

The Influence of Digital Literacy and Digital Leadership Mediated by Employee Motivation on the Performance of East Java Province Government ASN Employees

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Abstract

The increasingly rapid development of technology has led to an increase in people's needs for fast and maximum service. This causes the East Java Provincial Government through the State Civil Apparatus as public servants to be required to have good Digital Literacy and optimize digital leadership which has an impact on Work Motivation and Performance. The aim of the research is to analyze the influence of Digital Literacy and Digital Leadership on Performance through Work Motivation. Quantitative type research conducted at the East Java Provincial Government. The research population was 199 ASN of the East Java Provincial Government, using the Slovin method to determine the research sample, resulting in a total sample of 133 people. The data collection technique uses an online questionnaire via Google Form. Data analysis techniques use SEM AMOS and Sobel Test. The research results prove that Digital Literacy and Digital Leadership have a significant effect on Employee Motivation and ASN Performance. Apart from that, Employee Motivation is able to mediate the relationship between Digital Literacy and Leadership on ASN Performance

Keywords: *Digital Literacy, Digital Leadership, Employee Motivation, ASN Performance*

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A. INTRODUCTION

A society that is developing rapidly due to technological developments is a market orientation target that must be served by the Government. As a dynamic market, society will moderate the dynamic capability of an organization (Eisenhardt & Martin, 2000). However, due to very rapid environmental changes with the VUCA paradigm, the government's dynamic capabilities are forced to be more agile and adaptive to change.

Currently, most government offices have adopted technology ranging from simple to the most advanced technology. Various work equipment that was originally mechanical has gradually changed to become completely digital and based on computer technology. Regarding ASN's digital literacy competency based on the 2022 Digital Literacy Status Survey conducted by the Ministry of Communication and Information, the government/TNI/Polri segment has the highest digital literacy index score of 3.74, compared to the education segment (students and teachers) of 3.70 and the general public segment of 3.5. However, the use of computers and laptops is not yet part of the work of most respondents. Those

who work and use computers/laptops are only 26.67%, so from the data in the survey, we can see that the use of technological hardware, especially computers and laptops, has not become the main tool for work.

In fact, fluency in using technological hardware is one part of literacy related to the use of digital technology apart from the ability to use software (Wang et al., 2013). Digital literacy refers to the ability to use information effectively in all digital formats, and nowadays digital literacy is an important 'life skill' for anyone in the world (Bawden & Robinson, 2012). Focused on productivity, the ability to use basic digital tools such as word processing, internet navigation, email communications, and even spreadsheet programs is a must-have skill. On the other hand, digital professional skills in the fields of programming and data science are also increasingly being prioritized considering the public sector's need to manage IT-based services.

Digital leadership is created by combining leadership and digital capabilities to optimize the benefits of digital technology to improve business performance (Amelda et al., 2021). Digital leadership combines transformational leadership and digital skills (De Waal et al., 2016), where the support of digital leaders will increase employees' digital capabilities thereby improving organizational performance (Shin et al., 2023). In a dynamic Government, the capacity of senior officials to understand digital transformation as a phenomenon that clearly goes beyond technological or technical discussions is fundamental to reaching a new stage of digital government maturity in the national context.

The level of digital literacy is related to innovative work behavior and employee performance (Santoso et al., 2019) and digital leadership capability contributes positively to innovative performance (Benitez et al., 2022). Digital literacy as an internal HR factor and digital leadership which is an external factor for individuals can motivate ASN to perform. Employee motivation is described as the way in which an employee is inspired to behave in a certain way and motivated employees will have better performance outcomes (Al-Kharabsheh et al., 2023).

The East Java Provincial Government is a province located at the Eastern Tip of Java Island with the City of Surabaya as the Provincial Capital. East Java. Based on data from the 2022 Government Agency Performance Report, it can be seen that ASN Competency has met the target of 90% which is the same as the Realization value of 90%. The increase in the target for increasing ASN competency by the East Java Provincial Government is due to the increasing development of each ASN's competency either offline or online which is in line with the East Java Provincial Government's goal of increasing the use of Information and Communication Technology. By using good technology, "good governance" will be realized, which can be seen from the acceleration of public services. So it can be concluded that technology has an impact on the performance of East Java Provincial Government ASN employees.

