## Jurnal Ilmu Pemerintahan Widya Praja p-ISSN: 0216-4019 e-ISSN: 2614-025X

# THE INFLUENCE OF DIGITAL LITERACY ON THE UTILIZATION OF THE POPULATION ADMINISTRATION AND CIVIL REGISTRATION ONLINE SERVICE INFORMATION SYSTEM (SILAKAS) APPLICATION IN TANAH LAUT REGENCY

# Ratih Putri Kusuma<sup>1</sup>, Etin Indrayani<sup>2</sup>

<sup>1</sup>Pemerintah Kabupaten Tanah Laut <sup>2</sup>Institut Pemerintahan Dalam Negeri *Email*: <sup>1</sup> ratihkusumaa27@gmail.com, <sup>2</sup>etin.indrayani@ipdn.ac.id

ABSTRACT. The Population Administration and Civil Registration Online Service Information System (SILAKAS) is a digital technology-based application developed by the Tanah Laut Regency Government to streamline document management and population administration processes. However, the impact of digital literacy on SILAKAS utilization is understudied. This study fills the research gap by examining the influence of digital literacy on the utilization of SILAKAS for Population Administration and Civil Registration Online Services in Tanah Laut Regency. Employing a descriptive quantitative method, simple linear regression analysis is used to measure the impact of digital literacy on SILAKAS utilization. Data collection involved distributing 100 questionnaires to SILAKAS users through random sampling. The findings indicate a significant favorable influence of digital literacy on SILAKAS utilization in Tanah Laut District. The regression analysis yielded a coefficient of 0.608 (p < 0.001) and a coefficient of determination (R Square) of 0.416, suggesting that digital literacy accounts for 41.6 percent of the variation in SILAKAS utilization. This study concludes that digital literacy is crucial in enhancing the utilization of SILAKAS for Population Administration and Civil Registration Online Services in the Tanah Laut Regency. The findings highlight the importance of promoting digital literacy initiatives to empower users and maximize the benefits of digital solutions in administrative processes. Policymakers and practitioners can utilize the insights from this study to develop strategies for improving digital literacy and optimizing the utilization of online administrative services.

**Key words:** Population Administration; Civil Registration; Online Service Information System (SILAKAS); Digital Literacy.

### INTRODUCTION

Bureaucratic institutions in Indonesia strive for achieving digital transformation by implementing electronic-based government systems (SPBE) to promote good governance. The demand for sufficient human resources with digital literacy is crucial in digitization as individuals are expected to navigate rapid technological advancements.

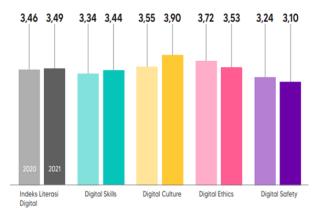
Digital literacy refers to an individual's understanding and ability to utilize information from various digital sources effectively. According to Lee (2014), digital literacy is the ability to understand and use data in multiple formats (text, images, audio, video, and animation) and from various sources presented via electronic devices. The utilization and adoption of technology can be accelerated with adequate digital literacy and a competent workforce.

Furthermore, digital literacy also places a lot of emphasis on the skills of digital media users in carrying out productive digital media mediation processes (Kurnia and Wijayanto, 2020; Kurnia and Astuti, 2017). A user who has good digital literacy skills is not only able to operate the tool but is also able to use digital media responsibly. Kominfo, Sibercreation, and Deloitte (2020) offer four competency areas: digital skills, ethics, safety, and culture.

Previous studies have explored relationship between digital literacy and the usage of government applications in various domains. Alawiyah (2020) investigated the influence of digital literacy on the use of digital report applications, while Syah (2021) examined digital literacy's role in enhancing the quality of public administration services. Additionally, Nurjanah (2017) explored the relationship between digital literacy and the quality of eresource usage. Yuni and Adnan (2022) evaluated the effectiveness of the Dukcapil Ceria Mobile application in supporting e-government. These studies highlight the importance of digital literacy in facilitating the effective utilization of government services.

