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The Influence Of Digital Literacy And Adaptability On The Performance Of Village Government Apparatus In Sanga Desa District

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Abstract

This study aims to examine the influence of Digital Literacy and Adaptability on the Performance of Village Government Apparatus in the Sanga Desa District area. Using a quantitative approach, data were collected through questionnaires from 72 respondents, covering all active village officials through a saturated sampling technique. Data analysis was performed using the multiple linear regression method with SPSS software. Statistical test results show that Digital Literacy partially provides a positive and significant contribution to performance, with a t- count value of 2.195 and a significance of 0.032. Similarly, the Adaptability variable is proven to have a significant influence on the performance of the apparatus, with a t-count value of 2.119 and a significance of 0.038. Simultaneously, both variables have a significant effect on the performance of the apparatus, with an F-count value of 12.255 and a significance of 0.000. The results of the coefficient of determination (R Square) test show that the independent variables contribute an influence of 26.2%, while the remaining 73.8% is determined by external factors outside this model. These findings confirm the importance of strengthening technological literacy and mental readiness in supporting the success of digital transformation in village government.

Keywords: ***Digital Literacy, Adaptability, Apparatus Performance, Village Government***

INTRODUCTION

The government has an important role in regulating and serving the community in order to achieve welfare and sustainable development. This success is largely determined by the performance of effective, efficient, and qualified public officials. In the

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digital era, the utilization of information technology is key to accelerating administrative processes, increasing transparency, and improving public services. Therefore, public officials are required to have good digital literacy and the ability to adapt to technological changes.

At the village level, these challenges become more complex because public officials interact directly with the community. Digital transformation requires not only adequate infrastructure but also the readiness of human resources. Digital literacy helps public officials operate technology and manage data, while adaptability enables them to adjust to changes in work systems. Both aspects have been shown to play an important role in improving the performance of public officials.

However, the implementation of village digitalization has not been evenly distributed nationwide. Of the targets for tens of thousands of digital villages, only some have been able to utilize technology optimally. Various studies have also shown that low levels of digital literacy and adaptability are major obstacles to improving the quality of public services.

This condition can also be observed in Sanga Desa District, Musi Banyuasin Regency. Although the demand for digital-based public services is increasing, there are still public officials who are not sufficiently skilled and lack confidence in using technology. In addition, age and educational background also influence the speed of adaptation and the ability to operate digital systems.

Thus, the success of village government digitalization largely depends on the digital literacy and adaptability of public officials. Therefore, this study was conducted to analyze the influence of these two factors on the performance of village government officials in Sanga Desa District.

LITERATURE REVIEW

Theoretical Review

This study uses the *Organizational Learning Theory* proposed by Peter Senge (1990), which emphasizes the importance of continuous learning, innovation, and adaptation within organizations. This theory consists of five main disciplines, namely *personal mastery*, *mental models*, *shared vision*, *team learning*, and *systems thinking*. In the context of this study, digital literacy serves as the foundation for individual and team learning, while adaptability strengthens the organization's ability to innovate and adjust to changes. Both contribute to improving the performance of village officials.

Digital Literacy

Digital literacy refers to the ability of public officials to understand and utilize information technology effectively. This ability is important for improving work efficiency,

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the quality of public services, transparency, and digital communication. Digital literacy is influenced by several factors, such as age, educational level, access to technology, training, and individual motivation. The indicators of digital literacy include the ability to operate devices, digital document management, communication and collaboration, efficient service delivery, and data security.(Hamid.2023)

