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Connecting Digital Competence, Adaptability, and ASN Performance Through Engagement

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ABSTRACT

Digital transformation in the public sector has changed not only how technology is used in daily work but also how civil servants are expected to respond to evolving work practices. Under these conditions, digital competency and work adaptability represent important individual capacities, while work engagement may serve as a mechanism linking these capacities to employee performance. This study examines the effects of digital competency and work adaptability on civil servant performance, with work engagement as an intervening variable. An explanatory quantitative approach with a cross-sectional design was employed. The population and sample consisted of 37 civil servants at the Department of Community and Village Empowerment of Sidoarjo Regency, all of whom were included through a census technique. Data were collected using a five-point Likert-scale questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results indicate that digital competency has a positive and significant effect on civil servant performance, with a path coefficient of 0.358, while work adaptability has a positive and significant effect with a coefficient of 0.290. Digital competency and work adaptability also have positive and significant effects on work engagement, with coefficients of 0.416 and 0.555, respectively. Work engagement, in turn, has a positive and significant effect on performance, with a coefficient of 0.329. The indirect-effect analysis further demonstrates that work engagement partially mediates the relationships between digital competency, work adaptability, and civil servant performance. These findings suggest that human resource management in an increasingly digitalized public-sector environment needs to integrate technological capability, adaptability, and employee engagement rather than treating them as separate dimensions.

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INTRODUCTION

Digital transformation has increasingly reshaped the way public organizations manage information, coordinate administrative activities, and deliver public services. The change extends beyond the adoption of digital applications. Government employees are also expected to develop the capabilities needed to work effectively in technology-dependent environments, respond to changing procedures, and maintain performance as organizational demands evolve (Mergel et al., 2019). For this reason, the

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quality of digital transformation depends not only on technological infrastructure but also on the readiness and capabilities of the employees who use it.

These conditions are particularly relevant to the Office of Community and Village Empowerment of Sidoarjo Regency. As a local government institution responsible for administrative functions and community and village empowerment services, the organization operates in an environment where digital systems, information management, and changing administrative requirements increasingly shape everyday work. Civil servants are therefore expected to use digital technologies effectively while continuing to meet established performance standards. In practice, however, employees may differ in their ability to use digital tools and adjust when work procedures or organizational requirements change. Preliminary survey findings provide an indication of this situation. Positive responses were recorded for digital competence at 56.8%, work adaptability at 69.5%, work engagement at 75.7%, and ASN performance at 75.4%. Although the overall responses were relatively positive, digital competence showed comparatively greater room for improvement. In addition, the indicator concerning employees' ability to maintain productivity during organizational change recorded a mean score of 3.68. Such findings suggest that technological capability and the ability to remain effective during change warrant closer examination, particularly in a public-sector environment undergoing continuous digitalization.

Previous research has established relationships between digital competence, adaptability, work engagement, and employee performance. Studies have reported relationships between digital competence and employee performance (Emilia & Soemaryani, 2025; Ermawati et al., 2024; Ingsih et al., 2024), while other research has connected adaptability with work engagement and work performance (Astari & Harmen, 2021; Chen et al., 2024; Mashavira et al., 2025). Work engagement has also been recognized as an important employee-related mechanism associated with work outcomes (Bakker & Albrecht, 2018; Knight et al., 2017, 2019). Nevertheless, these relationships have often been examined separately or in organizational contexts that differ from local government institutions. Evidence remains relatively limited regarding a model that simultaneously considers digital competence and work adaptability as predictors of ASN performance while examining work engagement as a mediating mechanism.

Addressing this gap, the present study integrates digital competence, work adaptability, work engagement, and ASN performance within a single empirical model. The research focuses on civil servants at the Office of Community and Village Empowerment of Sidoarjo Regency and examines both the direct relationships between individual capabilities and performance and the indirect relationships operating through work engagement. Such an approach provides a more integrated perspective on how employee capabilities may be translated into performance in a public organization undergoing digital transformation.

Accordingly, this study aims to examine the effects of digital competence and work adaptability on ASN performance, their effects on work engagement, and the effect of work engagement on ASN performance. It further investigates the mediating role of work engagement in the relationships between digital competence, work adaptability, and ASN performance. The findings are expected to contribute to public-sector human resource management literature and provide practical considerations for developing civil servant capabilities in local government organizations.

