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MANAGING GEN Z EMPLOYEES IN ASIA'S DIGITAL TRANSFORMATION ERA: THE ROLE OF DIGITAL LEADERSHIP, LEARNING AGILITY, AND ORGANIZATIONAL COMMITMENT IN INDONESIAN HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

Rapid economic, technological, and generational transformations are reshaping Human Resource Management (HRM) practices across Asia. In particular, organizations face growing challenges in managing younger employees amid digital transformation while moving beyond culture-centric explanations as the dominant lens for understanding HRM phenomena. This study examines how digital leadership influences employee performance through learning agility and organizational commitment among Generation Z employees in Indonesian higher education institutions, with digital transformation serving as a contextual moderator. Using a quantitative cross-sectional design, data were collected from 251 Gen Z employees across public and private higher education institutions in Indonesia and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings uncover that digital leadership is positively associated with employee performance, both directly and indirectly through learning agility and organizational commitment. Moreover, digital transformation strengthens the linkage between learning agility and employee performance, underscoring the importance of adaptive HRM capabilities in technology-intensive environments. By embedding HRM within Asia's institutional, technological, and generational transformations, this study contributes to contextualized HRM scholarship by moving beyond culture-centric explanations that have dominated prior Asian HRM research. Practically, the findings offer insights for HR leaders and university administrators on designing digitally enabled HRM strategies that foster adaptability, commitment, and long-term performance among Gen Z employees in higher education institutions undergoing rapid digital change.

KEYWORDS: Digital leadership; learning agility; organizational commitment; Gen Z; digital transformation; HRM in Asia; higher education institutions

1. NTRODUCTION

In the current period, Human Resource Management (HRM) practices across Asia have been reshaped by rapid economic, technological, and generational transformations. Digital transformation, institutional shifts, and demographic changes have significantly altered how organizations manage human capital and organizational performance (Kraus et al., 2021; Schilirò, 2024; Verhoef et al., 2021). While prior HRM investigations in the region has predominantly relied on cultural explanations to account for employee behavior and organizational outcomes, such an approach has become increasingly insufficient in capturing the complex realities faced by organizations operating in dynamic, technology-intensive environments. Asian organizations are now navigating accelerating digital transformation, shifting institutional arrangements, and the growing presence of younger generations in the workforce, all of which demand a more contextualized and process-oriented understanding of HRM phenomena (Kringelum et al., 2025; Verhoef et al., 2021).

One of the most significant drivers of organizational change in Asia is digital transformation. Governments and organizations across the region have actively promoted digitalization to enhance efficiency, service quality, and competitiveness (Gil-Gomez et al., 2020; Kraus et al., 2021). In Indonesia, for instance, large-scale digital initiatives have been implemented across sectors, including higher education institutions (HEIs), to modernize administrative systems, improve learning services, and support data-driven decision-making (Baiquni, 2025; López-Figueroa et al., 2025). While digital transformation offers substantial organizational benefits, it also creates new challenges for employees who must continuously adapt to evolving technologies, work processes, and performance expectations (Ampofo et al., 2023; Barbu et al., 2025; Schilirò, 2024). Employees who struggle to adjust to these changes may experience reduced effectiveness, disengagement, and declining performance, thereby undermining organizational outcomes (Barbu et al., 2025; Ma et al., 2024).

Under these circumstances, leadership stands as a key driver in shaping employees' responses to digital transformation. Digital leadership extends beyond technical proficiency and reflects leaders' ability to strategically guide organizations through digital change, foster adaptive mindsets, and align technological initiatives with human capabilities (AlNuaimi et al., 2022; López-Figueroa et al., 2025; Sacavém et al., 2025). Prior studies suggest that digitally oriented leaders can support employee adaptability, learning, and innovation, by creating environments that encourage experimentation, knowledge sharing, and continuous development (Cheng et al., 2025; Fan & Yang, 2026; Ramadan et al., 2023). Yet predominant scholarly attention has examined digital leadership in isolation from broader HRM mechanisms and has rarely considered how leadership effects unfold within specific institutional and generational contexts in Asia.

At the same time, managing younger employees has emerged as a pressing HRM challenge in the region. Generation Z is widely acknowledged as an increasingly dominant presence within the Asian workforce, bringing distinct values, career expectations, and learning preferences shaped by digital-native experiences and heightened exposure to technological change (Borowska & Pietroń-Pyszczek, 2025; Widodo et al., 2025). In Indonesia, Generation Z or also known as Gen Z represents a substantial proportion of the working-age population and is increasingly employed within HEIs in both academic and administrative roles (Utomo & Heriyanto, 2022). Prior research indicates that younger employees may exhibit lower organizational commitment and higher mobility intentions compared to previous generations, raising concerns about retention, engagement, and long-term performance (Borowska & Pietroń-Pyszczek, 2025; Turnawan et al., 2024; Widodo et al., 2025). Such dynamics call for HRM strategies that not only enhance performance but also foster adaptability and long-term commitment among younger workers.

Learning agility has been identified as a critical individual capability for navigating complex and uncertain work environments. Defined as the ability to learn from experience and effectively apply that learning to new situations, learning agility enables employees to adapt to technological change, shifting job demands, and evolving organizational practices (De Meuse, 2022; Deepa et al., 2021). From an HRM perspective, learning agility represents a key mechanism through which leadership practices, organizational culture (Cyfert et al., 2025; Fikri, 2024; Lam et al., 2021), and employee attitudes translate into performance outcomes (Hidayat et al., 2025; Tripathi, 2024). Nevertheless, empirical research examining learning agility within Asian HRM contexts remains limited, particularly in relation to generational differences and digital transformation.

