

The Role of Digital Competence and Employee Agility in Enhancing Employee Performance at the Jatiluhur Floating Net Cages

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Abstract

This study aims to describe digital competence, employee agility, and employee performance, as well as to analyze the effects of digital competence and employee agility-both partially and simultaneously-on employee performance at the Floating Net Cage (KJA) Zone 5 Jatiluhur. The research sample consisted of 104 field workers selected using probability sampling with a simple random sampling method. Quantitative data were collected through a Likert-scale questionnaire (1-5) and analyzed using Covariance-Based Structural Equation Modeling (CB-SEM) with the assistance of SmartPLS 4. The descriptive analysis results indicate that digital competence is in the good category, employee agility is in the fairly good category, and overall employee performance is in the good category. Hypothesis testing shows that digital competence has a positive and significant effect on employee performance ($t = 2.064$; $p = 0.040$), while employee agility does not have a significant direct effect ($t = 0.550$; $p = 0.583$). However, simultaneously, digital competence and employee agility explain 65.5% of the variance in employee performance ($R^2 = 0.655$), indicating a synergistic effect in enhancing performance. Theoretically, these findings confirm digital competence as a key factor in improving work effectiveness and employees' ability to adapt to operational and technological changes. Although employee agility is not directly significant, it functions as a reinforcing factor when combined with digital competence. Practically, this study suggests that organizations should prioritize the development of digital competence, structured agility training, and integrated strategies to optimize overall employee performance.

1. Introduction

The fisheries industry is one of the strategic sectors in the national economy, particularly in regions with abundant water resources such as Indonesia. Fish farming activities through the Floating Net Cage (*Kolam Jaring Apung* - KJA) system have expanded rapidly, as they contribute to increased fish production, broaden business opportunities, and support the welfare of coastal communities (Husnadinda et al., 2024).

Purwakarta Regency is the largest center of fish farming activities, with KJA production reaching approximately 94.5 thousand tons per year, the highest in West Java (Husnadinda et al., 2024). Jatiluhur Reservoir has served as the focal point of KJA activities since the 1980s and remains a primary source of livelihood for thousands of local residents. While the growth of KJA has been driven by market demand and favorable

environmental potential, it has also generated ecological and social challenges that affect the economic stability of fish farmers (Zidan Imawan & Gunawan, 2025).

Employee performance plays a crucial role in determining organizational success, as it reflects the extent to which an organization can achieve its objectives efficiently and effectively (Mulyadi & Pancasasti, 2021). Declines in employee performance are often triggered by low levels of commitment, insufficient work discipline, and work pressure that is not balanced with individual capacity (Nabila & Syarvina, 2022). In high-demand working environments such as the Floating Net Cage (KJA) operations in Jatiluhur, operational pressures combined with limited adaptive capabilities may further exacerbate performance issues.

Based on a preliminary survey conducted among 30 employees of the Floating Net Cage (KJA) Zone 5 in Jatiluhur, 66% of employees were found to exhibit suboptimal performance, while only 34% met the company's performance standards. The results of this preliminary employee performance survey are presented in Figure 1.