Adaptability

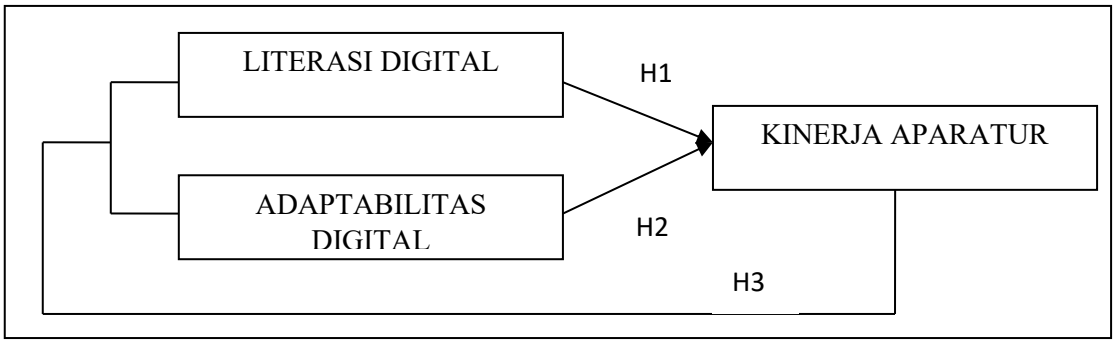
Adaptability is the ability of individuals or organizations to adjust, learn, and develop in response to changes, particularly in the digital era. Adaptability provides benefits in improving service efficiency, transparency, governance, community participation, and village independence. Factors influencing adaptability include the quality of human resources, infrastructure support, training, leadership, and organizational culture. The indicators of adaptability include the ability to accept change, work flexibility, willingness to learn, creativity, and responsiveness to community needs.

Village Official Performance

The performance of village officials refers to the level of success of officials in carrying out government duties and public services effectively, efficiently, and professionally. Good performance provides benefits in the form of fast, transparent, and accountable services, as well as increasing public trust. Performance is influenced by the quality of human resources, work motivation, availability of resources, communication, and support from the government and community. The indicators of performance include productivity, responsiveness, responsibility, accountability, and service quality (Meilin.2023).

Conspetual Framework

In this study, there are four variables, namely independent variables and a dependent variable. Digital literacy and adaptability serve as the independent variables, while the performance of village officials serves as the dependent variable.



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H1: It is hypothesized that digital literacy has a positive and significant effect on the performance of village officials.
H2: It is hypothesized that adaptability has a positive and significant effect on the performance of village officials
H3: It is hypothesized that digital literacy and adaptability simultaneously have a positive and significant effect on the performance of village officials.

RESEARCH METHOD

This study uses a quantitative approach with the aim of examining the effects of digital literacy (X1) and adaptability (X2) on the performance of village officials (Y). Data were collected through structured questionnaires and analyzed using multiple linear regression to determine the partial and simultaneous effects. The study was conducted from October 2025 to January 2026 in Sanga Desa District, Musi Banyuasin Regency, South Sumatra. The quantitative data consisted of questionnaire scores using a Likert scale. Primary data were obtained from questionnaires and observations of village officials. Secondary data were obtained from documents, books, journals, and previous studies. The population consisted of 72 village officials from 9 selected villages based on their level of digital literacy. The sample was determined using a saturated sampling technique, whereby the entire population was used as respondents.

The questionnaire was used to measure the research variables. Observation was conducted to examine activities and the use of technology. Documentation was used to complement supporting research data. The data were analyzed using SPSS through the following stages: data quality tests, consisting of validity and reliability tests; classical assumption tests, consisting of normality, multicollinearity, and heteroscedasticity tests; and multiple linear regression to test the hypotheses using the model:

$$Y = a + b_1X_1 + b_2X_2 + e$$

Hypothesis testing consisted of the t-test (partial test), F-test (simultaneous test), correlation coefficient (R), and coefficient of determination (R^2).

RESULTS

Respondent Characteristics Based on Gender

The selection based on gender shows the involvement of both male and female village officials within the village government structure, so that the data collected can represent the general profile of village officials.