Moreover, organizational commitment and organizational learning culture continue to play pivotal roles in shaping employee behavior amid change. Employees who feel emotionally attached to

their organizations are more likely to invest in self-development and adapt to new demands, while learning-oriented cultures provide the structural and psychological conditions necessary for continuous skill development (Halmaghi & Todăriță, 2023; Meher et al., 2025; Sungu et al., 2019). Organizational learning culture and commitment have also been shown to positively influence employee performance and adaptability (Gašić et al., 2024; Tripathi, 2024). However, existing studies have largely treated these constructs as universal predictors of performance, with insufficient attention to how they operate within digitally transforming organizations in Asia. In particular, little is known about how learning agility functions as a mediating mechanism linking leadership (Ibrahim et al., 2025), commitment, and learning culture to performance under conditions of rapid digital change (AlNuaimi et al., 2022; Qiao et al., 2024).

Addressing these gaps, this study examines how digital leadership influences employee performance through learning agility and organizational commitment among Gen Z employees in Indonesian higher education institutions, with digital transformation serving as a moderating contextual factor. Grounding HRM processes within Asia's institutional, technological, and generational transformations, this research moves beyond culture-centric explanations and offers a deeper insight into how HRM mechanisms operate in an emerging Asian economy (Kraus et al., 2021; Verhoef et al., 2021).

2. LITERATURE REVIEW

2.1. Digital Leadership and Learning Agility

Digital leadership refers to a leadership approach that integrates digital technologies into strategic decision-making, organizational processes, and people management practices to enable organizations to function effectively in technology-intensive environments (AlNuaimi et al., 2022; Sacavém et al., 2025; López-Figueroa et al., 2025). Rather than focusing solely on technical competence, digital leadership emphasizes leaders' ability to align technological change with human capabilities, foster adaptive mindsets, and support continuous learning among employees (Cheng et al., 2025; Tigre et al., 2025). In the case of Asian organizations undergoing rapid digital transformation, digital leadership has become increasingly critical as institutions face heightened pressure to modernize while maintaining workforce stability and performance (Namatovu & Kyambade, 2025; Verhoef et al., 2021).

From an HRM perspective, digital leadership serves as a cornerstone in shaping employees' learning-related behaviors. Leaders who actively promote digital initiatives, encourage experimentation, and legitimize learning from failure create conditions that support employees' willingness to acquire new skills and adapt to evolving work demands (Ramadan et al., 2023; Fan & Yang, 2026). Such leadership behaviors are particularly relevant in Asian higher education institutions, where digitalization has accelerated administrative reform, data-driven governance, and technology-mediated service delivery (Arregi Lopez et al., 2025; Baiquni, 2025). Under these conditions, employees are required not only to adopt new systems but also to continuously update their competencies to remain effective (Barbu et al., 2025).

Learning agility represents a key individual capability through which digital leadership exerts its influence. Employees who perceive strong digital leadership are more likely to engage in reflective learning, seek feedback, and apply newly acquired knowledge to unfamiliar situations (De Meuse, 2022; Deepa et al., 2021). By minimizing the uncertainty associated with technological change and providing strategic direction, digital leaders can enhance employees' confidence in navigating new digital tools and work processes (AlNuaimi et al., 2022; Qiao et al., 2024). Accordingly, digital leadership is expected to foster higher levels of learning agility among employees (Chong & Zainal, 2024).

H1: Digital leadership has a positive effect on learning agility

Beyond its direct influence, digital leadership is also expected to affect employee performance indirectly through learning agility. While leadership can set direction and create supportive conditions, performance improvements materialize only when employees internalize learning opportunities and translate them into adaptive work behaviors (Tripathi, 2024; Hidayat et al., 2025). Learning agility therefore emerges as an essential mediating mechanism through which digital leadership drives performance outcomes in digitally transforming organizations (AlNuaimi et al., 2022; Qiao et al., 2024).

H5: Learning agility mediates the link among digital leadership and employee performance

2.2. Organizational Commitment and Learning Agility

Organizational commitment reflects the extent to which employees identify with, feel emotionally attached to, and are willing to remain in their organization (Sungu et al., 2019; Gašić et al., 2024). In Asian HRM contexts, organizational commitment has traditionally been associated with loyalty, long-term

employment relationships, and collective orientation. However, these assumptions have been increasingly challenged by generational shifts and changing employment expectations, particularly among younger employees such as Generation Z (Borowska & Pietroń, 2025; Widodo et al., 2025).

Despite these changes, organizational commitment remains an important motivational resource that influences employees' willingness to invest in self-development and adapt to organizational change. Employees who feel committed to their organization are more likely to perceive learning as a means of contributing to organizational success rather than as an imposed requirement (Gašić et al., 2024). This sense of psychological attachment can motivate employees to actively seek learning opportunities, embrace new responsibilities, and develop adaptive competencies (Sungu et al., 2019).

In light of digital transformation, committed employees are better positioned to engage in continuous learning and skill development, as they are more inclined to align their personal growth with organizational objectives (Verhoef et al., 2021). Learning agility serves as the mechanism through which organizational commitment is translated into adaptive learning behaviors (Tripathi, 2024). Employees who are emotionally invested in their organization are more likely to reflect on experiences, seek feedback, and apply learning to new situations, thereby enhancing their capacity to cope with technological and organizational change (De Meuse, 2022).