Chen and Wang (2019) conducted an empirical study on the relationship between digital literacy and user satisfaction in online government service usage. Meanwhile, Lee and Kim (2018) explored the relationship between digital literacy and user experience in online public service adoption. Park and Lee (2016) investigated the factors influencing digital literacy and its impact on online government service adoption. Lastly, Garcia and Rodriguez (2017) studied the enhancement of digital literacy for effective government service delivery, which includes lessons from a developing country.

The study by Samsuddin, Mohamed, and Bolong (2021) focuses on understanding the digital capabilities of rural communities in low literacy rate areas in Malaysia. The researchers aim to explore the readiness of these communities to embrace digital technologies and become part of the digital society. The findings reveal that despite the challenges posed by low literacy rates, rural communities are eager to learn and adopt digital technologies. The study emphasizes the importance of digital literacy programs and infrastructure development to bridge the digital divide and empower these



communities.

Figure 1. Comparison of Digital Literacy Index in Indonesia in 2020 and 2021 (Source Kominfo, 2021)

Nationally, the digital literacy index in Indonesia is still in the medium category. Figure 1 shows that the Digital Literacy Index for 2021 has increased compared to the Digital Literacy Index for 2020. In measuring the Digital Literacy

Index for 2021, Indonesia's digital literacy is in the medium category, with an index score of 3.49. The score for the Digital Skill Pillar is 3.44, the Digital Ethics Pillar is 3.53, the Digital Safety Pillar is 3.10, and the Digital Culture Pillar is 3.90. The Digital Culture pillar has the highest score, while the Digital Safety pillar is the lowest.

In response to the COVID-19 pandemic in 2019, where all activities and services needed to be digitally based, the administrative office for population administration and civil records (DUKCAPIL) in Tanah Laut introduced a recent breakthrough in the form of an electronic-based public administration service application.

The System for Online Services in Population Administration and Civil Registration (SILAKAS), developed by the DUKCAPIL of Tanah Laut Regency, was launched in December 2019. This digital-based application can be accessed by residents of Tanah Laut Regency with a population identification number of 6301, facilitating the processing of population-related documents, correspondence, and civil registration certificates. SILAKAS can be accessed through website the https://silakas.dukcapil.tanahlautkab.go.id/ and is available for download on the Google Play

Store for Android users, although it is still under development for iOS users.

Results from interviews conducted with one of the SILAKAS application administrators in Tanah Laut Regency revealed that some users encountered difficulties accessing SILAKAS, as expressed in their reviews on the Google Play Store. Various criticisms and suggestions were provided by users, including challenges in creating accounts, logging in, slow application performance, failures in uploading ID card photos and document completeness, and errors in the latest version of the application. However, many users also expressed satisfaction with the convenience of using SILAKAS for document submissions and DUKCAPIL services. The application population data has made

management, such as obtaining identity cards, birth certificates, and family cards, more accessible, practical, and efficient, eliminating the need for physical visits and queuing at DUKCAPIL offices.

Based on the background, this study aims to examine the influence of digital literacy on the ability to use the SILAKAS application developed by DUKCAPIL in the Tanah Laut Regency. Although there have been previous studies examining the measurement of digital literacy and its impact on the usage of government applications in different contexts, this research provides a unique perspective by linking digital literacy with the online population administration and civil registration system (SILAKAS) in Tanah Laut Regency.

In conducting this research on the influence of digital literacy on the utilization of the Population Administration and Civil Registration Online Service Information System (SILAKAS) application in Tanah Laut Regency, it is crucial to formulate hypotheses that will guide the study. The hypotheses are designed to examine the relationship between digital literacy and the utilization of the SILAKAS application. The null hypothesis (H0) states that there is no significant difference among the dimensions of digital literacy in their influence on using the SILAKAS application. This means that all dimensions of digital literacy have an equal impact on the level of utilization of the application by the users in the Tanah Laut Regency. On the other hand, the alternative hypothesis (H1) proposes that at least one dimension of digital literacy significantly influences utilizing the SILAKAS application. This implies that specific dimensions of digital literacy directly affect application utilization, enhancing efficiency and effectiveness in accessing population administration and civil registration services.