Table 1. Respondents Based on Gender

Gender	Frequency	Percentage
Male	60	83,33%
Female	12	16,67%

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Total	72	100%

Source: Processed Data, 2026

Based on the data obtained from 72 village official respondents, it can be seen that the majority of respondents were male. This is indicated by the number of male respondents, which was 60 people or 83.33%. Meanwhile, there were 12 female respondents, accounting for 16.67%.

Respondent Characteristics Based on Position

The selection of position as a respondent characteristic is intended to describe the involvement of village government officials in various structural positions within the village government organization. Thus, it can represent the overall condition of village government officials without distinguishing between the levels of authority or workload associated with each position.

Table 2. espondents Based on Position

NO	Position	Frequency	Percentage
1	Village Head	9	12,50%
2	Village Secretary	9	12,50%
3	Head of Affairs	27	37,50%
4	Head of Section	18	25,00%
5	Hamlet Head	9	12,50%
Total		72	100%

Source: Processed Data, 2026

The distribution of respondents shows that the Head of Affairs position was the group with the largest number of respondents, namely 27 people or 37.50% of the total respondents. Furthermore, respondents holding the position of Head of Section numbered 18 people or 25.00%. Meanwhile, the positions of Village Head, Village Secretary, and Hamlet Head each had 9 respondents or 12.50%.

Respondent Characteristics Based on Age

The age characteristics of respondents in this study show that village government officials in Sanga Desa District consist of various age groups who are actively involved in the administration of village government. This age diversity reflects a combination of work experience from more senior officials with the energy and potential for technological adaptation among younger officials.

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Table 3. Respondents Based on Age

	Ace group	Frequency	Percentage
1	< 25 years	4	5,56%
2	25-30 years	20	27,78%
3	31-35 years	22	30,56%
4	>35 years	26	36,11%
Total		72	100%

Source: Processed Data, 2026

The grouping results show that respondents aged over 35 years constituted the largest group, with 26 people or 36.11%. Furthermore, respondents aged 31–35 years numbered 22 people or 30.56%. Respondents aged 25–30 years numbered 20 people or 27.78%. Meanwhile, the group aged below 25 years had the smallest number of respondents, namely 4 people or 5.56%.

Multiple Linear Regression Analysis

Table 4. Multiple Linear Regression Analysis

Coefficientsa						
Unstandardized Coefficients			Standardized Coefficients			
1	Model	B	Std. Error	Beta	t	Sig.
	(Constant)	22,670	4,581		4,948	,000
	Digital Literacy	,268	,122	,289	2,195	,032
	Adaptability	,245	,116	,279	2,119	,038
a. Dependent Variable: Official Performance						

Source: Processed SPSS Version 26 Output

Based on the results of the multiple linear regression analysis shown in the coefficient analysis table, the multiple linear regression equation for Digital Literacy (X1), Adaptability (X2), and Official Performance (Y) is as follows:

$Y = a + b1X1 + b2X2 + e$

$Y = 22,670 + 0,268X1 + 0,245 X2 +$

1. Constant (22.670): If the Digital Literacy and Adaptability variables have a value of zero (0), the value of Official Performance is 22.670. This indicates that other factors outside this research model consistently contribute to maintaining the level of village official performance even when the technology and adaptation variables are not intervened.
2. Coefficient (0.268): Every one-unit increase in Digital Literacy will increase Official Performance by 0.268, assuming other variables remain constant. This proves that the

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better the digital understanding and skills possessed by village officials, the greater the increase in their performance.

3. Coefficient (0.245): Every one-unit increase in Adaptability will increase Official Performance by 0.245, assuming other variables remain constant. This means that every one-unit increase in adaptability will encourage an increase in performance.

Overall, the results of this study indicate that in order to improve Official Performance, institutions also need to pay attention to the level of digital literacy and adaptability of their employees, because both factors have been statistically proven to have a significant impact.

Partial Test Results

The selection based on gender shows the involvement of both male and female village officials within the village government structure, so that the data collected can represent the general profile of village officials.