H2: Organizational commitment has a positive effect on learning agility

H6: Learning agility mediates the link among organizational commitment and employee performance

2.3. Organizational Learning Culture and Learning Agility

Organizational learning culture refers to the shared values, norms, and practices that support continuous learning, knowledge sharing, and experimentation within an organization (Halmaghi, 2023; Meher et al., 2023). A strong learning culture provides both structural resources (e.g., training systems, knowledge-sharing platforms) and psychological conditions (e.g., trust, openness, and tolerance for failure) that enable employees to learn and adapt effectively (El Mazyani et al., 2025; Wardati & Ali, 2023).

In Asian higher education institutions, organizational learning culture plays a particularly important role due to the knowledge-intensive nature of academic and administrative work. As universities undergo digital transformation, employees are required to continuously update their competencies, collaborate across units, and integrate new technologies into existing practices (Lopez-Figueroa et al., 2025; Verhoef et al., 2021). A learning-oriented culture facilitates these processes by legitimizing learning as part of everyday work and encouraging employees to reflect on and share their experiences (Tripathi, 2024).

Learning agility is deeply embedded in such cultural environments. When organizations promote continuous learning and provide safe spaces for experimentation, employees are more likely to develop the flexibility and openness required to learn from experience and apply knowledge in novel situations (De Meuse, 2022; Meher et al., 2023). Organizational learning culture thus acts as a foundational HRM mechanism that enhances employees' learning agility and, by extension, their performance (Tripathi, 2024).

H3: Organizational learning culture has a positive effect on learning agility

H7: Learning agility mediates the link among organizational learning culture and employee performance

2.4. Learning Agility and Employee Performance

Learning agility has emerged as a vital capability in contemporary organizations characterized by rapid change, uncertainty, and technological disruption (De Meuse, 2022; Deepa et al., 2021). It captures employees' ability to learn quickly from experience, transfer insights across contexts, and adjust behavior in response to new demands (Vatsa & Bhatnagar, 2021).

From an HRM standpoint, learning agility is particularly valuable as it allows organizations to leverage existing human capital more effectively without relying solely on external recruitment (Tripathi, 2024). Employees with high learning agility are better equipped to manage complex tasks, respond to unexpected challenges, and continuously improve their work practices (Hidayat et al., 2025).

In higher education institutions, where employees must navigate evolving digital systems, regulatory requirements, and service expectations, learning agility supports sustained performance by enabling individuals to adapt their skills and behaviors in line with organizational needs (Lopez-Figueroa et al., 2025). Accordingly, learning agility is expected to be a strong predictor of employee performance, particularly in environments undergoing digital transformation (Serena et al., 2025; Tripathi, 2024).

H4: Learning agility has a positive effect on employee performance

2.5. The Moderating Role of Digital Transformation

Digital transformation represents a broader organizational context that shapes how individual capabilities translate into performance outcomes (Verhoef et al., 2021; Kraus et al., 2021). Beyond the adoption of digital technologies, digital transformation involves changes in organizational structures, workflows, and decision-making processes (Schilirò, 2024; Kringelum et al., 2025).

In organizations with higher levels of digital transformation, employees are more likely to have access to digital infrastructure, learning platforms, and data-driven tools that support the application of new knowledge (Gil-Gomez et al., 2020). Under such conditions, the performance benefits of learning agility are amplified, as employees can more effectively leverage digital resources to enhance efficiency and work quality (Barbu et al., 2025; Wang & Zhang, 2025). Conversely, in organizations with limited digital transformation, learning-agile employees may face structural barriers that restrict the translation of learning into performance gains (Schilirò, 2024).

Thus, digital transformation is expected to strengthen the positive relationship between learning agility and employee performance (Namatovu & Kyambade, 2025; Qiao et al., 2024).

H8: Digital transformation moderates the link among learning agility and employee performance

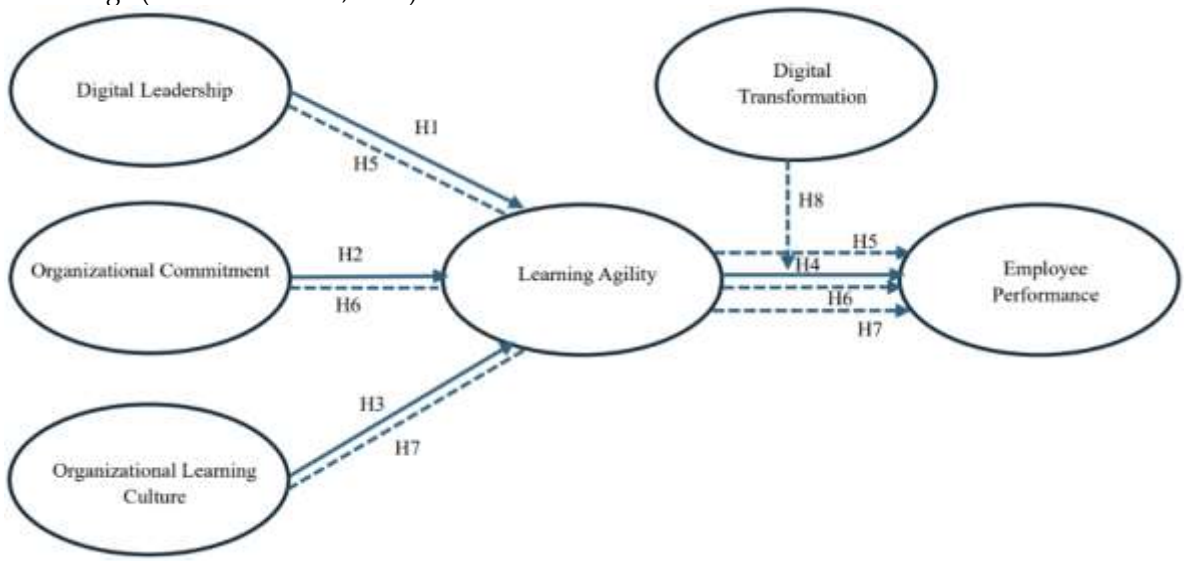

Figure 1: Research Model

3. RESEARCH METHODOLOGY

3.1. Research Design

This study adopted a quantitative research approach with a cross-sectional design to investigate the relationships among digital leadership, organizational commitment, organizational learning culture, learning agility, digital transformation, and employee performance within higher education institutions in Indonesia. A structured questionnaire was employed to collect empirical data from employees working in both public and private universities.