# RESEARCH METHODS

In this study, using a quantitative explanatory research approach, the researchers investigate the impact of independent variables

the dependent variable, specifically examining the influence of digital literacy on the usage of the Population Administration and Civil Registration Online Service Information System (SILAKAS) application in Tanah Laut Regency. Data collection methods in this study involved questionnaires and documentation techniques. The questionnaires were distributed to 100 users of the SILAKAS application in Tanah Laut Regency through Google Forms. The population for this study is the community in Tanah Laut Regency who have downloaded the SILAKAS application from the Play Store, with a total of 10,000 downloads. The sample size was determined using the Slovin's formula:

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

where:

n = sample size

N = total population

e = tolerance error (set at 10%)

Calculating the sample size:

 $n = 10,000 / (1 + 10,000 * (0.1)^2)$ 

n = 10,000 / (1 + 10,000 \* 0.01)

n = 10,000 / (1 + 100)

n = 10,000 / 101

n = 99.01

Rounding up the sample size, the researchers decided to have 100 participants. The research participants include various individuals. including civil servants, students, entrepreneurs. The data analysis techniques employed in this study encompass inferential statistical analysis to examine the research variables. Additionally, descriptive statistical analysis techniques provide an overview and description of each research variable, employing frequency distribution analysis, percentage calculations, validity, and reliability tests.

Tanah Laut Regency was chosen as the research locus for several reasons. Firstly, it provides a representative case study to examine the influence of digital literacy on the utilization of the SILAKAS application in a specific local context. Secondly, the implementation of

SILAKAS in Tanah Laut Regency since December 2019 allows for a sufficient period to assess its adoption and usage patterns. Focusing on Tanah Laut Regency also enables the study to address the specific challenges and opportunities related to digital literacy in a local administrative context. The findings will provide practical insights and recommendations relevant to the local government and stakeholders.

### **Defines of Variables:**

### 1. Variable X: Digital Literacy

Digital Literacy is the ability to access, evaluate, understand, and effectively use digital technologies and information resources for communication, learning, problem-solving, and participation in the digital society. It encompasses the skills, knowledge, attitudes, and behaviors required to navigate and thrive in the digital era.

**Digital Literacy Dimensions** 

- a) Digital Skills: Measured through the individual's ability to use digital tools and technologies effectively, navigate online platforms, and access and evaluate digital information.
- b) Digital Ethics: Assessed by the individual's understanding of ethical behavior in digital environments, including responsible online communication, respect for privacy, and awareness of cyberbullying and digital rights.
- c) Digital Culture: Captured by the individual's familiarity with and participation in online communities, digital content creation, and engagement with digital media and cultural practices.
- d) Digital Safety: Evaluated based on the individual's knowledge and implementation of measures to protect personal information, secure online transactions, and safeguard against threats and risks.
- 2. Variable Y: Application Usage Capability Application Usage Capability refers to the users' perceived ability and competence in effectively

utilizing a specific application or software. It reflects their proficiency, confidence, and comfort in using the application to perform various tasks and achieve desired outcomes.

Application Usage Capability Dimensions:

- a) Perceived Usefulness refers to the users' perception of how much the application enhances their productivity, efficiency, and effectiveness in completing tasks. It encompasses the users' belief in the application's capability to fulfill their specific needs and goals and their perception of its relevance and value in improving their overall user experience.
- b) Perceived Ease of Use reflects users' perception of the application's simplicity, intuitiveness, and ease of learning and navigation. It encompasses how easily users can understand and use the application's features functionalities without encountering difficulties or technical challenges. It also comprises users' confidence in using the application without extensive training or assistance.
- c) Attitude towards usage represents users' overall positive or negative feelings, beliefs, and attitudes towards using the application. It reflects their satisfaction with the application's performance, intention to continue using it, and the likelihood of recommending it to others. It encompasses users' subjective evaluation of their experience with the application and their perception of its value in achieving their desired outcomes.

The relationship model for the influence of the digital literacy variable (X) on the application usage capability (Y) is illustrated in Figure 3 below.

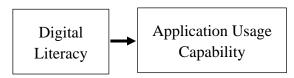


Figure 2. Model of influence of digital literacy (X) on the application usage capability (Y)

The operationalization of each variable is described, as seen in Table 1 below.