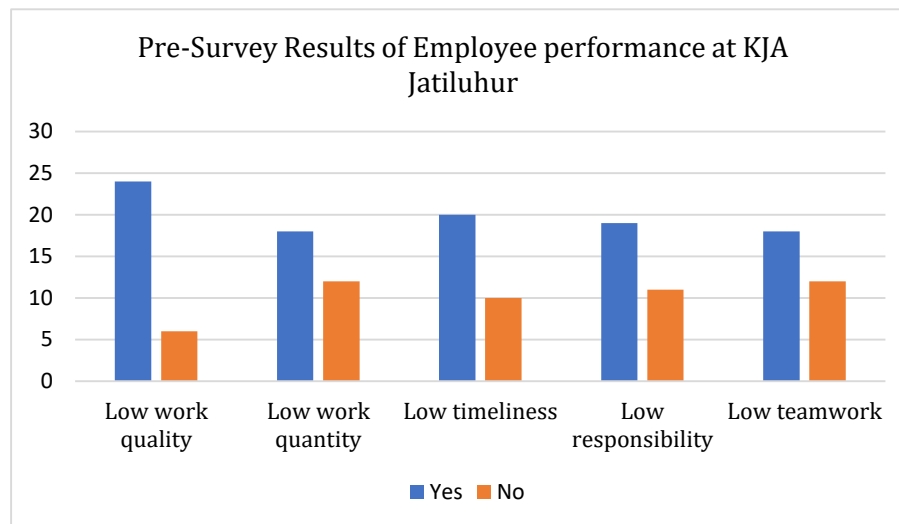


Figure 1 Pre-Survey Results of Employee Performance at FNC Zone 5

To ensure the sustainability of this sector, the government, through Regulation of the Minister of Marine Affairs and Fisheries Number 49/PERMEN-KP/2014 concerning Fish Farming Enterprises, emphasizes the importance of implementing sustainable management principles, production efficiency, and the enhancement of human resource capacity among fish farmers. One of the main challenges in this context is the readiness of human resources to face the era of the Industrial Revolution 4.0, in which digital technology has become a critical element in improving the effectiveness of business management. Digital capability is therefore regarded as a key factor in supporting organizational transformation (Nauli et al., 2025). Companies are increasingly required to shift their operational systems from manual to digital processes and consequently need human resources that are able to adapt quickly to technological developments (Simatupang et al., 2023). In this regard, digital competence and employee agility have become essential elements enabling employees to respond to change and enhance productivity (Nauli et al., 2025).

Digital competence constitutes a strategic capability that enables employees to use technology effectively in performing their tasks (Metris et al., 2025). Although many organizations have implemented digital-based systems, limitations in employees' digital competence may hinder the optimization of performance and work processes (Fadilah et al., 2025). Meanwhile, employee agility is widely recognized as a crucial factor in improving work effectiveness, as agile employees tend to demonstrate flexibility, rapid learning ability, and proactive initiative in dealing with workplace uncertainty (Simatupang et al., 2023). An increasingly dynamic work environment requires employees to adapt swiftly, prioritize tasks effectively, and continuously adjust to technological advancements (Selvia Wardhani et al., 2022).

Previous studies indicate that digital competence is closely associated with employee agility and employee performance, both directly and indirectly. Several studies report that digital competence has a direct effect on employee performance (Liasari et al., 2024; Nauli et al., 2025). In contrast, other studies suggest that this relationship is not purely direct and requires the presence of mediating variables, such as employee agility or digital innovation (Hasyim, 2025; Khoiruddin et al., 2024). On the other hand, employee agility has been shown to have a positive influence on employee performance and readiness for digital transformation (Ayatulloh et al., 2025; Liasari et al., 2024). However, most of these studies have been conducted in the education sector, industrial settings, or formal organizations. Therefore, this study offers novelty by integrating digital competence, employee agility, and employee performance within a single research model and applying it to the context of the fisheries sector, particularly traditional fisheries operations that are currently adapting to digital transformation.

This study aims to: (1) provide a comprehensive overview of digital competence, employee agility, and employee performance at the Floating Net Cage (KJA) operations in Jatiluhur; (2) examine the actual levels of employees' digital competence, employee agility, and performance within the KJA Jatiluhur work environment; and (3) analyze the effect of digital competence on employee performance, the effect of employee agility on employee performance, and the simultaneous influence of digital competence and employee agility on employee performance.

2. Literature Review

2.1 Employee Performance

Employee performance refers to the work outcomes achieved by an individual in carrying out assigned tasks, which are based on competence, experience, commitment, and the effective use of time (Mulyadi & Pancasasti, 2021). According to Nabila and Syarvina (2022), employee performance is defined as work achievement or work results, measured in terms of both quality and quantity, attained by employees within a certain period. Meanwhile, Rahmawati et al. (2024) describe employee performance as individual work outcomes that reflect the achievement of task quality and quantity in accordance with assigned responsibilities, evaluated based on predetermined criteria and requiring work to be carried out effectively and efficiently. Based on these perspectives, employee performance can be defined as the outcomes of an individual's execution of tasks and responsibilities, assessed in terms of quality and quantity within a specific period, in accordance with organizational standards.