LITERATURE REVIEW

Digital Competence

Digital competence refers to more than the ability to operate computers or use particular software. In contemporary workplaces, it encompasses the ability to access and manage information, communicate through digital channels, collaborate using technology, solve problems, and use digital resources appropriately and responsibly (Van Laar et al., 2020). Sousa and Rocha (2019) similarly emphasize that digital capabilities are increasingly relevant to organizational transformation because employees need to acquire and apply new skills as technology changes.

Within public organizations, digital competence becomes particularly relevant because many routine activities are increasingly performed through digital systems. Employees may need to manage electronic documents, retrieve information from internal applications, communicate through digital platforms, and prepare reports using standardized systems. Mergel et al. (2019) note that digital transformation involves changes in organizational processes and ways of working, rather than merely introducing new technologies.

From this perspective, employees with stronger digital competence are expected to perform work more effectively because they can use available technological resources to support their daily responsibilities. Previous empirical studies have also identified a positive relationship between digital competence and employee performance (Emilia & Soemaryani, 2025; Ermawati et al., 2024; Ingsih et al., 2024)

Therefore, the first hypothesis is formulated as follows:

H1: Digital competence has a positive and significant effect on ASN performance.

Work Adaptability

Work adaptability reflects an employee's ability to respond effectively when work tasks, procedures, technologies, or organizational conditions change. In a rapidly changing work environment, employees are not always able to rely on established routines. They may need to learn new procedures, adjust priorities, or find alternative ways to complete their responsibilities.

Rudolph et al. (2021) explain that changing work conditions require employees to respond to uncertainty and adjust their behavior accordingly. Sony and Mekoth (2022) further describe adaptability as an important capability for employees working in environments characterized by technological and organizational change.

For ASN employees, adaptability can be observed in practical situations such as adjustments to new administrative systems, changes in reporting procedures, or shifts in organizational priorities. Employees who are able to adjust while maintaining their responsibilities may be better positioned to sustain their performance when work conditions change.

Empirical evidence has also associated adaptability with employee performance (Chouhan, 2023). Based on this reasoning, the second hypothesis is proposed:

H2: Work adaptability has a positive and significant effect on ASN performance

Work Engagement

Work engagement describes a positive and fulfilling state of mind characterized by vigor, dedication, and absorption in work (Schaufeli & Bakker, 2004). Engaged employees tend to invest energy in their responsibilities, feel a stronger sense of involvement in their work, and remain attentive to the tasks they are performing.

The Job Demands-Resources (JD-R) theory provides a useful explanation of why engagement matters in the workplace. According to Bakker and Demerouti (2017), job resources can stimulate motivation and contribute to positive work outcomes. Employees who possess resources that help them deal with work demands may therefore be more likely to remain engaged.

Bakker and Albrecht (2018) further emphasize the role of engagement in contemporary organizations, while Knight et al. (2017, 2019) demonstrate that work engagement can be strengthened through appropriate organizational interventions. In a public-sector setting, engagement may be particularly relevant because employees are expected to maintain service and administrative responsibilities even when organizational demands change.

Digital Competence and Work Engagement

Digital competence may contribute to work engagement by making employees better equipped to deal with technology-related demands. An employee who understands how to use digital systems, locate relevant information, communicate through digital platforms, and solve routine technology-related problems may experience fewer difficulties when completing work tasks.

The relationship can also be interpreted through the JD-R perspective. Digital competence may function as a personal resource that helps employees handle work demands and use available job resources more

effectively. When employees feel capable of dealing with digital requirements, they may be more willing to invest energy and attention in their work.
Accordingly, the third hypothesis is:
H3: Digital competence has a positive and significant effect on work engagement.

Work Adaptability and Work Engagement
Adaptability is also closely connected to how employees experience their work. Employees who are able to adjust to new responsibilities and changing work conditions may find it easier to maintain their involvement when familiar routines are disrupted.
Research by Astari and Harmen (2021) indicates a relationship between career adaptability, work engagement, and work performance among ASN employees. Chen et al. (2024) likewise found that career adaptability is associated with work engagement, while Mashavira et al. (2025) identified adaptability as relevant to employee engagement in the health sector.
The underlying mechanism is reasonably straightforward. When employees are able to adjust to change, uncertainty may become more manageable, allowing them to continue directing their attention and energy toward work. On this basis, the fourth hypothesis is formulated:
H4: Work adaptability has a positive and significant effect on work engagement