From the results of field observations, it is known that the application of digital technology is still not optimal, which is proven by the use of computers and

laptops which have not become the main tools for work due to a lack of understanding of the use of digital technology. The inadequate use of computers and laptops is caused by several factors such as the lack of knowledge of East Java Provincial Government ASN employees which can be proven from the East Java Digital Literacy Index at 3.58 which is in the Medium category (Dhiya, 2023). Apart from that, the Digital Leadership factor is still not implemented enough, which can be proven by the lack of ability of Heads of Division in managing the use of Digital Technology in achieving business goals. Motivational factors also influence performance where there are still many East Java Provincial Government ASN employees who prefer to use conventional work rather than using digital technology.

Based on the background of the problem above, it can be seen that the performance of East Java Provincial Government Employees is influenced by Digital Literacy, Digital Leadership and Motivation. Observation results show that there are performance problems caused by the lack of use of computers and laptops which have not become the main tools for work due to a lack of understanding of the use of digital technology, the lack of ability of Heads of Division to manage the use of digital technology in achieving business goals and many employees who prefer to use work. conventionally compared to using digital technology. The results of previous research studies also show differences in results between variables. So researchers will prove the influence of variables on the East Java Provincial Government. Researchers will conduct research entitled "The Influence of Digital Literacy and Digital Leadership Mediated by Employee Motivation on the Performance of ASN Employees of the East Java Provincial Government".

The aim of this research is to analyze the influence of digital literacy and digital leadership on the performance and motivation of ASN employees, analyze the influence of employee motivation on the performance of ASN employees and analyze the mediating influence of employee motivation on the relationship between digital literacy and digital leadership on the performance of ASN employees.

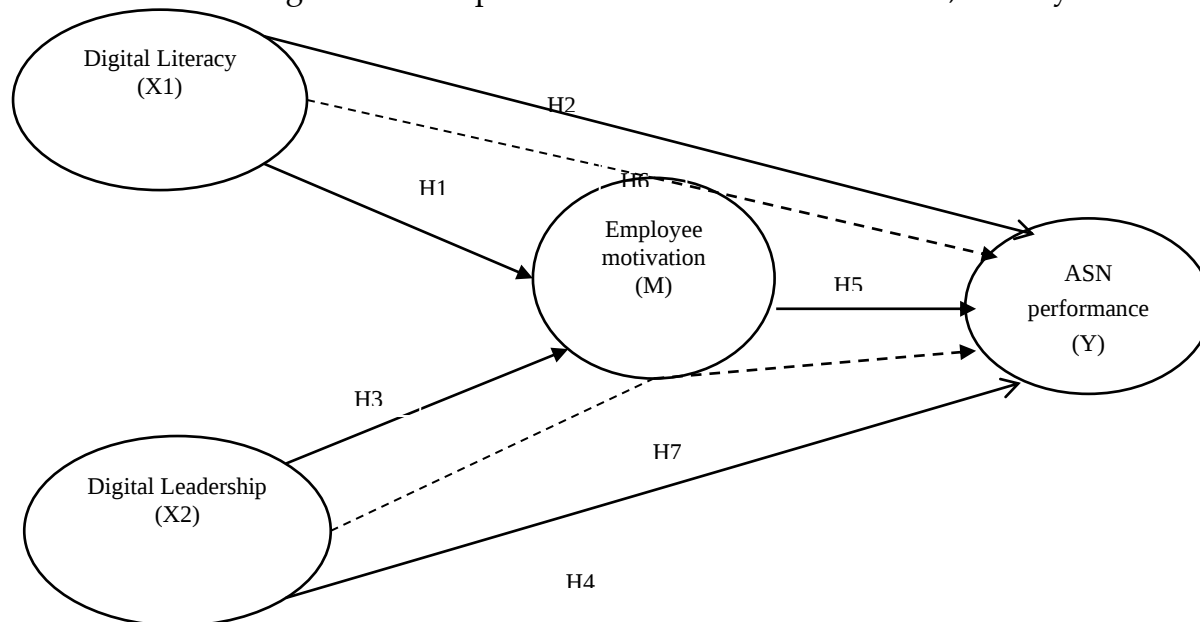
B. METHODS

This research uses a positivist paradigm to find or obtain confirmation of causal relationships which are used to predict general patterns of social phenomena or human activities. This research is non-experimental quantitative research that compares two or more groups in terms of causal factors (or independent variables) that have occurred, and uses statistical correlation to describe and measure the degree of relationship between two or more variables or a series of scores (Creswell, 2018). The research location is the Regional Apparatus within the Regional Government of East Java Province.