According to Kurniasih et al. (2022), employee performance consists of several dimensions: (1) work quality, referring to the accuracy of work results and their conformity with established work standards; (2) work quantity, which relates to the volume of tasks completed and the achievement of work targets; (3) timeliness, defined as the completion of tasks according to schedule and the efficient use of working time; (4) responsibility, reflecting commitment in carrying out duties and compliance with work regulations; and (5) cooperation, referring to the ability to work effectively in teams and the willingness to assist colleagues.

2.2 Digital Competence

Digital competence is defined as a set of knowledge and skills that employees must possess in order to perform their tasks professionally, efficiently, and effectively (Hutasoit et al., 2025). It also refers to an individual's ability to use information and communication technology independently, effectively, and responsibly (Fadilah et al., 2025). Furthermore, Nauli et al. (2025) define digital competence as employees' ability to utilize digital technology effectively and adaptively to support work activities and respond to the demands of organizational digital transformation. Based on these definitions, digital competence can be concluded as an individual's capability encompassing knowledge and skills in utilizing digital technology effectively, independently, and adaptively to support task execution and cope with organizational digital transformation.

Digital competence consists of three main dimensions, each with specific indicators: (1) basic digital competence, which includes digital literacy and the ability to operate digital devices; (2) advanced technological competence, referring to the ability to utilize digital technologies and understand digital technology risks; and (3) digital-based soft skills, which encompass the ability to adapt to technological changes and the capacity for independent digital-based learning (Nauli et al., 2025).

2.3 Employee Agility

Employee agility is a vital human resource quality in the context of intense business competition and a dynamic work environment, requiring employees to work proactively and responsively in order to achieve organizational vision and mission (Simatupang et al., 2023). According to Rafidah et al., (2025), employee agility refers to an employee's personal ability to adapt quickly to change and cope with high work pressure. Meanwhile, Selvia Wardhani et al. (2022) state that this capability reflects an individual's capacity to set priorities, handle emergency situations, and continuously learn and adjust to ongoing changes, including technological advancements. Based on these viewpoints, employee agility can be defined as an employee's ability to adapt quickly and effectively to change, manage work pressure, and continuously learn and adjust in order to support the achievement of organizational goals.

According to Sadijah et al. (2023), employee agility comprises three dimensions: (1) proactive agility, which refers to the ability to anticipate change and the willingness to take on new roles; (2) adaptive agility, defined as the speed of adjustment and flexibility in changing work conditions; and (3) generative agility, which involves the ability to generate new ideas and implement more effective ways of working.

2.4 Conceptual Framework and Research Hypotheses

In this study, digital competence is defined as an individual's ability encompassing knowledge and skills in utilizing digital technology effectively, independently, and adaptively to support task execution and respond to organizational digital transformation. Digital competence includes basic competence, advanced technological competence, and digital soft skills, which are reflected in digital literacy and device usage, the utilization of technology and understanding of its risks, as well as adaptive capability and independent digital-based learning (Nauli et al., 2025). Previous studies indicate that digital competence has a positive relationship with employee performance (Kurniasih et al., 2022; Metris et al., 2025; Nauli et al., 2025). However, under certain conditions, digital competence has also been found to have a negative or insignificant relationship with performance (Hasyim, 2025; Khoiruddin et al., 2024).