Work Engagement and ASN Performance
Work engagement may influence performance because engaged employees are more likely to invest their physical and psychological energy in their responsibilities. Vigor supports sustained effort, dedication encourages a sense of purpose, and absorption allows employees to remain focused on their tasks (Schaufeli & Bakker, 2004).
From the JD-R perspective, engagement represents an important motivational pathway through which workplace resources may contribute to positive employee outcomes (Bakker & Demerouti, 2017). Employees who are more engaged may therefore be more consistent in completing assignments, maintaining attention to work, and pursuing expected performance standards.
Previous research has provided support for the relationship between engagement and work outcomes (Bakker & Albrecht, 2018; Knight et al., 2017, 2019). Therefore:
H5: Work engagement has a positive and significant effect on ASN performance

Work Engagement as a Mediating Variable
The relationships proposed in this study suggest that employee capabilities may influence performance through more than one pathway. Digital competence and work adaptability may directly support performance because they enable employees to complete work requirements more effectively. At the same time, these capabilities may strengthen work engagement, which can subsequently contribute to performance.
Such a mechanism is consistent with the JD-R theory, where personal and job resources can activate motivational processes that lead to positive work outcomes (Bakker & Demerouti, 2017). The AMO framework offers a complementary perspective. Bos-Nehles et al. (2023) explain that employee outcomes can be understood through ability, motivation, and opportunity. Digital competence can be viewed as an ability-related resource, while work engagement represents a motivational condition through which employee capability may be translated into performance.
Recent evidence also supports the relevance of engagement as a mediating mechanism between employee capabilities and performance. Prasetya et al. (2026), for example, examined the mediating role of work engagement in relationships involving digital competence and employee performance in urban village offices.
Based on these theoretical and empirical considerations, two mediation hypotheses are proposed:
H6: Work engagement mediates the positive relationship between digital competence and ASN performance.

H7: Work engagement mediates the positive relationship between work adaptability and ASN performance

Conceptual Framework

The conceptual framework positions digital competence and work adaptability as exogenous variables, work engagement as the mediating variable, and ASN performance as the endogenous variable. The model assumes that digital competence and work adaptability may influence ASN performance directly while also affecting performance indirectly through work engagement.

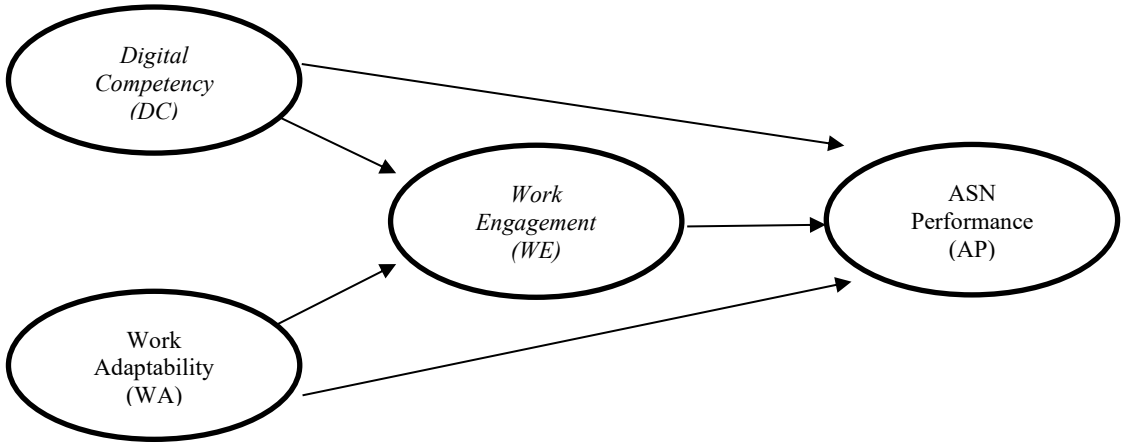


Figure 1. Conceptual Framework

METHOD

Research Design and Participants

This research employed a quantitative explanatory design. Data collection was conducted from March to May 2026 at the Office of Community and Village Empowerment of Sidoarjo Regency.

The research population consisted of 37 active ASN employees. Because the population was relatively small, the study used saturated sampling, meaning that all members of the population were included as respondents. This approach allowed the study to capture the responses of the entire ASN population within the selected research setting.

Data Collection and Measurement

Primary data were collected through a structured questionnaire using a five-point Likert scale. The questionnaire measured four constructs: digital competence, work adaptability, work engagement, and ASN performance.

The measurement of digital competence focused on employees' ability to use digital technologies and manage information required for work. Work adaptability concerned employees' ability to respond to changes in work tasks, procedures, technologies, and organizational conditions. Work engagement was measured through dimensions associated with vigor, dedication, and absorption. ASN performance reflected employees' ability to accomplish their work responsibilities and expected performance outcomes

Data Analysis

The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. PLS-SEM was used to assess both the measurement model and the structural relationships among the constructs.