The research population was 199 ASN employees of the East Java Provincial Government. The sampling technique used the Slovin method to obtain a sample size of 133 respondents. The data collection technique in this research uses a survey method with a questionnaire guide that is delivered directly to respondents.

Answers are provided using a 1-5 Likert scale to get relevant results. In this research, a questionnaire that was prepared via Google form was given to ASNs within the Regional Government of East Java Province who were the research sample and represented all ASN employees of East Java Province as a whole. Data analysis in this research was carried out using computer software, a statistical analysis program by applying the AMOS SEM test.

The following is the conceptual framework for this research, namely:



Picture 1. Conceptual Framework

Based on the conceptual framework above, several research hypotheses can be prepared, namely:

- H1: Digital literacy has a positive and significant relationship to the motivation of East Java Provincial Government ASN employees
- H2: Digital Leadership has a significant influence on the Motivation of ASN Employees of the East Java Provincial Government
- H3: Digital leadership has a positive and significant relationship to the performance of ASN (Y) employees of the East Java Provincial Government
- H4: Digital leadership has a significant influence on the performance of East Java Provincial Government ASN (Y) employees
- H5: Employee motivation has a positive and significant relationship to the performance of ASN (Y) employees of the East Java Provincial Government
- H6: Employee motivation mediates the relationship between digital literacy and the performance of East Java Provincial Government ASN (Y) employees
- H7: Employee motivation mediates the relationship between digital leadership and the performance of East Java Provincial Government ASN (Y) employees

C. RESULTS AND DISCUSSIONS

Based on the results of distributing the questionnaire, a descriptive analysis will be carried out on the characteristics of the research respondents. The following are the descriptive results of the characteristics of research respondents, namely:

Table 1. Descriptive Characteristics of Respondents

No	Characteristic	n	%
1	Gender	Man	86
		Woman	47
		Total	133
2	Age (in Years)	< 30 Years	15
		31 – 40 Years	32
		41 – 50 Years	46
		> 50 Years	40
		Total	133
3	Education	SLTP/SLTA/SMA	33
		D3	3
		D-IV	3
		S1	69
		S2	25
		Total	133

Based on the table above, it can be seen that in terms of gender, the majority of respondents were male, 86 people (64.7%). In terms of age, the majority of respondents were 41 – 50 years old, 46 people (34.6%). In terms of recent education, the majority of respondents had a Bachelor's degree, 69 people (51.9%).

Research Validity Test

The validity test is used to determine the similarity between the data collected and the data that actually occurs on the object under study so that valid research results can be obtained. The validity of an indicator can be declared valid if the indicator used can measure a particular construct if the critical ratio (CR) of the regression weight shows a value above 2.0 with a p value smaller than 0.05 (Ghozali, 2018).

Table 2. Validity Testing

Variable	Indicator	Loading Factor	Cut off	P	Information
Digital Literacy (X1)	X _{1.1.1}	1,140	0.5	0.000	Valid
	X _{1.1.2}	1,039			
	X _{1.1.3}	0,965			
	X _{1.1.4}	1,458			
	X _{1.1.5}	1,022			
	X _{1.1.6}	1,180			
	X _{1.1.7}	1,092			

Variable	Indicator	Loading Factor	Cut off	P	Information
	X _{1.1.8}	0,927			
	X _{1.2.1}	0,874			
	X _{1.2.2}	1,172			
	X _{1.3.1}	0,983			
	X _{1.3.2}	1,022			
	X _{1.3.3}	1,000			
Digital Leadership (X2)	X _{2.1}	0,952			
	X _{2.2}	0,838			
	X _{2.3}	1,035			
	X _{2.4}	0,930			
	X _{2.5}	0,707			
	X _{2.6}	0,985			
	X _{2.7}	0,824			
	X _{2.8}	0,979			
	X _{2.9}	0,782			
	X _{2.10}	1,000			
	X _{2.11}	0,734			
Work motivation (M)	M ₁	1,000			
	M ₂	1,080			
	M ₃	0,859			
	M ₄	0,748			
	M ₅	0,822			
	M ₆	0,905			
	M ₇	0,690			
ASN performance (Y)	Y ₁	1,000			
	Y ₂	1,307			
	Y ₃	0,850			
	Y ₄	1,343			
	Y ₅	1,266			
	Y ₆	1,531			
	Y ₇	1,751			
	Y ₈	1,131			
	Y ₉	0,816			

Based on the data in table, it can be explained that all indicators have valid indicators because the loading factor value is more than 0.50.

