table 12, Hypothesis 6 is accepted. Perceived ease of use has a positive and significant effect on the intention to adopt e-government. This hypothesis is accepted by considering the values of the P-value, T-statistic, and original sample in accordance with the rules of thumb from SmartPLS, namely a P-value of 0.000, which is below 0.05, a T-statistic of 5.360, which is above 1.96, and an original sample value close to +1, which is 0.571.

3.7. Hypothesis 7

Hypothesis 7 indicates an indirect effect through an intervening variable. Based on Table 12, the P-value is 0.000, indicating evidence of an effect, and the T-statistic is 4.693, which is significant. Additionally, the original sample value is 0.383, approaching +1.

Hypothesis 7 is accepted, indicating that digital literacy has a positive and significant effect on the intention to adopt e-government through perceived ease of use.

Discussion

This study was conducted to examine the influence of digital literacy on the intention to adopt e-government, using perceived usefulness and perceived ease of use as intervening variables that exert both direct and indirect effects. The research was conducted by surveying 80 employees of the Regional Inspectorate of South Sumatra Province, with respondents' characteristics including gender, age, employment status, and education. The survey, conducted by distributing questionnaires, revealed that the number of male employees exceeded that of female employees. The 46-55-year age group was the most represented among the other age ranges. Regarding employment status, civil servants (ASN) were more numerous compared to contract employees (honorary staff). As for educational level, undergraduate (S-1) degree holders were the most prevalent.

Technological advancements have changed daily life. These changes have led the government to transform its operations from traditional methods to modern ones through the adoption of e-government. The process of adoption, of course, does not occur suddenly; the intention to adopt can be influenced by other variables, such as digital literacy, as in this study, which uses digital literacy as a variable affecting the intention to adopt e-government. Based on the results of the hypothesis testing conducted, digital literacy does not influence the intention to adopt e-government. This is in line with previous research Mulyani & Kurniadi, (2015) which found that subjective norms and attitudes towards use do not have a direct effect on the intention to use. According to the study conducted by Nugraha (2018),the implementation of e-government can be carried out if there is initiative from resources; in this study, the concept of initiative involves skills, knowledge, and digital technology behavior, yet it cannot guarantee that individuals will take the initiative to adopt e-government. Similarly, the study by Wirawan, (2020) found that when accepting new technology, people with knowledge consider the innovation's value. The values considered were innovativeness and compatibility, and both hypotheses were accepted in Wirawan, (2020) study. Therefore, the researcher can conclude that an individual's digital literacy does not directly influence the intention to adopt e-government, and Hypothesis 1 is rejected.

Based on the first hypothesis, the digital literacy variable (independent) does not affect the intention to adopt e-government variable (dependent). However, after testing the hypotheses on the perceived usefulness and perceived ease of use variables, it was found that digital literacy does affect these two intervening variables, so hypotheses 2 and 5 are accepted. This is reinforced by previous research by Sensuse & Widiatmika, (2012), which found that experience with the internet significantly affects perceived usefulness and perceived ease of use. Knowledge of digitalization influences how a person uses a system, focusing on its usefulness and ease of use. The influence exerted is based on the individual's knowledge, abilities, and behavior, with an average value above 0.70, indicating whether a system is sound and facilitates their tasks.

Perceived usefulness and perceived ease of use as intervening variables (independent variables) can influence the dependent variable both directly and indirectly. In hypotheses 3 and 6, it was found that perceived usefulness and perceived ease of use affect the intention to adopt e-government. The influence of these two independent variables is supported by previous research, such as studies by Akbar & mar'aini, (2020); Martunisa et al., (2021); Ngantung et al., (2014); Wirawan, (2020), which found that perceived usefulness and perceived ease of use affect actual

usage. In line with the study by Martunisa et al., (2021), perceived usefulness and perceived ease of use affect the actual use of e-filing. Furthermore, research by Akbar & mar'aini, (2020) found that perceived usefulness and perceived ease of use have a positive, significant impact on the successful implementation of SIPKD. This is further reinforced by research conducted by Wirawan, (2020), which states that an e-government system can operate effectively if there is an equitable distribution of IT and systems and the application or website's actual functions are utilized, rather than merely serving as a provider of static information.

Hypotheses 4 and 7 indicate that there is an influence between the dependent variables through the independent variables. The hypothesis was supported, indicating that digital literacy has a positive and significant effect on the intention to adopt e-government, mediated by perceived usefulness and perceived ease of use. This influence is an indirect effect exerted by the independent variables on the dependent variables. This is similar to the study conducted by Setyawati, (2020), which found that independent variables accounted for 62.8% of the variance in the dependent variables, while 32% was attributed to other variables, and also noted that perceived usefulness and perceived ease of use influence behavioral intention through attitude toward using.

The Indonesian government has implemented digital technology across government systems through Presidential Instruction No. 3 of 2003 concerning the Policy and National Strategy for the Development of E-Government, transforming Indonesia's governance process into an electronic-based system. The changes were made to provide better public services. Efforts to develop e-government have increasingly been carried out by government bureaucracies to provide the best possible public services. Rukayat (Aswin & Mediyastuti Sofyan, 2022) states that the government must be responsible and strive to provide the best services in order to improve public satisfaction and public service delivery. Realizing the objectives of e-government requires the government to remain committed to developing e-government by considering infrastructure such as the availability of adequate internet and technology. Furthermore, it is necessary to conduct skill training and to raise awareness regarding digitalization. The adoption of e-government can provide significant benefits to public services when appropriately implemented. An individual's intention to adopt e-government facilitates bureaucratic processes, making them more efficient, accountable, and of higher quality.

CONCLUSION

Based on research examining digital literacy and the intention to adopt e-government by surveying employees of the Regional Inspectorate of South Sumatra Province, the following findings can be concluded:

1. Digital literacy does not affect the intention to adopt e-government, as the P-value is greater than 0.05 (0.478) and the T-statistic is 0.713, which is also less than 1.96.
2. Digital literacy has a positive and significant effect on perceived usefulness. The P-value is less than 0.05, specifically 0.000, with a T-statistic of 12.210, which is greater than 1.96, and the path coefficient is close to +1, at 0.664.
3. Perceived usefulness has a positive and significant effect on the intention to adopt e-government. This is indicated by a P-value of 0.035, which is below 0.05, and is significant, as the T-statistic of 2.147 is above 1.96. Furthermore, it is supported by a positive path coefficient of 0.229.

4. Digital literacy affects the intention to adopt e-government through perceived usefulness. This is shown by a P-value of 0.038, which is less than 0.05, and by a T-statistic of 2.110 and a path coefficient of 0.152, which is close to +1.

5. Digital literacy affects perceived ease of use. This is because the P-value of 0.000 is below 0.05, the T-statistic of 11.360 is above 1.96, and it is reinforced by a path coefficient of 0.670, which is close to +1.\

6. Perceived ease of use influences the intention to adopt. This is because the P-value of 0.000 is less than 0.05, the T-statistic of 5.360 is greater than 1.96, and the path coefficient is close to +1 at 0.571.

7. Digital literacy influences the intention to adopt e-government, with a P-value of 0.000 (less than 0.05), a T-statistic of 4.693 (above 1.96), and a positive path coefficient of 0.383, approaching +1.

The Adjusted R-Square indicates that digital literacy and the intention to adopt e-government fall into the moderate category, explaining only 64.4% of the variance.

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