The measurement model was evaluated through validity and reliability assessment. The structural model was then examined through path coefficients, t-statistics, significance values, coefficient of determination (R^2), and predictive relevance (Q^2). Bootstrapping was used to assess the significance of direct and indirect effects.

The structural relationships were represented by the following equations:

$$\mathbf{WE = b_{1.1}\ DC + b_{1.2}\ AK + e_1}$$

$$P = b_{2.1} DC + b_{2.2} WA + b_{2.3} WE + e_2$$

where DC represents digital competence, WA represents work adaptability, WE represents work engagement, P represents ASN performance, and e represents residual variable.

RESULT AND DISCUSSION

Respondent Characteristics and Descriptive Findings

The respondents consisted of 18 male and 19 female ASN employees. The preliminary survey findings showed positive responses of 56.8% for digital competence, 69.5% for work adaptability, 75.7% for work engagement, and 75.4% for ASN performance.

Table 1. Preliminary Survey

Construct	Average Percentage "Yes"	Category
Digital Competency	56,8	Passable
Work Adaptability	69,5	Passable
Work Engagement	75,7	Passable
ASN Performance	75,4	Passable

The relatively lower percentage for digital competence deserves attention. The result does not necessarily indicate that employees lack digital skills. Rather, it suggests that digital competence remains an area where further development may be useful, particularly as administrative work becomes increasingly dependent on digital systems.

A similar point emerges from the adaptability indicator concerning employees' ability to maintain productivity during organizational change. The mean score for this indicator was 3.68 (see Table 2). Employees appear to be reasonably capable of adjusting to change, although maintaining productivity while adapting to new conditions remains a relevant aspect of their work experience

Table 2. Frequency Distribution of Respondents Response Regarding Work Adaptability

No	Indicator	SD	D	N	A	SA	Total Score	Mean	Category
1	Adaptation to new tasks: Adjusting to new task (WA1.1)	0	0	6	15	16	158	4,27	Very high
2	Accepting changes in work system (WA1.2)	0	1	9	16	11	148	4,00	High
3	Social adaptation (Teamwork): Working with diverse characters (WA2.1)	0	0	9	10	18	157	4,24	Very high
4	Adaptingto a work team (WA2.2)	0	0	8	13	16	156	4,22	Very high
5	Adapting to new cultures/policies: Adapting to new policies (WA3.1)	0	0	7	16	14	155	4,19	High
6	Responding positively to rule changes (WA3.2)	0	1	8	13	15	153	4,14	High
7	Managing uncertainty: Maintaning productivity during change (WA4.1)	0	3	13	14	7	136	3,68	High

No	Indicator	SD	D	N	A	SA	Total Score	Mean	Category
8	Managing stress at work (WA4.2)	0	1	11	15	10	145	3,92	High
9	Fast learning ability: nderstanding new things quickly (WA5.1)	0	2	8	12	15	151	4,08	High
10	Mastering new applications/procedures (WA5.2)	0	1	8	16	12	150	4,05	High
	Average/Total	**0**	**9**	**87**	**140**	**134**	**1509**	**4,078**	**High**

Measurement Model

Before examining the hypothesized relationships, the measurement model was assessed to determine whether the study constructs were measured reliably and validly. The assessment covered convergent validity, internal consistency reliability, and discriminant validity, using the SmartPLS 4.0 output.

Convergent Validity and Reliability

Convergent validity was examined through the indicators' outer loadings and the Average Variance Extracted (AVE). Internal consistency was evaluated using Cronbach's alpha and Composite Reliability. As a general guide, outer loadings should exceed 0.70, AVE should be above 0.50, and reliability coefficients should reach at least 0.70.

Table 3. Convergent Validity and Reliability

Construct	Indicator	*Loading Factor*	AVE	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)
Digital Competency (DC)	DC1	0,966	0,906	0,974	0,974	0,980
	DC2	0,971				
	DC3	0,957				
	DC4	0,961				
	DC5	0,903				
Work Adaptability (WA)	AK1	0,949	0,802	0,938	0,949	0,953
	AK2	0,885				
	AK3	0,933				
	AK4	0,784				
	AK5	0,918				
Work Engagement (WE)	WE1	0,942	0,901	0,945	0,948	0,965
	WE2	0,947				
	WE3	0,959				
ASN Performance (AP)	K1	0,973	0,858	0,958	0,962	0,968
	K2	0,853				
	K3	0,923				
	K4	0,937				
	K5	0,941				

All 18 indicators have outer loadings between 0.784 and 0.973, so each exceeds the commonly applied 0.70 threshold. WA4 has the lowest loading (0.784), while P1 has the highest (0.973). Although WA4 is lower than the other indicators, its loading remains within the acceptable range and does not, on its own, warrant removal.