Research Reliability Test

Reliability testing is used to test whether a research instrument can demonstrate its ability to measure without error and the results are always consistent (remain the same), even though they are used by other people or in other

places (Sugiyono, 2019). A research instrument is declared reliable if the acceptable limit value for the level of reliability is construct reliability > 0.7.

$$\text{Construct Reliability} = \frac{(\sum \text{Std. Loading})^2}{(\sum \text{Std. Loading})^2 + \sum e_j}$$

The following are the results of Reliability testing, namely:

Table 3. Reliability Testing

Variable	Digital Literacy (X1)		Digital Leadership (X2)		Work motivation (M)		ASN Performance (Y)	
Indicator	Construct	Error	Construct	Error	Construct	Error	Construct	Error
X _{1.1.1}	0,751	0,249						
X _{1.1.2}	0,646	0,354						
X _{1.1.3}	0,585	0,415						
X _{1.1.4}	0,818	0,182						
X _{1.1.5}	0,783	0,217						
X _{1.1.6}	0,803	0,197						
X _{1.1.7}	0,788	0,212						
X _{1.1.8}	0,671	0,329						
X _{1.2.1}	0,612	0,388						
X _{1.2.2}	0,843	0,157						
X _{1.3.1}	0,673	0,327						
X _{1.3.2}	0,636	0,364						
X _{1.3.3}	0,760	0,240						
X _{2.1}			0,675	0,325				
X _{2.2}			0,628	0,372				
X _{2.3}			0,767	0,233				
X _{2.4}			0,605	0,395				
X _{2.5}			0,648	0,352				
X _{2.6}			0,775	0,225				
X _{2.7}			0,671	0,329				
X _{2.8}			0,672	0,328				
X _{2.9}			0,660	0,34				
X _{2.10}			0,572	0,428				
X _{2.11}			0,593	0,407				
M ₁					0,773	0,227		
M ₂					0,839	0,161		
M ₃					0,768	0,232		
M ₄					0,602	0,398		
M ₅					0,655	0,345		

Variable	Digital Literacy (X1)		Digital Leadership (X2)		Work motivation (M)		ASN Performance (Y)	
Indicator	Construct	Error	Construct	Error	Construct	Error	Construct	Error
M ₆					0,763	0,237		
M ₇					0,602	0,398		
Y ₁							0,556	0,444
Y ₂							0,741	0,259
Y ₃							0,543	0,457
Y ₄							0,794	0,206
Y ₅							0,800	0,200
Y ₆							0,638	0,362
Y ₇							0,812	0,188
Y ₈							0,668	0,332
Y ₉							0,513	0,487
ΣStd. Loading	9,369		7,266		5,002		6,065	
ΣError		3,631		3,737		1,998		2,935
Construct Reliability	0,869		0,791		0,862		0,810	
Information	Reliable		Reliable		Reliable		Reliable	

Based on the results of the Reliability test above, it can be seen that all variables are declared Reliable because they have a Construct Reliability value above 0.6.

Goodness of Fit Criteria Evaluation Results

After the SEM assumptions are met, structural feasibility testing is then carried out and for this several model feasibility indices will be used, the results of which are shown in the following table:

Table 4. Evaluation of Goodness of Fit Indices Criteria

Criteria	Results	Cut-off Value	Model Evaluation
Chi-Square	121,344	Expected small value	Smaller (Significant)
Probability	0,650	≥ 0,05	Good
RMSEA	0,044	≤ 0,08	Good
TLI	0,977	≥ 0,90	Good
CFI	0,995	≥ 0,90	Good
GFI	0,965	≥ 0,90	Good
AGFI	0,933	≥ 0,90	Good

The probability value is 0.650, which means > 0.05 in the good category. The RMSEA value is 0.044 which means < 0.08 in the good category. The TLI value is 0.977 which means > 0.90 in the good category. The CFI value is 0.995, which means > 0.90 in the good category. The GFI value is 0.965 so it is in the good category and the AGFI value is 0.933 which also indicates the good category. Based on the table

above, it can be explained that the results of the goodness of fit test on the structural equation model show good data because it meets all the required criteria.