3.2. Sample and Data Collection

The population under investigation comprised employees affiliated with Indonesian higher education institutions. Convenience sampling was adopted as the sampling strategy, with respondents selected on the basis of accessibility and voluntary participation. An online survey instrument was deployed through institutional communication channels and professional networks for data collection purposes. To ensure respondents' familiarity with organizational processes, eligibility criteria required participants to be currently employed at a higher education institution in Indonesia and to possess a minimum of six months of work experience. The minimum required sample size was calculated using G*Power software. Assuming a medium effect size ($f^2 = 0.15$), a significance level of 0.05, a statistical power of 0.95, and four predictor variables, the minimum sample size was determined to be 129 respondents. A total of 251 valid responses were obtained from employees representing 41 higher education institutions across Indonesia, thereby exceeding the minimum threshold and strengthening the statistical power of the study.

3.3. Ethical Considerations

The study was designed and executed in accordance with prevailing ethical research principles. Each participant voluntarily took part in

the study, having provided informed consent prior to their involvement. Prior to participation, respondents were briefed on the study's purpose and assured that their responses would remain anonymous and confidential. No personal identifying details were obtained from respondents, and all data were used solely for academic research purposes.

3.4. Measurement Instruments

All constructs were measured using established and validated scales adapted from prior research. Digital leadership was measured using five items adapted from Qiao, Li, and Hong (2024). Organizational commitment was assessed using six items from the same source. Organizational learning culture was measured using eight items adapted from Tripathi (2024), while learning agility was measured using nine items based on Tripathi (2024). Digital transformation was measured using five items adapted from Qiao, Li, and Hong (2024), and employee performance was assessed using six items from the same study. All measurement items were rated on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). The questionnaire was administered in Indonesian to ensure clarity and comprehension among respondents.

3.5. Data Analysis

Data analysis was performed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4.0. PLS-SEM was selected due to its appropriateness for testing complex theoretical models, its emphasis on prediction, and its robustness in handling data that do not conform to multivariate normality assumptions. Analysis was carried out in two methodical stages, beginning with measurement model appraisal and advancing to structural model evaluation.

4. RESULTS

Table 1 presents the demographic profile of the respondents. Female respondents constituted a slightly higher proportion of the sample (57.77%) compared to male respondents (42.23%). The majority of respondents were aged between 22 and 26 years (56.18%), followed by those aged 27–30 years (37.85%) and 18–21 years (5.98%). Most respondents held a bachelor's degree (75.30%), followed by master degree (18.33%), while 5.18% reported a high school or vocational education background.

In terms of work experience, more than half of the respondents had been employed for 1–2 years (55.38%), followed by those with 3–4 years of experience (26.69%). Smaller proportions reported 5–6 years (11.16%) and 7–8 years (6.77%) of work experience.

Table 1: Respondent Profile

Criteria		Freq	Percentage
Gender	Man	106	42.23%
	Woman	145	57.77%
Age	18 - 21 years old	15	5.98%
	22 - 26 years old	141	56.18%
	27 - 30 years old	95	37.85%
Educational Background	High School / Vocational School	13	5.18%
	Bachelor (S1)	189	75.30%
	Master (S2)	46	18.33%
	Doctoral (S3)	3	1.20%
Work Experience	1 - 2 years	139	55.38%
	3 - 4 years	67	26.69%
	5 - 6 years	28	11.16%
	7 - 8 years	17	6.77%

To ensure the validity and reliability of the measurement model, several criteria were examined, including outer loadings, average variance extracted (AVE), Cronbach's alpha (CA), and composite reliability (CR) for each construct.

Table 2: Measurement Test Results

Indicator	Outer Loading
Digital Leadership (DL) (AVE:0.659, CA : 0.872, CR : 0.906)	
DL.01 : My boss helped me understand the risks that can arise from using technology in the workplace.	0.805
DL.02 : My boss introduced technology that could make work more efficient.	0.875
DL.03 : My boss works with others to make ethical rules in the use of technology.	0.792
DL.04 : My boss helped reduce the resistance to digital change by providing clear explanations.	0.771
DL.05 : My boss encourages us to use the right digital tools so that the work can run well.	0.813
Organizational Commitment (OC) (AVE:0.679, CA : 0.905, CR : 0.927)	
OC.01 : I am happy and willing to continue my career in this organization.	0.781
OC.02 : I feel that the challenges faced by this organization are also my responsibility.	0.768