AVE values range from 0.802 to 0.906, comfortably above the 0.50 threshold. In other words, each construct accounts for more than half of the variance in its indicators. Digital competence has the highest AVE (0.906), followed by work engagement (0.901), ASN performance (0.858), and work adaptability (0.802).

The reliability coefficients also meet the recommended criteria. Cronbach's alpha ranges from 0.938 to 0.974, and Composite Reliability ranges from 0.953 to 0.980. Since all values exceed 0.70, the results suggest that the indicators within each construct show strong internal consistency.

Taken together, the outer loadings, AVE values, and reliability coefficients provide evidence of satisfactory convergent validity and internal consistency reliability.

Discriminant Validity

Discriminant validity was examined using two complementary approaches: the Fornell-Larcker criterion and the Heterotrait-Monotrait ratio (HTMT). Under the Fornell-Larcker criterion, the square root of a construct's AVE should be greater than its correlations with the other constructs. For HTMT, values below 0.90 are commonly treated as acceptable, particularly when the constructs are conceptually related

Table 4. Results of the AVE Root Discriminant Validity Test (*Fornell-Larcker Criterion*)

Construct	Work Adaptability	Digital Competency	ASN Performance	Work Engagement
Work Adaptability	0,896			
Digital Competency	0,733	0,952		
ASN Performance	0,835	0,841	0,926	
Work Engagement	0,860	0,823	0,873	0,949

The diagonal entries in Table 4 show the square root of AVE for each construct; the remaining entries show correlations between constructs. The values on the diagonal are 0.896 for work adaptability, 0.952 for digital competence, 0.926 for ASN performance, and 0.949 for work engagement.

For every construct, the diagonal value is greater than its correlations with the other constructs. For instance, work engagement has a square-root AVE of 0.949, compared with correlations of 0.860 with work adaptability, 0.823 with digital competence, and 0.873 with ASN performance. The same pattern holds across the matrix, indicating that the Fornell-Larcker criterion is met.

Table 5. Results of the Heterotrait-Monotrait Ratio (HTMT)

Construct Pair	HTMT Value	Assessment
Work Adaptability and Digital Competency	0,751	Satisfactory
Work Adaptability and ASN Performance	0,869	Satisfactory
Work Adaptability and Work Engagement	0,807	Satisfactory
Digital Competence and Work Engagement	0,868	Satisfactory
Digital Competence and Work Engagement	0,855	Satisfactory
ASN Performance and Work Engagement	0,815	Satisfactory

From Table 5, all six HTMT values fall below 0.90. The largest value is 0.869 for work adaptability and ASN performance, while the smallest is 0.751 for work adaptability and digital competence.

The HTMT results therefore support the conclusion that the four constructs are empirically distinguishable under the selected threshold. Considered alongside the Fornell-Larcker results, they provide further support for the discriminant validity of the measurement model.

Overall, the measurement results support convergent validity, internal consistency reliability, and discriminant validity. The structural model can therefore be examined, while keeping in mind the limits of the statistics available in the reported output.

Inner Model Assessment

The structural model was examined in terms of explanatory power, effect size, model fit, and predictive relevance. The thesis reports the R^2 values and one Q^2 value, but the available output does not include a numerical SRMR value or the f^2 statistics. These missing values are identified below rather than estimated from other results.

a. Goodness of Fit

Model-fit measures provide an indication of how closely the proposed model corresponds to the observed data. In PLS-SEM, the Standardized Root Mean Square Residual (SRMR) is often reported as a measure of approximate fit. A value below 0.08 is commonly used as a guideline, although meeting this threshold alone does not establish that a model is valid.

Table 6. Goodness of Fit Assessment

Fit Index	Results	Reference Guideline	Interpretation
SRMR	Not reported in the thesis output provided	Below 0,08 is commonly used	Cannot be determined from the available

The SmartPLS output reproduced in the thesis does not show a numerical SRMR value. As a result, model fit cannot be evaluated using SRMR from the evidence currently available. If the target journal requires this statistic, it should be retrieved from the model-fit results in SmartPLS 4.0.

b. Determinant Coefficient Test (R-Square Test)

R^2 indicates the proportion of variance in an endogenous construct explained by its predictors. Adjusted R^2 also accounts for the number of predictors in the model. Both values should be interpreted in light of the study design, sample size, and institutional context.