Evaluation of Model Equations

Based on the results of the Standardized Regression test, the research model equation was obtained from the Modified Research Model. The following equation is obtained, namely:

Employee Motivation (Z) = 0,493 Digital Literacy (X1) + 0,598 Digital Leadership (X2)

ASN performance (Y) = 0,380 Digital Literacy (X1) + 0,162 Digital Leadership (X2) + 0,210 Employee Motivation (Z)

Hypothesis Testing Evaluation

Research hypothesis testing is carried out based on the results of the analysis of causal relationships between research constructs, as presented in the following table:

Table 5. Hypothesis Testing Results

	Estimate	S.E.	C.R.	P
Digital Literacy → Employee Motivation	0,493	0,081	6,081	0,000
Digital Leadership → Employee Motivation	0,598	0,107	5,593	0,000
Digital Literacy → ASN performance	0,380	0,077	4,918	0.000
Digital Leadership → ASN performance	0,162	0,064	2,547	0.011
Employee Motivation → ASN performance	0,210	0,076	2,778	0.005

The standardized regression weight coefficient value between Digital Literacy and Employee Motivation is 0.493 with a probability of 0.000 or $p < 0.05$. This shows that the Digital Literacy variable has a significant positive effect on the East Java Provincial Government ASN Employee Motivation variable, which means the hypothesis is accepted.

The standardized regression weight coefficient value between Digital Leadership and Employee Motivation is 0.598 with a probability of 0.000 or $p < 0.05$. This shows that the Digital Leadership variable has a significant positive effect on the East Java Provincial Government ASN Employee Motivation variable, which means the hypothesis is accepted.

The standardized regression weight coefficient value between Digital Literacy and ASN Performance is 0.380 with a probability of 0.000 or $p < 0.05$. This shows that the Digital Literacy variable has a significant positive effect on the East Java Provincial Government ASN Performance variable, which means the hypothesis is accepted.

The standardized regression weight coefficient value between Digital Leadership and ASN Performance is 0.162 with a probability of 0.011 or $p < 0.05$. This shows that the Digital Leadership variable has a significant positive effect on the East Java Provincial Government ASN Performance variable, which means the hypothesis is accepted.

The standardized regression weight coefficient value between employee motivation and ASN performance is 0.210 with a probability of 0.005 or $p < 0.05$. This shows that the Employee Motivation variable has a significant positive effect on the East Java Provincial Government ASN Performance variable, which means the hypothesis is accepted.

Sobel Test Results

Mediating variables are variables that influence the relationship between the independent variable and the dependent variable (Sugiyono, 2019). The mediation hypothesis test was carried out using the Sobel test developed by Sobel. The Sobel test is carried out by testing the strength of the indirect effect of the independent variable (X) on the dependent variable (Y) through the mediating variable (Z). The standard error of the indirect effect can be calculated using the Sobel test formula:

$$Sab = \sqrt{b^2 S\alpha^2 + \alpha^2 Sb^2 + S\alpha^2 Sb^2}$$

Information:

α = Direct effect coefficient of the independent variables Digital Literacy (X1) and Digital Leadership (X2) on the mediating variable Employee Motivation (Z)

b = Direct effect coefficient of the mediating variable Employee Motivation (Z) on the dependent variable ASN Performance (Y).

$S\alpha$ = Standard Error of α .

Sb = Standard Error of b

To determine value α , b, $S\alpha$ dan Sb obtained from the results of the following Regression test and Coefficient test:

Table 6. Regression Testing Results

Model	Coefficients ^a								
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics
	B	Std. Error	Beta			Zero order	Partial	Part	Tolerance VIF
1 (Constant)	4.147	1.616		2.567	.011				
Digital Literacy	.164	.050	.303	3.280	.001	.757	.276	.167	.303 3.300
Digital Leadership	.370	.063	.544	5.880	.000	.797	.458	.299	.303 3.300

a. Dependent Variable: Employee Motivation

Based on the test results above, the values for a and Sa are obtained, namely:

1. α (Digital Literacy) = 0,164
2. α (Digital Leadership) = 0,370
3. $S\alpha$ (Digital Literacy Error Value) = 0,050
4. $S\alpha$ (Error Digital Leadership Error Value) = 0,063

Table 7. Coefficient Test Results

		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	10.517	2.063		5.098
	Employee Motivation	.941	.069	.767	13.685

a. Dependent Variable: ASN Performance

Based on the test results above, the values for b and Sb are obtained, namely:

1. b (Employee Motivation) = 0,941
2. b (Employee Motivation Error Value) = 0,069

The following is the Sobel test calculation by entering the values α , b, $S\alpha$, and Sb, namely:

1. Sobel's calculation of the influence of Employee Motivation Mediation on the relationship between Digital Literacy and ASN Performance

$$Sab = \sqrt{(0,941)^2 \times (0,050)^2 + (0,164)^2 \times (0,069)^2 + (0,050)^2 \times (0,069)^2}$$

$$Sab = 0,0497$$

To obtain the calculated t value from the indirect influence of the Digital Literacy variable (X1) which is mediated by the Employee Motivation variable (Z) on ASN Performance (Y), the equation is used:

$$t \text{ count} = ab / Sab$$

The following are the results of the t count, namely:

$$t \text{ count} = ab / Sab$$

$$t \text{ count} = (0,164 \times 0,941) / 0,0497$$

$$t \text{ count} = 3,1053$$

The calculated t value is 3.1053 which is greater than 1.96 so it can be concluded that Employee Motivation (Z) mediates the influence of Digital Literacy (X1) on ASN Performance (Y). Thus, hypothesis H6 is accepted, the data supports the model

2. Sobel's calculation of the influence of Employee Motivation Mediation on the relationship between Digital Leadership and ASN Performance

$$Sab = \sqrt{(0,941)^2 \times (0,063)^2 + (0,370)^2 \times (0,069)^2 + (0,063)^2 \times (0,069)^2}$$

$$Sab = 0,0694$$

To obtain the calculated t value from the indirect influence of the Digital Leadership variable (X2) which is mediated by the Employee Motivation variable (Z) on ASN Performance (Y), the equation is used:

$$t \text{ count} = ab / Sab$$

The following are the results of the t count, namely:

$$t \text{ count} = ab / Sab$$

$$t \text{ count} = (0,370 \times 0,941) / 0,0694$$

$$t \text{ count} = 5,0160$$

The calculated t value is 5.0160 which is greater than 1.96 so it can be concluded that Employee Motivation (Z) mediates the influence of Digital

Leadership (X2) on ASN Performance (Y). Thus, hypothesis H7 is accepted, the data supports the model

The Influence of Digital Literacy on Employee Motivation

The results of the hypothesis test show that Digital Literacy partially influences employee motivation, because it has a P-value of $0.000 < 0.05$ and the standardized regression weight coefficient value is positive 0.493, so the conclusion is that the Digital Literacy variable has a significant positive influence on employee motivation. means that the hypothesis which states "Digital literacy has a positive and significant relationship to the motivation of ASN employees of the East Java Provincial Government", is declared accepted. The results of this research are in line with the study by Hendriyani et al., (2022) which also proves that digital literacy has a significant effect on learning motivation. Apart from that, it is also in line with Kajin (2018) research which proves that digital literacy has a significant effect on motivation.

The Influence of Digital Leadership on Employee Motivation

The results of the hypothesis test show that Digital Leadership partially influences employee motivation, because it has a P-value of $0.000 < 0.05$ and the standardized regression weight coefficient value is positive 0.598, so the conclusion is that the Digital Leadership variable has a significant positive influence on employee motivation. This means that the hypothesis which states "Digital leadership has a positive and significant relationship to the motivation of East Java Provincial Government ASN employees.", is declared accepted. The results of this research are in line with the Harahap & Hazmanan (2019) study where digital leadership has a significant effect on work motivation. Apart from that, it is also in line with Sunaryo et al., (2021) research where digital leadership style has a significant direct influence on employee performance.

The Influence of Digital Literacy on ASN Performance

The results of the hypothesis test show that Digital Literacy partially influences ASN Performance, because it has a P-value of $0.000 < 0.05$ and the standardized regression weight coefficient value is positive 0.380, so the conclusion is that the Digital Literacy variable has a significant positive influence on ASN Performance. Then, looking at the Goodness Fit test results, it can be seen that this value means that the hypothesis which reads "Digital Literacy has a positive and significant relationship to the motivation of East Java Provincial Government ASN employees", is declared accepted. The results of this research are in line with research by Razak et al., (2023) which also states that digital literacy has a positive and significant effect on employee performance. Then it is also in line with research by Abas et al., (2019) which proves that there is an influence of Digital Literacy on Performance.