Indicator	Outer Loading
OC.03 : I feel like I am part of a big family in this organization.	0.814
OC.04 : I feel emotionally attached to this organization.	0.826
OC.05 : This organization has a lot of meaning to me.	0.880
OC.06 : I have a strong sense of belonging to this organization.	0.868
Organizational Learning Culture (OLC) (AVE:0.629, CA : 0.916, CR : 0.931)	
OLC.01 : Employees get appreciation when they want to learn new things.	0.757
OLC.02 : Employees take the time to build trust with each other.	0.807
OLC.03 : Teams adjust their thinking after a discussion together	0.852
OLC.04 : The team changed their view based on the new information obtained.	0.841
OLC.05 : Learning or work experience is shared so that all employees can learn.	0.775
OLC.06 : Employees are rewarded when they dare to take the initiative.	0.729
OLC.07 : The organization works with external parties to achieve common goals	0.774
OLC.08: Leaders in my organization are constantly looking for opportunities to learn and grow.	0.800
Learning Agility (LA) (AVE:0.515, CA : 0.864, CR : 0.894)	
LA.02 : I was still able to get the job done well despite the change in situation.	0.659
LA.03 : I asked for feedback on my skills.	0.724
LA.04 : I asked for input from others to improve my skills.	0.756
LA.05 : I love learning new things from people outside of my field of work.	0.651
LA.06 : I easily remember new information.	0.607
LA.07 : I am sure I can learn new things.	0.777
LA.08 : I enjoy finding different ways to solve problems.	0.770
LA.09 : I am looking for ways to apply the new things I learn.	0.772
Digital Transformation (DT) (AVE:0.759, CA : 0.921, CR : 0.940)	
DT.01 : My organization strives to digitize as many work processes as possible.	0.856
DT.02 : My organization collects a lot of data from various sources.	0.859
DT.03 : My organization uses digital technology to expand its activities.	0.897
DT.04 : My organization utilizes digital technology to improve the quality of services.	0.883
DT.05 : My organization supports information sharing through digital platforms.	0.860
Employee Performance (EP) (AVE:0.632, CA : 0.882, CR : 0.911)	
EP.01 : My work is rewarded when I do it well.	0.740
EP.02 : I received useful feedback from my boss about my performance.	0.783
EP.03 : I feel happy when my work helps the success of the organization.	0.855
EP.04 : I am happy to know that my work is beneficial to me and also to the organization.	0.838
EP.05 : I remain committed to completing the work despite the challenges.	0.813
EP.06 : I meet the expected performance standards for my work.	0.731

All indicator loadings exceeded the minimum recommended threshold of 0.60, indicating acceptable indicator reliability. Although several items exhibited moderate loadings, they were retained as they contributed to content validity and the overall reliability of the constructs. Convergent validity was confirmed across all constructs, with AVE values clearing the 0.50 threshold, while internal consistency reliability was equally upheld, as evidenced by Cronbach's alpha and composite reliability values above 0.70.

Table 3: Discriminant Validity Assessment Using HTMT

	DL	DT	EP	LA	OC	OLC	DT x LA
Digital Leadership							
Digital Transformation	0.500						
Employee Performance	0.665	0.600					
Learning Agility	0.544	0.693	0.730				
Organizational Commitment	0.635	0.401	0.625	0.603			
Organizational Learning Culture	0.664	0.576	0.795	0.625	0.596		
Digital Transformation x Learning Agility	0.091	0.490	0.107	0.210	0.130	0.063	

Discriminant validity was verified by subjecting all constructs to the HTMT criterion. All HTMT values were below the recommended threshold of 0.90, indicating adequate discriminant validity among the constructs.

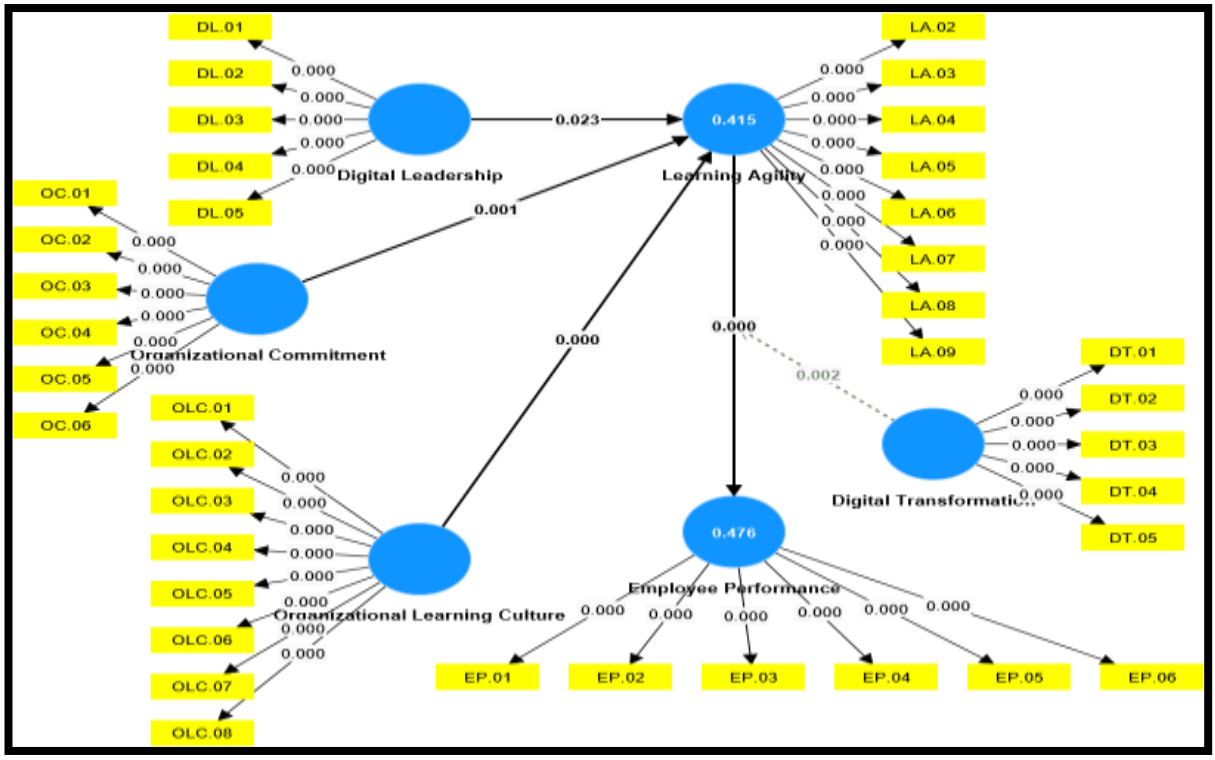

Figure 2: Structural Model Results

The coefficient of determination (R^2) for employee performance was 0.476, signifying that the proposed model captures 47.6% of the variance in employee performance, which reflects a moderate level of explanatory power.

