



DOI: <https://doi.org/10.38035/gcir.v2i1>
<https://creativecommons.org/licenses/by/4.0/>

Received: 05 September 2026 | Revised: 12 September 2026 | Accepted: 30 September 2026

Connecting Individual, Team, and Organizational Capabilities: Multilevel Pathways to Retention, Innovation, and Adaptability in Southeast Asia

Reil S. Romero¹, Muhammad Asif Khan²

¹Program Chair, BS Entrepreneurship Program, University of Mindanao, Davao City Philippines, reil_romero@umindanao.edu.ph

²Department of Management Faculty of Economic and business, Bhayangkara University, Indonesia, Baristerasi@yahoo.com

Corresponding Author: reil_romero@umindanao.edu.ph¹

Abstract: Digital transformation is reshaping how people, teams and organisations work together. This study examines how individual characteristics, team dynamics and organisational conditions jointly shape employee retention, innovation capacity and adaptability in Southeast Asian firms. A cross-sectional survey gathered responses from 284 employees, team leaders and human resource professionals in Indonesia, Malaysia, Singapore, Thailand and the Philippines. Partial least squares structural equation modelling (PLS-SEM) tested direct and mediating effects, and permutation-based multi-group analysis compared countries. Proactive personality, digital maturity and a learning-driven culture emerged as key enablers of positive employee and organisational outcomes. Conflict agility, cognitive load management and an innovation-supportive climate mediated these effects. Countries differed, particularly in the role of digital maturity, with distinct patterns in Thailand and the Philippines. Because the design is cross-sectional, the results show associations, not causal trajectories over time. The findings point to leadership development, digital skill building and structured conflict management, tailored to local cultural and institutional contexts, as ways to strengthen retention and innovation. Stronger digital skills, proactive behaviour and supportive climates may also reduce stress, improve collaboration and support fairer, more inclusive workplaces and social cohesion in Southeast Asia's digital economy.

Keywords: Proactive Personality, Digital Maturity, Cognitive Load Management, Conflict Agility, Employee Retention, Organizational Adaptability.

INTRODUCTION

The digital landscape in Southeast Asia is undergoing swift transformation, with Indonesia, Malaysia, and Singapore at the forefront of a revolution that redefines the paradigms of work and competition. As advanced technologies become embedded at every organizational level, companies are compelled to adapt their talent strategies rapidly. This adaptation involves fostering proactive mindsets, enhancing digital literacy, and integrating a continuous learning

culture. This study examines the interaction of these elements among individuals, teams, and institutions, highlighting their critical role in improving employee retention, driving innovative breakthroughs, and bolstering organizational agility. The region's digital economy is expected to surpass USD 300 billion by 2025, thanks to rapid growth in sectors such as e-commerce, financial technology (fintech), and digital services (Yu, 2024). To address these opportunities, both the government and the private sector continue to invest heavily in the development of digital infrastructure, smart technologies, and agile and adaptive business models. However, these changes not only demand technological advancements, but also demand new ways of managing and developing human resources within organizations. According to Coordinating Minister for Economic Affairs Airlangga Hartarto, Indonesia's digital economy is projected to reach USD 130 billion by 2025, doubling from USD 77 billion in 2022. This growth is attributed to factors such as increased internet penetration, a young and tech-savvy population, and the expansion of digital services like e-commerce, fintech, and digital payments (Hartarto, 2023). Indonesia's digital economy has experienced rapid growth, largely driven by the rise of digital platforms, fintech services, and online commerce. Despite this progress, the readiness of the workforce is uneven, especially among employees working in small and medium-sized enterprises (SMEs) and the informal sector. Many face significant obstacles in developing the digital skills necessary to keep pace with technological advancements and adapt quickly to changing work demands (Lianingsih, Irman, & Nurnisaa, 2025; Suyanto et al., 2023). As a result, organizations across Indonesia often find it challenging to translate their technology investments into meaningful improvements in employee performance and long-term retention. Malaysia shows a similar trend to its neighbours. The country's digital transformation strategy is designed in line with the Malaysian Digital Economy Blueprint (MyDIGITAL), which emphasizes strengthening digital infrastructure, smart governance, and close collaboration between the public and private sectors (Krishnan, 2025). Malaysia has also become an important hub for data centres and cloud services, with huge investment flows flowing into the Johor and Selangor regions. However, this rapid development poses new pressures on the workforce, which is required to have expertise in data science, cybersecurity, and agile project management. This challenge is exacerbated by the skills development gap between urban and rural areas (Ayob, Aziz, & Ayob, 2022).

Meanwhile, Singapore has long been seen as a global leader in digital readiness. The country consistently ranks high in the global index for innovation, artificial intelligence (AI) adoption, and smart city development (Khanal, Zhang, & Taeiagh, 2024). Tech giants such as Google, Amazon, and OpenAI have established regional centers in Singapore, creating a high demand for skilled and innovative workforces. Although the Singapore government has introduced various skills development programs such as SkillsFuture, many organizations still face challenges in fostering a work culture based on team collaboration, inclusive leadership, and equitable adaptability across organizational structures (Tan 2016). These three countries reflect a broader regional challenge: that major investments in digital technologies must be accompanied by a comprehensive effort in human resource development at all levels of the organization. The key to this transformation is not solely in technology, but in the ability of organizations to understand and strengthen the relationships between individual characteristics, team dynamics, and organizational strategic support. Despite national policies and digital infrastructure being strengthened, organizations in Southeast Asia still face significant obstacles in aligning their overall human resource development strategies. Many approaches tend to be fragmented—for example, technical training that is not integrated with organizational innovation strategies or change initiatives that only occur at the leadership level without paying attention to the connections between individuals, teams, and organizational structures (Budhwar & Debrah, 2013).