The Influence of Digital Leadership on ASN Performance

The results of the hypothesis test show that Digital Leadership partially influences ASN Performance, because it has a P-value of $0.011 < 0.05$ and the standardized regression weight coefficient value is positive 0.162, so the conclusion is that the Digital Leadership variable has a significant positive influence on ASN Performance. This means that the hypothesis which states "Digital Leadership has a positive and significant relationship to the motivation of ASN employees of the East Java Provincial Government", is declared accepted. The results of this research are in line with research by Rantauwati et al., (2022) which also proves that there is a significant influence between Digital Leadership and performance. Apart from that, it is also in line with research by Razak et al., (2023) which states that digital leadership has a positive and significant effect on employee performance.

The Influence of Employee Motivation on ASN Performance

The results of the hypothesis test show that employee motivation partially influences ASN performance, because it has a P-value of $0.005 < 0.05$ and the standardized regression weight coefficient value is positive 0.210, so the conclusion is that the employee motivation variable has a significant positive influence on ASN performance. This means that the hypothesis which states "Employee Motivation has a positive and significant relationship to the motivation of East Java Provincial Government ASN employees", is declared accepted. The results of this research are in line with research by Wulandari & Bagia (2021) where work motivation influences employee performance. Furthermore, research by Masriah et al., (2022) also proves that work motivation has a significant effect on employee performance.

The Mediation Effect of Employee Motivation on the Relationship between Digital Literacy and ASN Employee Performance

Based on the results of the Sobel test, it can be seen that employee motivation is able to mediate the relationship between digital literacy and employee performance. This can be proven from manual Sobel test calculations with a result of 3.1053 and Sobel test calculations using an online calculator with a result of 3.1890, where this value is greater than 1.96. This means that the hypothesis which states "Employee motivation mediates the relationship between digital literacy and the performance of ASN (Y) Employees of the East Java Provincial Government", is declared accepted. The research results are in line with Iskandar et al., (2023) where Digital Literacy has a positive and significant effect on employee performance through motivation as a mediating variable.

The Mediation Effect of Employee Motivation on the Relationship between Digital Leadership and ASN Employee Performance

Based on the results of the Sobel test, it can be seen that employee motivation is able to mediate the relationship between digital leadership and employee performance. This can be proven from manual Sobel test calculations with a result of

5.0160 and Sobel test calculations using an online calculator with a result of 5.3940, where this value is greater than 1.96. This means that the hypothesis which states "Employee motivation mediates the relationship between digital leadership and the performance of ASN (Y) Employees of the East Java Provincial Government", is declared accepted. The research results are in line with Iskandar et al., (2023) where Digital Leadership has a positive and significant effect on employee performance through motivation as a mediating variable. However, this is not in line with research by Mijaya (2022) which proves that leadership with motivation as a mediating variable has no effect on employee performance.

D. CONCLUSIONS

Based on the results of data analysis and discussion, several research conclusions can be obtained, namely: 1) Digital Literacy does not have a significant effect on the East Java Provincial Government ASN Employee Motivation variable. 2) Digital Leadership has a significant effect on the East Java Provincial Government ASN Employee Motivation variable. 3) Digital Literacy has a significant effect on the East Java Provincial Government ASN Performance variable. 4) Digital Leadership has a significant effect on the East Java Provincial Government ASN Performance variable. 5) Employee Motivation has a significant effect on the East Java Provincial Government ASN Performance variable. 6) Employee Motivation mediates the relationship between Digital Literacy and the Performance of East Java Provincial Government ASN Employees. 7) Employee Motivation mediates the relationship between Digital Leadership and the Performance of East Java Provincial Government ASN Employees.

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REFERENCES

1. Al-Kharabsheh, S. A., Attiany, M. S., Alshawabkeh, R. O. K., Hamadneh, S., & Alshurideh, M. T. (2023). The impact of digital HRM on employee performance through employee motivation. *International Journal of Data and Network Science*, 7(1), 275–282.
2. Amelda, B., Alamsjah, F., & Elidjen. (2021). Does the Digital Marketing Capability of Indonesian Banks Align with Digital Leadership and Technology Capabilities on Company Performance? *CommIT Journal*, 15(1), 9–17.
3. Bawden, D., & Robinson, L. (2012). *Introduction to Information Science*. Facet Publishing.
4. Benitez, J., Alvaro, A., Ana, C., & Jose, E. (2022). Impact of digital leadership capability on innovation performance: The role of platform digitization capability. *Information & Management*, 59(2).
5. Creswell, J. W. (2018). *Research design: qualitative, quantitative, and mixed methods approaches*. Sage Publications.