Employee agility is defined as an employee's ability to adapt quickly and effectively to change, manage work pressure, and continuously learn and adjust in order to support the achievement of organizational objectives. According to Sadijah et al. (2023), employee agility comprises proactive agility (anticipating change and assuming new roles), adaptive agility (speed of adjustment and flexibility), and generative agility (the creation of new ideas and more effective ways of working). A number of studies have demonstrated that employee agility is positively associated with employee performance (Ayatulloh et al., 2025; Liasari et al., 2024; Rafidah et al., 2025). Conversely, low levels of employee agility may have a negative impact on performance (Sadijah et al., 2023; Simatupang et al., 2023).

Employee performance is defined as the outcomes of an individual's execution of tasks and responsibilities, measured in terms of both quality and quantity within a specific period and in accordance with organizational standards. According to Kurniasih et al. (2022), employee performance encompasses work quality, work quantity, timeliness, responsibility, and cooperation, which are reflected in work outcomes, target achievement, time efficiency, compliance with assigned duties, and the ability to work effectively in teams. Employee performance is closely related to digital competence and employee agility. High levels of digital competence and strong employee agility are positively associated with improved employee performance (Liasari et al., 2024; Nauli et al., 2025; Subariyanti et al., 2025). In contrast, low digital competence and limited employee agility are negatively associated with employee performance (Khoiruddin et al., 2024; Sadijah et al., 2023).

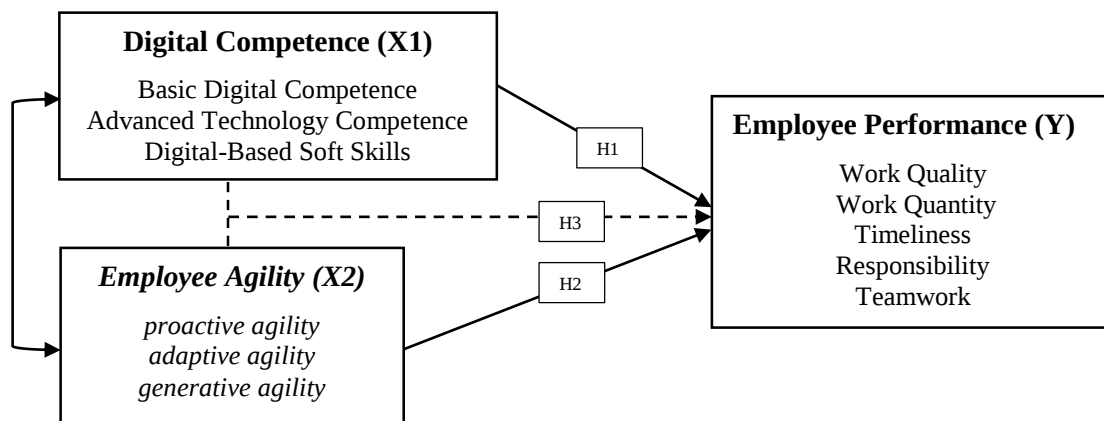


Figure 2 Conceptual Framework

Source: Adapted from Kurniasih et al. (2022), Nauli et al. (2025), and Sadijah et al. (2023)

Based on the research framework, digital competence and employee agility are regarded as important factors influencing employee performance. Digital competence supports work effectiveness through the utilization of technology, while employee agility enhances employees' ability to adapt to change. Accordingly, the following hypotheses are proposed:

H1: Digital competence has an effect on employee performance.

H2: Employee agility has an effect on employee performance.

H3: Digital competence and employee agility simultaneously have an effect on employee performance.

3. Research Method

This study employed a quantitative approach using a descriptive-verification method to analyze the effects of digital competence and employee agility on employee performance. Data were collected through a five-point Likert-scale questionnaire and field observations. The research was conducted at the Floating Net Cage (*Kolam Jaring Apung* - KJA) Zone 5 of the Jatiluhur Reservoir, Purwakarta Regency, West Java, with respondents consisting of all active field workers.

The research population comprised 115 employees. A sample of 104 respondents was determined using the Slovin formula with a 3% margin of error and selected through probability sampling using a simple random sampling technique. The study involved three main variables: digital competence (X_1) and employee agility (X_2) as independent variables, and employee performance (Y) as the dependent variable.