**Table 1. Operationalization of Variables** 

No	Variables	Dimensions	Indicators
1.	Digital Literacy	a) Digital Skills	Ability to navigate and operate digital devices
			Proficiency in using software applications
			Knowledge of Internet browsing and search
			techniques
		b) Digital Ethics	Understanding of online privacy and data
			protection
			Awareness of ethical online behavior
			Knowledge of copyright and intellectual property
			rights
		c) Digital Culture	Familiarity with digital trends and emerging
			technologies
			Participation in online communities and social
			networks
			Awareness of digital citizenship and online rights
		d) Digital Safety	Understanding of online threats and cybersecurity
			measures
			Knowledge of safe online practices and avoiding
			scams
			Ability to protect personal information and
			maintain online privacy
2.	Application usage	a) Perceive Usefulness	The belief is that using the SILAKAS application
	capability		enhances efficiency in administrative processes
			The perception that the application provides
			accurate and reliable information
			The belief that the application meets individual
		1) 7	needs and preferences
		b) Perceive ease of use	The perception that the SILAKAS application is
			user-friendly and intuitive
			Ease of understanding and navigating through the
			application's feature
			Confidence in using the application without
		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	requiring extensive assistance
		c) Attitude toward usage	Positive attitude towards incorporating the
			SILAKAS application in daily administrative
			tasks
			Willingness to allocate time and effort to learn and
			utilize the application
			The perception that using the application is a
			valuable and convenient option

Sources: Kominfo, Siberkreasi dan Deloitte (2020) and Davis (1989)

After formulating the operationalization of variables based on the established indicators, the next step is to develop statement items that reflect each indicator. We will be using the Likert scale as an appropriate measurement tool to assess participants' perceptions or responses to the observed variables. In the Likert scale we are utilizing, numerical values have been assigned to each response level to indicate the degree of agreement or disagreement with the statements.

Our scale consists of five levels: 5 represents "Strongly Agree," 4 represents "Agree," 3 represents "Neutral," 2 represents "Disagree," and 1 represents "Strongly Disagree."

Using this Likert scale, we will present a series of statements to participants based on the previously developed items. Participants will be asked to select the response level that aligns best with their views on each statement. The participants' response data will be subjected to

appropriate statistical methods, such as validity checks, R-square checks, coefficients of linear regression, and t-tests, to analyze the collected data. These statistical analyses assist in evaluating the validity, reliability, and significance of the relationships between variables. The detailed results from these analyses will provide insights into the strength, direction, and significance of the relationships and findings.

By combining the operationalization of variables, indicators, and the Likert scale, our aim is to gain a deeper understanding of participants' perceptions regarding the variables under study. We anticipate that the results of our analysis will yield valuable insights and a better comprehension of the relationships among the variables examined in this research.

### LOGICAL FRAMEWORK OF RESEARCH

This study is supported by the theory of digital literacy proposed by Kominfo (2021), which identifies digital literacy as comprising four dimensions: digital skills, digital ethics, digital culture, and digital security. By analyzing the impact of these dimensions on the utilization of the SILAKAS application, this research examines how individuals' proficiency in digital skills, adherence to digital ethics, adoption of digital culture, and awareness of digital security influence their ability to navigate and effectively use online administrative services. Additionally, the study incorporates the variable of application usage capability, derived from the Technology Acceptance Model (TAM) introduced by Davis (1989). By considering users' perceptions and attitudes towards the SILAKAS application, the research investigates how digital literacy dimensions affect their acceptance proficiency in utilizing the system. Combining the digital literacy theory (digital skills, digital ethics, digital culture, and digital security) and the TAM framework strengthens this study's theoretical and analytical framework, providing comprehensive insights into the relationship between digital literacy dimensions and application usage in SILAKAS.

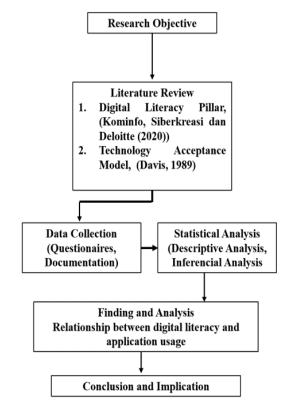


Figure 3. Logical Framework of Research

This flow diagram represents the logical framework of the research, investigating the influence of digital literacy dimensions and application usage capability on the utilization of the SILAKAS application. Based on the concept and pillars of digital literacy, data for this study was collected using questionnaires documentation techniques. The research analyzes the impact of digital skills, ethics, culture, and security on individuals' ability to navigate effectively use and online administrative services. The findings and analysis will contribute to a better understanding of the role of digital literacy in optimizing the utilization of the SILAKAS application, ultimately informing implications recommendations for stakeholders in the field.