Table 5. Partial Test Results

Coefficients[a]						
1	Model	B	Std. Error	Beta	t	Sig.
	(Constant)	22,670	4,581		4,948	,000
	Digital Literacy	,268	,122	,289	2,195	,032
	Adaptability	,245	,116	,279	2,119	,038
a.Dependent Variable: Official Performance						

Source: Processed SPSS Version 26 Output

Based on the partial test results (t-test), Digital Literacy (X1) has a t-value of 2.195 with a significance value of 0.032 (<0.05), indicating a positive and significant effect on Official Performance (Y). This shows that improving the digital capabilities of village officials can improve their performance. Meanwhile, Adaptability (X2) has a t-value of 2.119 with a significance value of 0.038 (<0.05), indicating that it also has a positive and significant effect on Official Performance. Thus, both variables are proven to be important factors in improving the performance of village officials.

Simultaneous Test

Table 6. Simultaneous Test

ANOVA[a]						
Model		Sum of Squares	df	Mean Square		Sig.
1	Regression	336,286	2	168,143	12,255	,000[b]
	Residual	946,700	69	13,720		

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	Total	1282,986	71			
	a. Dependent Variable: Official Performance b. Predictors: (Constant), Adaptability, Digital Literacy					

Source: Processed SPSS Version 26 Output

The test results show an F-value of 12.255 with a significance level of 0.000. Since the significance value obtained is much smaller than the 0.05 significance level (0.000 < 0.05), the regression model is declared fit, and the hypothesis stating that Digital Literacy (X1) and Adaptability (X2) simultaneously have a significant effect on Official Performance (Y) can be accepted. The results of this simultaneous test provide strong statistical evidence that the integration of digital technology skills and flexibility in adapting is a highly effective combination for increasing the productivity of village government organizations.

Coefficient of Determination (R^2)

Table 7. Coefficient of Determination (R^2)

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,512[a]	,262	,241	3,70409
a. Predictors: (Constant), Adaptability, Digital Literacy b. Footnote				

Source: Processed SPSS Version 26 Output

Based on the regression analysis, the R^2 value of 0.262 (26.2%) means that 26.2% of the variation in official performance can be explained jointly by Digital Literacy and Adaptability. The remaining 73.8% is influenced by other factors outside this study. These results indicate the importance of Digital Literacy and Adaptability, while also suggesting that other factors need to be considered to improve the performance of village officials.

DISCUSSION

The Effect of Digital Literacy on Official Performance

The results of the t-test show that digital literacy has a positive and significant effect on official performance (Sig. 0.032; coefficient 0.268). This confirms that improving the digital capabilities of village officials can increase work efficiency and the quality of public services. This finding is in line with Gilster's (1997) theory and is supported by the studies of Prasetya et al. (2024) and Ramadhika et al. (2025).

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The Effect of Adaptability on Official Performance

Adaptability also has a positive and significant effect on official performance (Sig. 0.038; coefficient 0.245). The ability to adjust to changes in technology and work systems has been proven to improve service effectiveness. This result is consistent with Arifin et al. (2024) and Mardiana (2020), who emphasize the importance of adaptability in improving performance.

The Effect of Digital Literacy and Adaptability on Official Performance

Simultaneously, digital literacy and adaptability have a significant effect on official performance (Sig. 0.000), with an R^2 value of 0.262. This means that the two variables contribute 26.2% to official performance, while the remaining percentage is influenced by other factors.

CONCLUSION

Based on the research results, digital literacy and adaptability have been proven to have positive and significant effects on the performance of village officials, both partially and simultaneously. Improving digital literacy enables village officials to work more efficiently and accurately, while adaptability helps them adjust to changes in technology and work systems. Collectively, the two variables contribute 26.2% to official performance, while the remaining percentage is influenced by other factors outside the scope of this study. These findings indicate that digital literacy and adaptability are important factors in improving the quality of performance and public services at the village level.

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