Table 1 Operational Variable

Digital Competence				Employee Agility				
Dimension	Indicator	Theoretical Source	Item No	Dimension	Indicator	Theoretical Source	Item No	
Basic Digital Competence	Digital literacy	Nauli et al., 2025	KD1	Proactive Agility	Ability to anticipate change	Sadijah et al., 2023	EA1	
	Ability to use digital devices		KD2		Willingness to take on new roles		EA2	
Advanced Technology Competence	Ability to utilize digital technology		KD3	Adaptive Agility	Speed of adaptation		EA3	
	Understanding of digital technology risks		KD4		Flexibility under changing work conditions		EA4	
Digital-Based Soft Skills	Ability to adapt to technological changes		KD5	Generative Agility	Ability to generate new ideas		EA5	
	Ability for self-directed digital learning		KD6		Ability to implement more effective work methods		EA6	
Employee Performance								
Dimension	Indicator	Theoretical Source	Item No	Dimension	Indicator	Theoretical Source	Item No	
Work Quality	Accuracy of work results	Kurniasih et al., 2022	KK1	Responsibility	Commitment in carrying out tasks	Kurniasih et al., 2022	KK7	
	Compliance of work results with work standards		KK2		Compliance with work regulations		KK8	
Work Quantity	Quantity of completed work		KK3	Teamwork	Ability to work in teams		KK9	
	Achievement of work targets		KK4		Willingness to assist coworkers		KK10	
Timeliness	Timely completion of tasks		KK5					
	Efficiency in the use of working time		KK6					

Source: Adapted from Kurniasih et al. (2022), Nauli et al. (2025), and Sadijah et al. (2023)

Descriptive analysis was conducted using the scale range method to describe the levels of digital competence, employee agility, and employee performance. Verificative analysis was performed using Covariance-Based Structural Equation Modeling (CB-SEM) with the assistance of SmartPLS 4. The analysis included the evaluation of the measurement model through convergent validity, construct reliability, and discriminant validity, as well as the evaluation of the structural model by assessing the coefficient of determination (R^2), path coefficients, and significance testing.

4. Research Results

4.1 Research Object Profile

The object of this study is the floating net cage (Kolam Jaring Apung/KJA) aquaculture business in Zone 5 of Jatiluhur Reservoir, located in Purwakarta Regency, West Java Province, Indonesia. Floating net cage aquaculture is a freshwater fish farming activity that utilizes reservoir waters as a cultivation medium by employing floating net systems for fish rearing. KJA Zone 5 is designated as an aquaculture utilization area, with its management authority under Perum Jasa Tirta II.

KJA Zone 5 is generally managed by local communities, either individually or through small business groups. Aquaculture activities are conducted using floating net cage units arranged across the reservoir waters. The main

cultivated commodities include common carp (*Cyprinus carpio*), tilapia (*Oreochromis niloticus*), and pangasius catfish (*Pangasius* sp.). Operational activities encompass cage preparation, stocking of fish seeds, fish maintenance, feeding, fish health management, harvesting, and daily operational record-keeping. All of these activities are carried out to ensure the sustainability of the aquaculture process and to enhance fishery production outcomes in KJA Zone 5 of Jatiluhur Reservoir.

4.2 Respondent Characteristics

To provide a general overview of the respondent profile, this study classified respondent characteristics based on age, highest level of education, and length of service. A summary of respondent characteristics by age, educational background, and tenure is presented in Table 2.

Table 2. Respondent Characteristics

Age			Last Education			Length of Service		
Category	Number (People)	%	Category	Number (People)	%	Category	Number (People)	%
≤ 20 years	16	15,4%	Elementary School	59	56,7%	≤ 1 year	11	10,6%
21 – 30 years	53	51%	Junior High School	34	32,7%	2 – 5 years	41	39,4%
31 – 40 years	30	28,8%	Senior High School	11	10,6%	6 – 10 years	37	35,6%
≥ 41 years	5	4,8%				> 10 years	15	14,4%

Based on Table 2, the majority of respondents were aged 21–30 years (51.0%), had a primary school education (56.7%), and had a length of service of 2–5 years (39.4%). These findings indicate the dominance of employees in their productive age with relatively stable work experience.