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

Endogenous Construct	R-Square	R-Square Adjusted	Category
ASN Performance	0,830	0,815	Strong
Work Engagement	0,819	0,808	Strong

Work engagement has an R^2 of 0.819 and an adjusted R^2 of 0.808. Digital competence and work adaptability therefore account jointly for 81.9% of the variance in work engagement in this sample. The remaining 18.1% reflects influences not represented in the model, along with unexplained variation.

For ASN performance, R^2 is 0.830 and adjusted R^2 is 0.815. Digital competence, work adaptability, and work engagement together account for 83.0% of the variance in ASN performance. The remaining 17.0% lies outside the explanatory contribution of the predictors included in the model. The R^2 values indicate substantial explanatory power for the respondents included in this analysis. They should not, however, be read as a guarantee that the model would explain the same share of variance in other local-government agencies or employee populations.

c. Effect Size Test

Effect size assesses how much an individual predictor contributes to explaining an endogenous construct. In PLS-SEM, f^2 is calculated by examining the change in R^2 when a predictor is removed from the structural model.

Common reference points for f^2 are 0.02 for a small effect, 0.15 for a medium effect, and 0.35 for a large effect. Values below 0.02 are generally considered negligible. These are interpretive guidelines rather than rigid cutoffs.

Table 8. Effect Size Assessment

Predictor	Endogenous Construct	F^2	Interpretation
Digital Competence	Work Engagement	Not reported	Cannot be determined
Work Adaptability	Work Engagement	Not reported	Cannot be determined
Digital Competence	ASN Performance	Not reported	Cannot be determined
Work Adaptability	ASN Performance	Not reported	Cannot be determined
Work Engagement	ASN Performance	Not reported	Cannot be determined

Although the thesis reports path coefficients and R^2 values, it does not provide the f^2 statistics needed to quantify each predictor's individual contribution. The effect sizes therefore cannot be established from the information available and should be taken from the f-square output in SmartPLS 4.0 before the assessment is finalized.

Path coefficients should not be used as substitutes for f^2 values. A statistically significant relationship does not necessarily imply a large effect; the f^2 value depends on how much the model's explanatory power changes when the predictor is excluded.

d. Predictive Test

The thesis reports a Q^2 statistic as an indicator of predictive relevance. Under the blindfolding-based Stone-Geisser approach, a Q^2 value greater than zero suggests that the model has predictive relevance for the endogenous construct to which the statistic applies.

Table 9. Predictive Test

Statistic	Reported Value	Interpretation
Q^2	0,969	Positive predictive relevance reported

The thesis reports $Q^2 = 0.969$, a positive value that is consistent with predictive relevance under the blindfolding-based procedure. However, that interpretation depends on the procedure actually used and on the construct to which the statistic refers.

Only one Q^2 value is reported, with no indication of whether it refers to work engagement, ASN performance, or an aggregate result. The final article should identify how the statistic was obtained and report separate construct-level results if they are available. If the analysis used PLSpredict rather than blindfolding, the assessment should instead include prediction-error measures and a suitable benchmark

The reported R^2 values suggest that the model explains a substantial proportion of the variance in work engagement (0.819) and ASN performance (0.830). The thesis also reports a Q^2 value of 0.969, although its interpretation remains provisional until the calculation procedure and relevant construct are confirmed.

Two parts of the assessment remain incomplete because the available thesis output does not report SRMR or f^2 values. Those statistics should be retrieved from SmartPLS 4.0 rather than inferred from the path coefficients or R^2 values. Once they are available, they can be considered alongside the direct and indirect effects to provide a fuller account of the structural model.

Direct Effects

The results of the structural model are presented below

Table 10. Significance Test Results for Path Coefficients (Direct Effect)

Relationship	Original Sample (O)	Standard Deviation	T-Statistics	P-Values	Explanation
Work Adaptability → ASN Performance	0,290	0,125	2,325	0,020	Significant
Work Adaptability → Work Engagement	0,555	0,108	5,148	0,000	Significant
Digital Competency → ASN Performance	0,358	0,085	4,230	0,000	Significant
Digital Competency → Work Engagement	0,416	0,110	3,787	0,000	Significant
Work Engagement → ASN Performance	0,329	0,133	2,481	0,013	Significant

Digital Competence and ASN Performance

Digital competence has a positive and significant effect on ASN performance, with a path coefficient of 0.358, a t-statistic of 4.230, and a p-value of 0.000. H1 is therefore supported.