Table 4: Multicollinearity Test Results

Path	BRIGHT
Digital Leadership -> Learning Agility	1.753
Digital Transformation -> Employee Performance	2.045
Learning Agility -> Employee Performance	1.652
Organizational Commitment -> Learning Agility	1.612
Organizational Learning Culture -> Learning Agility	1.716
Digital Transformation x Learning Agility -> Employee Performance	1.313

To rule out multicollinearity, VIF values were calculated and examined for all predictor variables. Table 3 presents the VIF values for all constructs, which fell below the recommended threshold of 3.00, confirming that multicollinearity was not a concern in the model. Having assessed both the measurement and structural models, the study proceeded to test the hypotheses through the bootstrapping procedure. Table 5 reports the outcomes of all hypothesized relationships

Table 5: Hypothesis Test Results

	Hypothesis	Path	T stat	P values	Result
H1	Digital Leadership -> Learning Agility	0.144	2.001	0.023	Accepted
H2	Organizational Commitment -> Learning Agility	0.289	3.162	0.001	Accepted
H3	Organizational Learning Culture -> Learning Agility	0.325	5.481	0.000	Accepted
H4	Learning Agility -> Employee Performance	0.472	7.238	0.000	Accepted
H5	Digital Leadership -> Learning Agility -> Employee Performance	0.068	1.915	0.028	Accepted
H6	Organizational Commitment -> Learning Agility -> Employee Performance	0.137	2.940	0.002	Accepted
H7	Organizational Learning Culture -> Learning Agility -> Employee Performance	0.154	3.827	0.000	Accepted
H8	Digital Transformation x Learning Agility -> Employee Performance	0.120	2.959	0.002	Accepted

4.1. Hypothesis Testing Results

To assess the hypothesized correlation, the bootstrapping procedure was duly applied. As shown in Table 5, digital leadership has a positive and significant effect on learning agility ($\beta = 0.144$, $t = 2.001$, $p = 0.023$), supporting H1. Organizational commitment is also positively related to learning agility ($\beta = 0.289$, $t = 3.162$, $p = 0.001$), providing support for H2. Organizational learning culture exhibits a strong positive association with learning agility ($\beta = 0.325$, $t = 5.481$, $p < 0.001$), supporting H3.

Learning agility is found to have a significant positive effect on employee performance ($\beta = 0.472$, t

= 7.238, p < 0.001), supporting H4. Regarding mediation effects, learning agility partially mediates the relationship between digital leadership and employee performance (β = 0.068, t = 1.915, p = 0.028), supporting H5. In addition, learning agility significantly mediates the relationships between organizational commitment and employee performance (β = 0.137, t = 2.940, p = 0.002) and between organizational learning culture and employee performance (β = 0.154, t = 3.827, p < 0.001), supporting H6 and H7, respectively.

Finally, the interaction effect analysis indicates that digital transformation significantly moderates the relationship between learning agility and employee performance (β = 0.120, t = 2.959, p = 0.002), supporting H8.

5. DISCUSSION

This study sought to investigate how digital leadership, organizational commitment, and organizational learning culture influence employee performance through learning agility among Gen Z employees in Indonesian higher education institutions, with digital transformation serving as a contextual moderator. By situating these relationships within Asia's ongoing technological and generational transformations, the findings provide several important theoretical and contextual insights for HRM scholarship beyond culture-centric explanations.

5.1. Learning agility as a central HRM mechanism in Asia's digital transformation

Among the most compelling outcomes of this study is the pronounced influence of learning agility in accounting for employee performance within digitally transforming higher education institutions. Learning agility emerged not only as a direct predictor of performance but also as a key mediating mechanism through which leadership, commitment, and learning culture exert their influence. This finding advances HRM theory by positioning learning agility as a core adaptive capability that enables employees to cope with rapid technological change, rather than merely an individual trait or learning preference.

From the perspective of dynamic capability theory, this aligns with learning agility as an important micro-foundation in enabling individuals to continuously adapt to digital disruption. Digital transformation demands that organizations develop continuous learning capacity as well as a high degree of adaptability at the individual level (Vial, 2021). In line with this, Leemann & Kanbach (2022) assert that dynamic capabilities, particularly those related to learning processes and knowledge acquisition, are the primary determinants in sustaining organizational performance amid dynamic and uncertain environments. Wessel et al. (2021) demonstrate that the success of digital transformation is highly dependent on individuals' ability to adapt rapidly, explore new knowledge, and integrate knowledge across contexts. Accordingly, the findings of this study reinforce the argument that learning agility not only represents an individual attribute, but also constitutes a strategic organizational capability that plays a role in integrating leadership, organizational commitment, and a learning culture in order to enhance employee performance — particularly in the context of higher education institutions facing the pressures of digital transformation amid resource constraints.

In the context of Asian organizations, where digital transformation often unfolds alongside institutional constraints and resource limitations, learning agility represents a critical HRM lever. Rather than relying exclusively on external talent acquisition, organizations can enhance performance by cultivating employees' capacity to learn, adapt, and transfer knowledge across contexts. This insight is particularly relevant for higher education institutions, which are increasingly required to modernize administrative and academic processes while maintaining service quality and organizational stability.