4.3 Descriptive Statistical Analysis

The results of the descriptive analysis for the variables of digital competence, employee agility, and employee performance are presented in Table 3.

Table 3 Descriptive Analysis of Research Variables

Variable	Indicator	Total Score	Category
Digital Competency	Digital literacy	338	Fairly Good
	Ability to use digital devices	357	Good
	Ability to utilize digital technology	361	Good
	Understanding of digital technology risks	355	Good
	Ability to adapt to technological changes	352	Fairly Good
	Ability for self-directed digital learning	372	Good
	Mode (most frequent category)		Good
Employee Agility	Ability to anticipate change	333	Fairly Good
	Willingness to take on new roles	358	Good
	Speed of adaptation	353	Fairly Good
	Flexibility under changing work conditions	353	Fairly Good
	Ability to generate new ideas	351	Fairly Good
	Ability to implement more effective work methods	338	Good
	Mode (most frequent category)		Fairly Good
Employee Performance	Accuracy of work results	331	Fairly Good
	Compliance of work results with work standards	353	Fairly Good
	Quantity of completed work	363	Good
	Achievement of work targets	346	Fairly Good
	Timely completion of tasks	359	Good
	Efficiency in the use of working time	359	Good
	Commitment in carrying out tasks	370	Good
	Compliance with work regulations	369	Good
	Ability to work in teams	372	Good
	Willingness to assist coworkers	382	Good
	Mode (most frequent category)		Good

Based on Table 3, employees' digital competence is classified as good, although digital literacy and adaptation to technological change remain at a moderate level. Employee agility is categorized as moderately good, with several indicators having reached the good category. Meanwhile, overall employee performance is classified as good, although some indicators are still in the moderately good category.

4.4 Measurement Model Evaluation (Outer Model)

The measurement model evaluation was conducted through tests of convergent validity, construct reliability, and discriminant validity (Sihombing et al., 2024).

4.4.1 Convergent Validity Test

Convergent validity was assessed by examining outer loading values. Indicators are considered valid if their outer loading values are ≥ 0.70 (Sihombing et al., 2024).

Table 4 Outer Loadings

Digital Competence		Employee Agility	
	Outer loadings		Outer loadings
X1.1 <- Digital Competence	0.839	EA1 <- Employee Agility	0.770
X1.2 <- Digital Competence	0.846	EA2 <- Employee Agility	0.810
X1.3 <- Digital Competence	0.854	EA3 <- Employee Agility	0.827
X1.4 <- Digital Competence	0.746	EA4 <- Employee Agility	0.796
X1.5 <- Digital Competence	0.707	EA5 <- Employee Agility	0.807
X1.6 <- Digital Competence	0.778	EA6 <- Employee Agility	0.724
Employee Performance			
	Outer loadings		Outer loadings
KK1<- Employee Performance	0.743	Y6 <- Employee Performance	0.836
KK2 <- Employee Performance	0.776	Y7 <- Employee Performance	0.865
KK3 <- Employee Performance	0.761	Y8 <- Employee Performance	0.786
KK4 <- Employee Performance	0.760	Y9 <- Employee Performance	0.882
KK5 <- Employee Performance	0.805	Y10 <- Employee Performance	0.828

All indicators have outer loading values ≥ 0.70 , indicating that all measurement items meet the criteria for convergent validity.

4.4.2 Construct Reliability and Average Variance Extracted (AVE)

A construct is considered reliable if Cronbach's Alpha and Composite Reliability values are ≥ 0.70 , and it demonstrates convergent validity if the AVE value is ≥ 0.50 (Sihombing et al., 2024).