### RESULT AND DISCUSSION

Before regression analysis, the validity test, reliability, and classical assumptions will be discussed. Validity testing ensures that the

research instrument accurately measures the intended constructs, while reliability assessment assesses the consistency and stability of the tool. Additionally, classical assumptions will be examined to ensure the suitability of the data for regression analysis. These steps are crucial in ensuring the robustness and integrity of the subsequent regression measurements.

# Validity Test, Reliability, and Classical Assumptions

Validity testing was conducted to assess the validity of the research instrument. A research instrument is considered valid if it can measure what it intends to measure. Therefore, the distributed research questionnaire should effectively measure the intended constructs (Abdullah, 2015). This validity testing utilized 28 questionnaire items that met the predetermined criteria set by the researcher. A

significance level of  $\alpha=5\%$  was used, indicating that an instrument can be considered valid if the obtained correlation coefficient (r-value) is greater than the critical value at a confidence level of 95%. The validity testing results for the 16 items measuring the Digital Literacy variable Pearson Correlation coefficients ranging from 0.264 to 0.787, with a significance value of 0.05, confirming the validity of the Digital Literacy instrument. Similarly, the validity testing results for the 12 items measuring the Usage Capability variable showed Pearson Correlation coefficients ranging from 0.346 to 0.612, with a significance value of 0.05, indicating the validity of the Usage Capability instrument. All items in the research instrument were deemed valid, thus affirming their suitability for further data analysis.

The results of measuring the validity of the instrument can be seen in Table 2 below.

Table 2. The Results of Measuring the Validity of the Instrument

Variable	Item	R Table	R Count	Result
	X1.1	0.195	0,787	Valid
	X1.2	0.195	0,719	Valid
	X1.3	0.195	0,681	Valid
	X1.4	0.195	0,749	Valid
Digital Literacy	X2.1	0.195	0,364	Valid
	X2.2	0.195	0,348	Valid
	X2.3	0.195	0,331	Valid
	X2.4	0.195	0,264	Valid
	X3.1	0.195	0,659	Valid
	X3.2	0.195	0,538	Valid
	X3.3	0.195	0,643	Valid
	X3.4	0.195	0,700	Valid
	X4.1	0.195	0,297	Valid
	X4.2	0.195	0,562	Valid
	X4.3	0.195	0,373	Valid
	X4.4	0.195	0,367	Valid
	Y1.1	0.349	0.913	Valid
Application usage	Y1.2	0.349	0.966	Valid
capability (SILAKAS)	Y1.3	0.349	0.913	Valid
	Y1.4	0.349	0.913	Valid
	Y2.1	0.349	0.840	Valid
	Y2.2	0.349	0.966	Valid
	Y2.3	0.349	0.966	Valid
	Y2.4	0.349	0.966	Valid
	Y3.1	0.349	0.913	Valid
	Y3.2	0.349	0.966	Valid
	Y3.3	0.349	0.840	Valid
	Y3.4	0.349	0.966	Valid

Source: Results of data processing using SPSS, 2023

83

Next, a reliability test will be conducted. Reliability testing assesses the consistency and stability of a previously validated measurement instrument. It measures the precision of the instrument. In this study, the instrument's

reliability will be evaluated using Cronbach's Alpha formula, where an instrument is considered reliable if Cronbach's Alpha value is more than 0.60 or 60%.