6. De Waal, B., Outvorst, F. van, & Ravesteyn, P. (2016). Digital Leadership: The Objective-Subjective Dichotomy of Technology Revisited. *12th European Conference on Management Leadership and Governance*.
7. Dhiya, H. (2023). *Increasing Work Productivity, East Java Provincial Government Emphasizes Digital Literacy for ASN*. <https://aptika.kominfo.go.id/2023/09/increase-work-productivity-of-jatim-provincial-government-emphasizes-digital-literacy-for-asn/>
8. Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21, 1105–1121.
9. Ghozali, I. (2018). *Aplikasi analisis multivariate dengan program IBM SPSS 25*.
10. Harahap, D. S., & Hazmanan, K. (2019). Pengaruh Kepemimpinan dan Kompensasi terhadap Kepuasan Kerja melalui Motivasi Kerja. *Jurnal Ilmiah Magister Manajemen*, 2(1), 69–88.
11. Hendriyani, Y., Ronaldo, R., Irfan, D., Budayawan, K., & Zulhendra, Z. (2022). P The Influence of Digital Literacy, and Internet Addiction on Online Learning, and the Subsequent Impact on the Learning Motivation of Students in the Department of Electronics Engineering. *Voteteknika (Vocational Electronics and Informatics Engineering)*, 10(4), 98.
12. Iskandar, F. Z., Setiawan, T., & Tamba, M. (2023). The Influence of Leadership Style on Employee Performance and Employee Morale with Motivation as a Mediating Variable at PT. Perkebunan Nusantara II Kebun Helvetia. *Journal of Digital Business Economics*, 2(1), 188–197.
13. Kajin, S. (2018). The influence of digital literacy-based learning on motivation and cognitive learning outcomes at MTs N Mojosari and MTs N Sooko Mojokerto. *PROGRESSA: Journal of Islamic Religious Instruction*, 2(1), 133–142.
14. Masriah, I., Fauzi, R. D., & Kustini, E. (2022). The Influence of Work Motivation and Work Discipline on Employee Performance at PT Mitra Adiperkasa in Central Jakarta. *Journal of Effective Economics*, 4(3), 348–356.
15. Mijaya, K. (2022). The Influence of Leadership, Digital Services and Training with Motivation as Mediating Variables on the Performance of Expert Level Document Research Functional Staff. *Management and Sustainable Development Journal*, 4(2), 1–28.
16. Mohd Abas, M. K., Yahaya, R. A., & Fee Din, M. S. (2019). Digital Literacy and its Relationship with Employee Performance in the 4IR. *Journal of International Business, Economics and Entrepreneurship*, 4(2), 29.
17. Rantauwati, E. A., Zulkifli Zulkifli, & Putriana, L. (2022). The Influence of Digital Leadership Style, Career Development and Organizational Culture on Employee Performance Through Organizational Commitment. *Journal of Management and Accounting Research*, 2(2), 38–49.
18. Razak, I., Masud, M., Wahid, M., & Rahman, W. (2023). The Influence of Character, Competency and Digital Literacy on Employee Performance at Muhammadiyah University Luwuk. *Management Scientific Journal "EMOR,"* 6(2), 220.

19. Santoso, Abdinagoro, & Arief. (2019). The Role of Digital Literacy in Supporting Performance Through Innovative Work Behavior: The Case of Indonesia's Telecommunications Industry. *International Journal of Technology*, 10(8), 1558–1566.
20. Shin, J. K., Mollah, M. A., Choi, J. H., & Hwang, S. J. (2023). Exploring a Pathway to Sustainable Organizational Performance of South Korea in the Digital Age: The Effect of Digital Leadership on IT Capabilities and Organizational Learning. *Sustainability (Switzerland)*, 15(10).
21. Sugiyono. (2019). *Quantitative, Qualitative, and R&D Research Methods*. Alfabet.
22. Sunaryo, W. A., Tabroni, Lies, P., Salim, F., & Mombang, S. (2021). The Influence of Organizational Culture and Digital Leadership Style on Motivation and Its Impact on PT Employee Performance. Hexa Dental Indonesia in Bogor. *Social and Technological Journal*, 1(9), 59–69.
23. Wang, Q. (Emily), Myers, M. D., & Sundaram, D. (2013). Digital Natives and Digital Immigrants. *Business & Information Systems Engineering*, 5, 409–419.
24. Wulandari, P. A. A., & Bagia, I. W. (2021). The Influence of Work Motivation on Performance of Community Health Center Employees. *Prospects: Journal of Management and Business*, 2(2), 251.