The finding indicates that employees' ability to work with digital technology is associated with better performance. In a local government office, digital competence is reflected not simply in whether an employee can operate a computer, but in how effectively that employee can use digital systems to process documents, retrieve information, communicate with colleagues, prepare reports, and resolve routine work problems.

The result is consistent with previous studies that found a relationship between digital competence and employee performance (Emilia & Soemaryani, 2025; Ermawati et al., 2024; Ingsih et al., 2024). Digital competence appears to have practical value because technological capability becomes part of the employee's everyday working capacity

Work Adaptability and ASN Performance

Work adaptability also has a positive and significant effect on ASN performance. The path coefficient is 0.290, with a t-statistic of 2.325 and a p-value of 0.020. H2 is supported.

The finding suggests that employees who are better able to adjust to changing work conditions tend to demonstrate better performance. Within a government institution, change can take many forms, including revised administrative procedures, new digital applications, changes in reporting requirements, or adjustments to organizational priorities.

The result supports the view that adaptability is an important employee capability in changing work environments (Rudolph et al., 2021; Sony & Mekoth, 2022). Chouhan (2023) similarly reported a relationship between career adaptability and employee performance. The present finding extends this discussion to the context of ASN employees in a local government institution.

Digital Competence and Work Engagement

Digital competence has a positive and significant effect on work engagement, with a path coefficient of 0.416, a t-statistic of 3.787, and a p-value of 0.000. H3 is supported.

One possible explanation is that employees who feel more capable of handling digital tasks may experience greater confidence in dealing with technology-dependent work. Instead of spending excessive effort overcoming basic technical difficulties, they can devote more attention to completing their responsibilities.

From the JD-R perspective, digital competence may function as a personal resource that helps employees deal with work demands (Bakker & Demerouti, 2017). The finding also reinforces the broader argument that digital transformation requires employee capabilities, not simply the introduction of technological systems (Mergel et al., 2019).

Work Adaptability and Work Engagement

Work adaptability demonstrates the strongest direct relationship with work engagement among the predictors examined in the model. The path coefficient is 0.555, with a t-statistic of 5.148 and a p-value of 0.000. H4 is supported.

Employees who can adjust when work conditions change may be better able to maintain psychological involvement in their work. When a familiar procedure is replaced by a new one, for instance, adaptability can help an employee shift attention from frustration with the change toward learning how to work under the new arrangement.

The finding is consistent with previous research linking adaptability and engagement (Astari & Harmen, 2021; Chen et al., 2024; Mashavira et al., 2025). It also suggests that adaptability is not merely a response capability. It may have implications for employees' motivational experiences at work.

Work Engagement and ASN Performance

Work engagement has a positive and significant effect on ASN performance. The path coefficient is 0.329, the t-statistic is 2.481, and the p-value is 0.013. H5 is therefore supported.

Employees who are energetic, dedicated, and absorbed in their work are more likely to maintain attention and effort when carrying out their responsibilities. In practical terms, engagement may be reflected in how consistently employees complete assignments, respond to work demands, and maintain focus on organizational responsibilities.

The result is consistent with the JD-R perspective, which places work engagement within the motivational process linking resources and positive employee outcomes (Bakker & Demerouti, 2017). It is also aligned with research emphasizing work engagement as an important factor in employee outcomes (Bakker & Albrecht, 2018; Knight et al., 2017, 2019).

Coefficient of Determination and Predictive Relevance

The coefficient of determination results are presented below.

Table 11. Coefficient of Determination (R-Square) Test Results

Endogenous Construct	R-Square	R-Square Adjusted	Category
ASN Performance	0,830	0,815	Strong
Work Engagement	0,819	0,808	Strong

The R^2 value for work engagement is 0.819, indicating that digital competence and work adaptability jointly explain 81.9% of the variance in work engagement. The adjusted R^2 is 0.808.

For ASN performance, the R^2 value is 0.830, while the adjusted R^2 is 0.815. Digital competence, work adaptability, and work engagement therefore jointly account for 83.0% of the variance in ASN performance within the research model.

The model also produced a Q^2 value of 0.969, indicating strong predictive relevance for the endogenous constructs examined in the model.

Mediation Analysis

The mediation results are presented below.

Table 12. Results of the Significance Test of Indirect Effect

Relationships Between Variables	Original Sample (O)	Standard Deviation	T-Statistics	P-Values	Information
Work Adaptability → Work Engagement → ASN Performance	0,183	0,093	1,970	0,049	Significant
Digital Competency → Work Engagement → ASN Performance	0,137	0,060	2,265	0,024	Significant

Work Engagement as a Mediator between Digital Competence and ASN Performance

The indirect effect of digital competence on ASN performance through work engagement is 0.137, with a t-statistic of 2.265 and a p-value of 0.024. The relationship is significant, and the mediation is classified as partial. H6 is supported.