**Table 3. Reliability Test Results** 

Variable	Reliability Coefficient	Critical Value	Result
Digital Literacy	0.833	0.60	Reliable
Application usage capability (SILAKAS)	0.887	0.60	Reliable

Source: Results of data processing using SPSS, 2023

One classical assumption that needs to be fulfilled is the test of data normality. The normality test determines whether the data distribution follows a normal distribution or deviates from it. The normality test examines whether the regression model on the disturbance or residual variable has a normal distribution. A proper regression model should have both graphical analysis and statistical tests. Gazalai

(2016) says the normality test can be conducted using the Kolmogorov-Smirnov (ks) test. If Kolmogorov-Smirnov (ks) sig > 0.055 indicates a normal distribution, the significance value of ks sig < 0.05 indicates a non-normal distribution. The results of the data normality test show that the data is normally distributed because the sig value is 0.200, that value >0.055, as seen in Table 4 below.

Table 4. Normality test, One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters <sup>,b</sup>	Mean	.0000000
	Std. Deviation	5.25729437
Most Extreme Differences	Absolute	.057
	Positive	.057
	Negative	057
Test Statistik	·	.057
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>
FD - 11 - 11 - 1 3 3 3 1		· ·

a. Test distribution is Normal.

Source: Results of data processing using SPSS, 2023

### Simple Linear Regression Analysis Test

The Simple Linear Regression Analysis test was carried out in this study as a relationship between the independent variable or x (independent) variable to the dependent variable or y (dependent) variable

This study has an independent variable in the form of digital literacy as the variable x and a

dependent variable in the form of the Application usage capability (SILAKAS) as a variable. The two variables are then tested to determine the direction of the relationship between the two variables. Based on the results of data processing, the test results were obtained as can be seen in Table 5 below:

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a low bound of the true significance

**Table 5. Simple Regression Analysis Test Results** 

### **Coefficients**

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	t	Sig.
(Constant)	7.840	3.684		2.128	.036
Variable X Digital	.608	.073	.645	8.353	.000
Literacy					
a. Dependent Variable/Variable Y: The Application usage capability (SILAKAS)					

Source: Results of data processing using SPSS, 2023

The value of the research regression equation is obtained as follows: Y = 7.840 + 0.608X

Based on the results of the simple linear regression test in the table above, it can be concluded that there is a significant relationship between the digital literacy variable (X) and the application usage capability variable (Y) in SILAKAS. The obtained equation Y = 7.840 +0.608\*X represents the regression model, where the constant term (7.840) indicates the expected value of Y when X is zero. The regression coefficient (0.608) signifies the change in Y for every unit increase in X. In this case, the positive coefficient suggests that an increase in digital literacy is associated with an increase in the ability to utilize the SILAKAS application. Therefore, it can be inferred that digital literacy plays a significant role in enhancing the utilization of the online administrative services provided by SILAKAS.

The coefficient of 0.608 indicates the magnitude and direction of the influence of the digital literacy variable (X) on the application usage capability variable (Y). In this case, an increase of one unit in digital literacy is associated with an average increase of 0.608 units in the application usage capability. Therefore, a higher level of digital literacy tends to contribute positively to proficiency in utilizing the SILAKAS application. The residuals represent the differences between the observed values of Y

and the predicted values based on the regression model. The residuals indicate how much the data points deviate from the estimated regression line. Ideally, the residuals should follow a normal distribution pattern with a mean of zero, indicating that the model adequately captures the relationship between X and Y. If the residuals exhibit a way or show significant deviations from the expected behavior, it suggests that there may be other factors or variables influencing the application usage capability that is not accounted for in the current model.

### T Test.

This hypothesis test aimed to examine the individual impact of the independent variable, digital literacy (X), on the dependent variable, the ability to use the SILAKAS application (Y). To make decisions based on this test, the significance value (sig) was considered, and the calculated t-value was compared to the critical t-value. If the calculated t-value is greater than the critical t-value, Ha (alternative hypothesis) is accepted. The crucial t-value at  $\alpha=0.1$  (10%) level of significance was found to be 1.661 using the formula T table = t (a/2: df residual) = t (0.1/2: 98) = 0.05: 98.