5.2. The role of digital leadership in shaping adaptive employee behavior

The evidence reveal that digital leadership has a positive effect on learning agility, both directly and indirectly influencing employee performance. Although the direct effect of digital leadership on learning agility is more modest than that of organizational learning culture, its significance lies in its strategic function. Digital leadership provides direction, legitimacy, and psychological assurance during periods of technological change, reducing uncertainty and encouraging employees to engage with new systems and practices.

The evidence presented herein confirms that digital leadership serves as a key mechanism in bridging technology adoption with the development of individual learning capacity, particularly through the enhancement of learning agility as a mediating factor that determines employee performance. From a socio-technical systems perspective, digital leadership does not merely direct the implementation of technology, but also shapes a context that encourages exploration, experimentation, and continuous learning. This is consistent with previous studies (Ben-Zvi & Luftman, 2022; Dwivedi et al., 2020; Okunlola et al.,

2024), which affirm that the success of digital transformation is highly dependent on leaders' ability to cultivate an adaptive mindset and a learning culture. Accordingly, the influence of digital leadership on performance is not direct in nature, but rather contingent upon the extent to which leaders are able to internalize learning values into employees' work behavior which thereby reinforcing the importance of integrating leadership, learning, and digital transformation within modern organizations.

This result underscores the importance of leadership as an HRM mechanism that aligns technological initiatives with human capabilities. In Asian higher education institutions, where hierarchical structures and formal authority remain salient, leaders occupy a pivotal position in framing digital transformation as a developmental opportunity rather than a disruptive challenge. The mediation effect also points to the inadequacy of digital leadership as a sole driver of performance enhancement unless it translates into employees' adaptive learning behaviors. These finding challenge instrumental views of leadership and highlights the need to focus on how leadership practices enable learning-oriented outcomes in digitally transforming contexts.

5.3. Organizational commitment as a motivational foundation for learning agility

The positive relations among organizational commitment and learning agility highlights the motivational dimension of adaptive capability development. Employees who feel emotionally attached to their organization are more likely to invest effort in learning and self-development, particularly in response to organizational change. For Gen Z employees, who are often characterized as less attached to traditional employment relationships, this finding suggests that commitment remains a relevant and influential factor in shaping adaptive behavior.

Within the integrated perspectives of social exchange theory and self-determination theory, emotional attachment to the organization fosters the emergence of intrinsic motivation to continuously learn and adapt. Employees with high commitment tend to be more proactive in seeking learning opportunities and are better able to transfer new knowledge into adaptive performance amid changes in the work environment. A study by Yi & Kim (2025) demonstrates that organizational commitment contributes significantly to adaptive behavior and individual learning readiness, while Ahmad et al. (2020) affirms that commitment strengthens employee engagement and resilience in facing workplace complexities. Further, Tripathi & Kalia (2024) found that a supportive work environment and organizational commitment is essential in enhancing learning agility and the development of employees' adaptive competencies. Hence, organizational commitment functions not only as a retention factor but also as a primary driver of continuous learning and adaptation, particularly among Gen Z employees, who faces increasingly complex demands for change.

In the Asian HRM context, where employment relationships are undergoing transformation due to generational change and shifting career expectations, fostering organizational commitment can serve as a stabilizing force. Commitment motivates employees to align their personal development with organizational goals, thereby facilitating the translation of learning agility into performance outcomes. This finding extends prior HRM research by demonstrating that commitment operates not only as an attitudinal outcome but also as a driver of adaptive learning processes in digitally transforming organizations.

5.4. Organizational learning culture as the strongest driver of learning agility

Among the antecedents examined, organizational learning culture exhibited the strongest relationship with learning agility. This finding reinforces the central role of organizational context in shaping individual adaptive capabilities. A learning-oriented culture provides employees with both the opportunity and the psychological safety needed to experiment, reflect, and learn from experience. In higher education institutions, where knowledge creation and dissemination are core organizational functions, learning culture serves as a foundational HRM resource.

Within the perspective of dynamic capabilities, organizational learning culture serves as a key mechanism in building individuals' adaptive capacity through the enhancement of learning agility. A learning culture not only encourages the accumulation of knowledge, but also facilitates the transformation of experience into competencies that are relevant to dynamic environmental changes. Nayak et al. (2026) affirm that performance enhancement is more effectively achieved through the development of learning capacity than through direct performance pressure. Further, Boerma et al. (2025) assert that agile organizations are formed from learning practices that are integrated into day-to-day work activities which including informal and collaborative learning, such that learning agility is the product of the interaction between individuals and the organizational context, rather than merely a

personal attribute. Thus, in the context of higher education, learning culture needs to be positioned as a strategic enabler that connects investment in leadership and technology with sustained performance, as without cultural support, transformation initiatives risk falling short of their intended impact.

This result suggests that investments in leadership development and digital infrastructure alone are insufficient if they are not accompanied by cultural support for learning. In Asian organizations, where risk aversion and formalized procedures may constrain experimentation, cultivating a learning culture is particularly critical for enabling learning agility. The mediation effect further demonstrates that learning culture enhances performance primarily by strengthening employees' capacity to learn and adapt, rather than through direct performance pressure.

5.5. Digital transformation as a contextual amplifier of learning agility

The moderating effect of digital transformation reveals that organizational context shapes the extent to which learning agility translates into performance. The positive interaction indicates that learning agility yields greater performance benefits in organizations with higher levels of digital transformation. This finding highlights the complementary relationship between individual capabilities and organizational infrastructure.