Table 5 Construct Reliability and Average Variance Extracted (AVE)

	Cronbach's alpha (standardized)	Cronbach's alpha (unstandardized)	Composite reliability (rho_c)	Average variance extracted (AVE)
Digital Competence	0.912	0.913	0.913	0.635
Employee Agility	0.908	0.908	0.908	0.624
Employee Performance	0.948	0.948	0.948	0.649

The results indicate that all constructs are reliable, as Cronbach's Alpha and Composite Reliability values exceed 0.70, and all AVE values are greater than 0.50.

4.4.3 Discriminant Validity Test

Discriminant validity was evaluated using the Heterotrait–Monotrait Ratio (HTMT) and the Fornell–Larcker Criterion (Sihombing et al., 2024).

Table 6 HTMT (Heterotrait–Monotrait Ratio)

	Digital Competence	Employee Agility	Employee Performance
Digital Competence			
Employee Agility	0.795		

Employee Performance	0.801	0.723
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All HTMT values between constructs are below the threshold of 0.90, indicating that digital competence, employee agility, and employee performance meet discriminant validity criteria based on the HTMT method.

Table 7 Fornell–Larcker Criterion

	Kompetensi Digital	Employee Agility	Kinerja Karyawan
Digital Competence	0.797		
Employee Agility	0.807	0.790	
Employee Performance	0.802	0.713	0.805

The square root of the AVE for each construct is greater than its correlations with other constructs, indicating that all variables satisfy discriminant validity criteria based on the Fornell–Larcker approach.

4.5 Structural Model Evaluation (Inner Model)

The results of the structural model evaluation include the R-square (R^2) value and path coefficients (Sihombing et al., 2024).

4.5.1 R-square

The R-square value is used to assess the ability of independent variables to explain the dependent variable (Sihombing et al., 2024).

Table 8.R-square

	R-square
Employee Performance	0.655

Based on Table 8, the R-square value of 0.655 indicates that digital competency and employee agility simultaneously explain 65.5% of the variance in employee performance, while the remaining 34.5% is explained by other variables not included in this research model.

4.5.2 Hypothesis Testing

Path coefficients indicate the direction and magnitude of the relationships between variables. The effect is considered statistically significant if the t-statistic value is ≥ 1.96 and the p-value is ≤ 0.05 (Sihombing et al., 2024).

Table 9 Path Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Digital Competence -> Employee Performance	0.578	0.516	0.280	2.064	0.040
Employee Agility -> Employee Performance	0.183	0.256	0.332	0.550	0.583

Based on these results, digital competency has a positive and statistically significant effect on employee performance. In contrast, employee agility does not show a significant effect on employee performance.

4.6 Model Fit Evaluation (Goodness of Fit)

The model fit evaluation shows that the estimated model has a Chi-square value of 301.517 (df = 206), a χ^2/df ratio of 1.464, RMSEA = 0.067, SRMR = 0.044, TLI = 0.940, and CFI = 0.947. These values indicate that the model demonstrates an acceptable to good statistical fit (Sihombing et al., 2024).

5. Discussion

5.1 Overview of Digital Competence, Employee Agility, and Employee Performance

Employees' digital competence is classified as good, with digital-based self-directed learning emerging as the most prominent aspect shaping digital competence in supporting job execution. Employee agility is generally categorized as moderately good, primarily represented by employees' willingness to take on new roles as a manifestation of agility in responding to dynamic work demands. Meanwhile, employee performance is also classified as good, with willingness to assist colleagues as the most dominant aspect, indicating the strong role of

collaboration in shaping employee performance. These findings are consistent with the views of Larasshati and Priyastiwi (2024) as well as Rafidah et al., (2025), who emphasize that digital competence and work agility are critical factors in supporting employee effectiveness and productivity, particularly in dynamic work environments.