Table 6. Uji T Test Digital Literacy on The Application Usage Capability
(SILAKAS)

Coefficients

Unctandardized Standardized

Coefficients <sup>a</sup>						
		Unstanda Coeffic		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
	(Constant)	7.840	3.684		2.128	.036
	Variable X	.608	.073	.645	8.353	.000
	Digital Literacy					
a. Dependent Variable/Variable Y The Application usage capability (SILAKAS)						

Source: Results of data processing using SPSS, 2023

Based on the SPSS coefficient table provided above, it is observed that the obtained t-value (8.353) is greater than the critical t-value (1.661). Therefore, the alternative hypothesis (Ha) is accepted. This indicates a significant influence of digital literacy on the application usage of the SILAKAS application in the Tanah Laut Regency.

### **Determination Coefficient Test (R Square)**

The purpose of conducting the coefficient of determination (R-square) test is to assess the

extent to which the variation in the dependent variable (y) can be accounted for by the independent variable (x) of digital literacy. The coefficient of determination provides a measure of the strength and proportion of the explained variation in the dependent variable, indicating how well the digital literacy variable explains the changes observed in the dependent variable. The table below presents the results of the coefficient of determination test (R-square) conducted in this study:

**Table 7. Test Results for the Coefficient of Determination (R Square)** 

Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R Square	<b>Std. Error of the Estimate</b>			
1	.645ª	.416	.410	5.284049			
a. Predictors: (Constant), Variable X Digital Literacy							
b. Dependent Variable/Variable Y The Application Usage Capability (SILAKAS)							

Source: Results of data processing using SPSS, 2023

Table 7 also presents the coefficient of determination, commonly called R-square, which indicates how much the regression model captures the relationship between the independent and dependent variables. The obtained R-square value is 0.416 or 41.6%, The result is that just 41.6% of the data variation can be represented by the linear regression model (or the line of the model). This indicates that the R-square value falls within the moderate range, marking a significant influence of the independent variable on the dependent variable.

### **Discussion of Research Findings**

The findings of this study align with previous research and theoretical frameworks that suggest a positive relationship between digital literacy and application usage capability. Previous studies have also indicated that individuals with higher digital literacy skills are more likely to utilize online services effectively (Nurjanah, 2017; Alawiyah, 2020; Syah, 2021). This study's positive regression coefficient (0.608) confirms that increased digital literacy is associated with an increased ability to use the SILAKAS application. These findings are consistent with the notion that digital literacy

plays a significant role in enhancing the utilization of online administrative services.

To better understand the impact of digital literacy on application usage capability, it is essential to consider the encompassing aspects of digital literacy. These aspects include digital skills, ethics, culture, and security. The analysis of the findings indicates that digital literacy, which consists of these dimensions, significantly contributes to the application usage capability in SILAKAS. For instance, high digital skills enable individuals to operate application more effectively, while understanding digital ethics helps them use it responsibly. Additionally, awareness of digital culture and security enhances application usage by ensuring holistic understanding protecting personal data. Therefore, digital literacy in its various dimensions significantly influences individuals' ability to utilize online administrative applications like SILAKAS.

However, it is essential to note that digital literacy is not the sole determinant of application usage capability. Future research could explore additional variables or factors that may influence the application usage capability beyond digital literacy. This could involve considering user experience, interface technological design, infrastructure, perceptions. By incorporating comprehensive set of variables, researchers can improve the model's accuracy and gain a deeper understanding of the factors influencing the utilization of online administrative services in the context of SILAKAS.

Furthermore, it would be beneficial for future studies to examine the potential implications of these findings. For instance, investigating the impact of digital literacy enhancement programs or interventions on improving user application usage capability could provide valuable insights for policymakers and practitioners. Additionally, exploring the relationship between digital literacy and other outcomes, such as user satisfaction or service quality, can contribute to a more comprehensive understanding of digital literacy's role in online administrative services.

This study's findings support the positive relationship between digital literacy and

application usage capability in SILAKAS. Digital literacy, encompassing dimensions such as digital skills, ethics, culture, and security, significantly influences individuals' ability to utilize online administrative applications. However, future research should consider additional variables and explore the implications of these findings to enhance further our understanding of the factors affecting the utilization of online administrative services.