Digital transformation allows data integration, process automation, and enhanced cross-functional collaboration, so individuals with high learning agility can more effectively apply new knowledge in decision-making and innovation. Research (Côrte-Real et al., 2020; Mikalef et al., 2020) reveals that digital transformation does not only have a direct impact on performance, but also strengthens organizational capabilities such as agility and innovation capability, which serve as important mediators in improving performance. Accordingly, without the support of mature digital transformation, the potential of learning agility cannot be maximized due to the limited infrastructure and processes that underpin continuous learning.

In digitally mature higher education institutions, employees can leverage digital platforms, data systems, and collaborative tools to apply new knowledge more effectively. Conversely, in organizations with limited digital transformation, even highly learning-agile employees may struggle to convert learning into performance due to structural constraints. This insight emphasizes that HRM strategies aimed at enhancing adaptability must be aligned with broader digital transformation initiatives to fully realize performance gains.

5.6. Implications for HRM scholarship in Asia

Collectively, the findings contribute to HRM scholarship in Asia by demonstrating how leadership, commitment, and learning culture interact to shape employee performance through learning agility in a digitally transforming environment. By focusing on Gen Z employees in an emerging Asian economy, this study responds to calls for more contextually grounded HRM research that moves beyond cultural explanations. The results highlight learning agility as a critical micro-level mechanism that connects HRM practices to performance outcomes amid technological and generational change.

5.7. Theoretical Implications

The present study deepens theoretical insight into Human Resource Management scholarship in Asia. First, the findings advance HRM theory by demonstrating that learning agility functions as a central adaptive mechanism linking leadership, organizational context, and employee performance in digitally transforming environments (Megdad & Çaglar, 2024). Rather than treating learning agility as an individual trait, this study positions it as a micro-level HRM capability that translates organizational practices into performance outcomes, particularly under conditions of technological change.

Second, by focusing on Gen Z employees in Indonesian higher education institutions, this study lends further empirical support to the developing literature on generational HRM in Asia. The results challenge assumptions that younger employees are inherently less committed or less adaptable by showing that organizational commitment and learning-oriented environments continue to play a meaningful role in shaping adaptive behavior and performance. This finding extends existing HRM models by integrating generational perspectives with leadership and learning perspectives in an Asian context.

Third, the study responds directly to calls for HRM research in Asia to move beyond culture-centric explanations. By framing employee behavior within broader institutional and technological transformations, the findings highlight how HRM mechanisms operate in context-specific ways that cannot be fully explained by cultural values alone. As such, this research expands the contextual boundaries of HRM scholarship within emerging Asian economies.

5.8. Practical Implications for HRM in Asia

The findings equally hold practical significance for HR leaders and decision-makers in higher education institutions and other organizations across Asia. First, organizations should recognize learning agility as a strategic HRM capability rather than an individual attribute that develops organically. HRM systems should be designed to actively cultivate learning agility through structured developmental opportunities, job rotation, feedback mechanisms, and reflective learning practices, particularly for younger employees navigating digital change.

Second, digital leadership development should be prioritized as part of broader HRM strategies. Leaders need not only technical competence but also the ability to communicate the purpose of digital initiatives, reduce uncertainty, and encourage adaptive learning behaviors. Leadership development programs in Asian organizations should therefore integrate digital change management with people-oriented competencies to ensure that technological investments translate into sustained performance improvements.

Third, fostering organizational commitment remains critical, even among Gen Z employees. HRM practices that promote psychological attachment, such as transparent communication, career development pathways, and inclusive decision-making can strengthen employees' willingness to invest in learning and adaptation. This is particularly vital in digitally transforming organizations, where continuous change may otherwise erode employees' sense of stability and belonging.

Finally, organizations should align HRM initiatives with the broader level of digital transformation. Investments in learning and leadership will yield limited returns if employees lack access to adequate digital infrastructure and systems that enable the application of new knowledge. HR leaders should therefore adopt an integrated approach that aligns learning, leadership, and digital transformation strategies to maximize employee performance.

5.9. Limitations and Future Research

The present study, while contributing meaningfully to the literature, is bounded by several limitations that future research could overcome. First, the reliance on a cross-sectional design restricts the capacity to infer causal directionality. Longitudinal studies could provide deeper insights into how learning agility and performance evolve over time in response to digital transformation. Second, while procedural remedies were implemented, the use of self-reported measures nonetheless carries the risk of common method bias. Future research could strengthen its findings by integrating multi-source data or more objective measures of employee performance.

Third, while the study focuses on higher education institutions in Indonesia, future research could examine similar HRM mechanisms in other Asian contexts or industries to enhance generalizability. Comparative studies across countries or sectors may further illuminate how institutional differences shape the role of learning agility in digitally transforming organizations. Finally, future investigations might uncover additional moderating variables, such as HR analytics maturity or AI-enabled learning systems, to deepen the understanding of adaptive HRM capabilities.

6. CONCLUSION

This study examined how digital leadership, organizational commitment, and organizational learning culture influence employee performance through learning agility among Gen Z employees in Indonesian higher education institutions, with digital transformation serving as a contextual moderator. The findings shed light on the role of learning agility as a critical HRM mechanism that allows employees to remain adaptive and productive in digitally transforming environments.

Anchoring HRM processes within Asia's technological and generational transformations, this study moves beyond culture-centric frameworks and enriches our insight into HRM in emerging Asian economies. The study draws attention to the necessity of aligning leadership, learning, and digital transformation strategies as a means of sustaining performance among younger employees. In doing so, it provides both theoretical insights and practical guidance for organizations seeking to manage human resources effectively in an era of rapid change.

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