The result indicates that digital competence contributes to ASN performance through two related pathways. The first is direct, as shown by the significant relationship between digital competence and performance. The second operates through work engagement. Employees who are more capable of handling digital requirements may not only perform their tasks more effectively but may also experience greater involvement in their work, which in turn contributes to performance.

This finding provides support for integrating capability and motivational perspectives. Digital competence represents an employee capability, while work engagement provides a motivational pathway through which that capability can be converted into work outcomes.

Work Engagement as a Mediator between Work Adaptability and ASN Performance

The indirect effect of work adaptability on ASN performance through work engagement is 0.183, with a t-statistic of 1.970 and a p-value of 0.049. The relationship is significant and indicates partial mediation. H7 is supported.

The result suggests that adaptability contributes to performance not only because employees can adjust their behavior when circumstances change, but also because adaptability may help them remain engaged with their work. An employee who can adjust to new procedures, responsibilities, or technologies may be better able to sustain involvement rather than allowing organizational change to interrupt work engagement.

The indirect effect is also somewhat larger than the indirect effect of digital competence. However, the coefficients should be interpreted within the context of this particular sample and research model rather than as a general ranking of the relative importance of the variables.

Theoretical Implications

The findings provide empirical support for combining the JD-R theory and the AMO framework to explain ASN performance in a local government context.

From the JD-R perspective, digital competence and work adaptability can provide employees with resources that help them manage changing work demands. These resources are associated with work engagement, which subsequently contributes to performance. The significant relationships between digital competence, work adaptability, work engagement, and ASN performance are consistent with this motivational pathway.

The AMO framework adds another layer to the explanation. Digital competence and adaptability represent employee capabilities that can support the ability component, while work engagement reflects a motivational condition through which those capabilities may be expressed in actual work behavior. The results therefore suggest that employee capability alone may not fully explain performance. The motivational state of the employee also matters.

Taken together, the findings support an integrated explanation in which employee capability and motivation operate alongside one another. Such integration is particularly relevant for public organizations where technological change and administrative requirements continue to evolve.

Practical Implications

Several practical implications emerge from the findings. First, digital competence development should be connected to the actual work performed by ASN employees. Training could focus on practical skills such as electronic document management, information retrieval, digital reporting, the use of government applications, and solving common problems encountered in digital workflows.

Second, adaptability should be developed as an ongoing workplace capability rather than treated only as a response to major organizational change. Employees may benefit from opportunities to learn new procedures gradually, receive clear information when systems change, and share practical solutions with colleagues.

Third, capability development needs to be accompanied by efforts to sustain work engagement. Employees who receive digital training but do not experience adequate support in their work environment may not necessarily translate those capabilities into sustained performance. Supervisory support, opportunities for communication, recognition, and clear work expectations can help maintain employee involvement.

Finally, the findings suggest that human resource development in local government should not treat digital competence, adaptability, and engagement as completely separate issues. They are connected elements of the way employees respond to contemporary work demands.

CONCLUSIONS

This study examined the relationships among digital competence, work adaptability, work engagement, and ASN performance at the Office of Community and Village Empowerment of Sidoarjo Regency. The findings show that digital competence has a positive and significant effect on ASN performance, while work adaptability also has a positive and significant effect on performance. Both digital competence and work adaptability significantly influence work engagement, and work engagement itself has a positive and significant relationship with ASN performance.

The mediation analysis provides further insight. Work engagement partially mediates the relationship between digital competence and ASN performance and also partially mediates the relationship between work adaptability and ASN performance. These findings indicate that employee capabilities may contribute to performance through both direct capability-related pathways and indirect motivational pathways.

For local government organizations, the results point to the value of developing employee capabilities alongside efforts to sustain engagement. Digital transformation requires employees who can use technology effectively, but technological capability alone does not tell the whole story. Employees also need to adjust when procedures and work conditions change and remain sufficiently engaged to translate those capabilities into consistent performance.

The study has several limitations. The research involved only 37 ASN employees from one local government institution, which limits the extent to which the findings can be generalized to other public organizations. The cross-sectional design also captures relationships at a particular period rather than changes over time. Future research could involve larger samples across several local government institutions and incorporate additional variables that may help explain ASN performance, such as leadership, organizational support, self-efficacy, or other work-related resources.

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