5.2 Effect of Digital Competence on Employee Performance

Digital competence has a positive and significant effect on employee performance at the Floating Net Cage (KJA) operations in Jatiluhur. The ability to utilize digital technology emerges as the most dominant aspect of digital competence, indicating that mastery and optimal use of technology directly support improvements in employee work effectiveness and productivity. This finding is in line with Larasshati and Priyastiwi (2024) and Nauli et al. (2025), who argue that digital competence plays a crucial role in enhancing employee performance in the era of digital transformation.

5.3 Effect of Employee Agility on Employee Performance

Employee agility does not have a significant effect on employee performance. Speed of adaptation is identified as the main dimension shaping employee agility, reflecting employees' ability to respond quickly to change. However, this finding suggests that such agility has not yet directly translated into improved performance outcomes. This may be because employee agility represents a long-term adaptive capability that requires support from work systems, organizational policies, and organizational culture in order to exert a tangible impact on performance. This result is consistent with the findings of Khoiruddin et al. (2024) and Hasyim (2025), who state that agility does not always have a direct effect on performance but may operate through mediating variables or within specific organizational contexts.

5.4 Effect of Digital Competence and Employee Agility on Employee Performance

Simultaneously, digital competence and employee agility explain 65.5% of the variation in employee performance, indicating that both variables play an important role in shaping employee performance at KJA Jatiluhur. Teamwork ability emerges as the most dominant aspect representing employee performance. Although employee agility does not have a significant partial effect, its presence strengthens the overall model when combined with digital competence. This finding supports the views of Subariyanti et al. (2025) and Ayatulloh et al. (2025), who emphasize the importance of integrating digital competence and adaptive capability to enhance performance in dynamic work environments.

5.5 Conclusions and Implications

Based on the results of this study examining the effects of digital competence and employee agility on employee performance at the Floating Net Cage (KJA) Zone 5 Jatiluhur, several conclusions can be drawn. First, the descriptive analysis indicates that digital competence and employee performance at the Floating Net Cage (KJA) operations in Jatiluhur Reservoir are generally categorized as good, while employee agility falls within the moderately good category. These findings suggest that employees possess adequate digital capabilities and performance levels; however, improvements in employee agility are still needed to enable employees to become more adaptive and responsive to change. Overall, the results highlight the importance of strengthening digital competence and employee agility as efforts to support improved employee performance.

Second, hypothesis testing reveals that digital competence has a positive and significant effect on employee performance. This indicates that improvements in digital literacy, device mastery, utilization of advanced technologies, and the ability to adapt to technological change contribute to enhanced productivity, work quality, and timeliness in task execution. In contrast, employee agility does not have a significant partial effect on employee performance. Nevertheless, when considered simultaneously, the combination of digital competence and employee agility explains 65.5% of the variation in employee performance. This finding underscores that these two factors reinforce each other in optimizing performance outcomes.

The findings further indicate that the contributions of various aspects of digital competence, employee agility, and employee performance are not evenly distributed. In terms of digital competence, the relatively low ability to adapt to technological change suggests that technological mastery has not yet been fully accompanied by readiness to face continuous technological developments. Regarding employee agility, weaknesses in anticipating change and implementing more effective work practices indicate that agility remains largely potential and has not been optimally realized in practice. Meanwhile, in employee performance, lower accuracy of work results suggests that precision still requires improvement, even though cooperation and compliance are already categorized as good.

From a practical perspective, these findings highlight the need to strengthen digital competence with a focus on enhancing adaptability to technological developments through continuous training and on-the-job mentoring.

In terms of employee agility, organizations should strengthen communication related to work changes and encourage the implementation of more effective work practices so that agility can generate tangible performance outcomes. In addition, the relatively low accuracy of work results calls for the reinforcement of work standards and periodic quality evaluations to improve work accuracy without undermining the collaborative culture that has been established within the KJA Jatiluhur work environment.

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Conflict of Interest

The authors declare no conflicts of interest regarding this paper's publication.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** Yuda.; **data collection:** U.M.D.F.; **analysis and interpretation:** E.R.; **manuscript drafting:** Yuda and U.M.D.F. All authors reviewed and approved the final version.

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