### CONCLUSION & RECOMMENDATIONS

This study shows that digital literacy significantly influences the ability to use the SILAKAS application in Tanah Laut Regency. This application provides benefits for the community in processing population documents efficiently and without the need to visit the Dukcapil Office. The linear regression model in this study demonstrates that digital literacy significantly impacts the ability to use the SILAKAS application, explaining 41.6% of the observed variation. Hence, the findings suggest that digital literacy significantly contributes to the ability to use the SILAKAS application, but a substantial portion of the variation in utilization is attributed to other factors that warrant further exploration and analysis. It is essential to support digital literacy and people's ability to utilize this technology.

Based on the findings that the residuals are relatively large when only one independent variable is involved, it is recommended that future researchers consider incorporating additional variables in the regression model. Including more independent variables can help capture the complexity and multidimensionality of factors that may influence the application usage capability (Y). By including a broader range of variables, the model may better explain the variations in the application usage capability and potentially reduce the size of the residuals, leading to a more robust and accurate analysis.

### **ACKNOWLEDGEMENT**

The main thanks are, of course, addressed to the Head of the Population and Civil Registration Office of Tanah Laut Regency and all staff and Tanah Laut Regency who have provided opportunities for researchers to conduct research, as well as to all respondents from users of the SILAKAS application of Tanah Laut Regency who have participated and helped researchers to obtain research data

### REFERENCES

- Abdullah, S. (2015). Metodologi Penelitian Kualitatif Edisi Revisi. Pustaka Pelajar.
- Alawiyah, F. (2020). The Influence of Digital Literacy on the Ability to Use Digital Report Applications. International Journal of Educational Technology and Learning, 1(1), 25-35.
- Chen, L., & Wang, H. (2019). Digital Literacy and User Satisfaction: An Empirical Study of Online Government Service Usage. Government Information Quarterly, 36(2), 324-335.
- Garcia, R., & Rodriguez, M. (2017). Enhancing
  Digital Literacy for Effective
  Government Service Delivery: Lessons
  from a Developing Country.
  Information Technology for
  Development, 23(1), 86-103.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quarterly, 13(3), 319-340. doi: 10.2307/249008
- Ghozali, I. (2016). Aplikasi Analisis Multivariate dengan Program IBM SPSS 23. Badan Penerbit Universitas Diponegoro.
- Kominfo, Siberkreasi, & Deloitte. (2020).Roadmap Literasi Digital 2021-2024.Jakarta: Kominfo, Siberkreasi dan Deloitte.

- Kurnia, N dan Astuti, S.I. (2017). Peta Gerakan Literasi Digital di Indonesia: Studi tentang pelaku, rgam kegiatan, kelompok sasaran dan mitra. INFORMASI Kajian Ilmu Komunikasi, vol 47(2), 149-166.
- Kurnia, N dan Wijayanto, X.A. (2020). Kolaborasi sebagai Kunci: Membumikan Kompetensi Literasi Digital Japelidi. Program Studi Komunikasi, Magister Ilmu Departemen Komunikasi. Ilmu Universitas Gajah Mada.
- Lee, S., & Kim, Y. (2018). Exploring the Relationship between Digital Literacy and User Experience in Online Public Service Adoption. Journal of Public Administration Research and Theory, 28(3), 371-390.
- Nurjanah, R. (2017). The Relationship Between Digital Literacy and the Quality of E-Resources Usage. Journal of Library Science, 3(1), 45-58.
- Park, S., & Lee, J. (2016). Factors Influencing Digital Literacy and Its Impact on Online Government Service Adoption: A Cross-Cultural Study. Government Information Quarterly, 33(4), 675-689.
- Samsuddin, S. F., Mohamed, N. A., & Bolong, J. (2021). Understanding the Digital Capabilities of Rural Communities in Low Literacy Rate Areas in Malaysia Towards Digital Society. International Journal of Academic Research in Business and Social Sciences, 11(15), 174–184.
- Smith, J., & Johnson, A. (2020). The Impact of Digital Literacy on Government Service Adoption: A Case Study of Online Population Administration Systems. International Journal of Public Administration, 45(3), 201-218.

Syah, A. (2021). Digital Literacy in Enhancing the Quality of Public Administration Services. Journal of Public Administration, 5(2), 112-125.

Yuni, A., & Adnan, R. (2022). The Effectiveness of the Dukcapil Ceria Mobile Application in Supporting E-Government. International Journal of E-Government Studies, 9(2), 76-89.



© 2023 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license