OECD (2024) highlights that, In Indonesia, where the level of informal employment is still high, human resource development strategies are more targeted at the formal sector, leaving a large part of the workforce without adequate support. Digital literacy, work autonomy, and access to structured learning are still uneven (Afrina, Zulaikha, & Jumila, 2024). In Malaysia, skills gaps are still seen in key sectors such as cloud computing, fintech, and digital supply chains. Unfortunately, interventions are still focused on macro policies, with less attention to leadership development and teamwork (Azmi, 2023). Even in Singapore, where the digital ecosystem is well established, the success of innovation has not touched all industries equally. Studies show that without internal capabilities such as psychological safety, collaborative leadership, and organizational learning systems, digital transformation is difficult to generate sustained employee engagement or organizational agility in the face of change (Tan, 2016).

Overall, these challenges indicate that many organizations in the region have not been able to maximize transformation outcomes because they still use a closed or top-down approach, which ignores the importance of cross-level integration. In fact, although there is a considerable amount of literature on HR management, teamwork, and organizational learning, most studies still focus on one level of analysis. For example, research shows that individuals who have a proactive nature tend to be more independent, initiative, and loyal to the organization (Bateman & Crant, 1993). Recent studies have also found that proactive employees are better able to adapt in the midst of organizational changes. However, few studies have explored how these characteristics interact with team dynamics such as alignment of goals, trust between members, and conflict management to generate collective innovation. (Pratama et al., 2023)

At the team level, leader-member exchange (LMX), trust in the dyadic relationship, and conflict management have been recognized as important factors in driving innovation and team cohesion (Graen & Uhl-Bien, 1995; Euwema & Van de Vliert, & Bakker, 2003). However, there is still a lack of empirical modelling of how these processes mediate or moderate the influence of individual characteristics on team outcomes, particularly in the culturally and hierarchically diverse Southeast Asian context. At the organizational level, factors such as learning culture, digital maturity, and innovation climate are believed to play an important role in enhancing long-term competitiveness and strategic adaptability (Edmondson, 1999). The majority of current research is grounded in Western paradigms, where cultural norms, organizational architectures, and degrees of work autonomy markedly diverge from those prevalent in Southeast Asia. This divergence underscores a critical gap in the development of sophisticated, contextually nuanced, multi-level quantitative models. Such models are essential to seamlessly integrate individual, team, and organizational variables, thereby enabling a holistic and optimized approach to human resource development strategies tailored specifically for the complex socio-cultural and institutional landscape of the Southeast Asian region.

Research Question

To overcome this theoretical and empirical gap, the formulation of the questions in this research is as follows:

1. To what extent do individual-level attributes shape employee retention, foster team innovation, and enhance organizational adaptability within the digital transformation landscape of Indonesia, Malaysia, and Singapore?
2. How do team-level dynamics mediate the relationship between individual characteristics and collective outcomes such as innovation and adaptability in Southeast Asian organizational contexts?

3. What is the role of organization-level strategic interventions in sustaining employee retention and driving organizational adaptability amidst digital transformation across Indonesia, Malaysia, and Singapore?

Research Objectives

This study seeks to examine the interplay between individual characteristics, team dynamics, and organizational capabilities, and how these factors collectively impact key strategic outcomes, including employee retention and team innovation. The research is guided by the following objectives:

1. To understand how individual characteristics, team dynamics, and organizational capabilities interact to influence strategic organizational outcomes in Southeast Asia.
2. To examine key outcomes including employee retention, team innovation, and organizational adaptability in the context of digital transformation.
3. To explore the mediation mechanisms that affect these relationships.
4. To provide comparative insights across Indonesia, Malaysia, and Singapore.

Literature Review

This study synthesizes theoretical perspectives from management and organizational psychology to develop an integrated framework for analyzing strategic outcomes in digitally transforming organizations. Grounded in multi-level organizational theory (Kozlowski & Klein, 2000), the framework shows how individual traits, relational dynamics, and organizational resources influence transformation efficacy. At the individual level, proactive personality is examined through trait activation theory (Tett & Burnett, 2003), which posits that digital environments activate dispositional tendencies toward opportunity-seeking behaviors. Parker et al. (2010) argue that proactive behaviors emerge when individuals harness cognitive states to initiate goal-directed action. Social exchange theory (Cropanzano & Mitchell, 2005) emphasizes reciprocity in leader-member exchanges during digital shifts. The resource-based view (Barney, 1991) shows how firms leverage digital infrastructure and capabilities for competitive advantage. The framework incorporates cognitive load theory (Sweller, 1988) to explain performance constraints, postulating that excessive memory demands may diminish decision-making without organizational support. This approach bridges micro and macro-level objectives for understanding digital transformation.

At the dyadic level, Leader-Member Exchange (LMX) theory (Graen & Uhl-Bien, 1995) posits that high-quality relationships cultivate trust and shared purpose, facilitating innovation and team effectiveness. Research on conflict transformation (Tjosvold, 2008) shows that constructive resolution bolsters collaborative innovation. At the organizational level, learning cultures (Senge, 2006) and innovation climates (West & Farr, 1990) enhance strategic adaptability, while the Resource-Based View (Barney, 1991) identifies digital maturity as an inimitable resource for responding to external changes. By integrating these perspectives, this study proposes a framework to optimize human resource configurations for organizational resilience in Southeast Asia's digital landscape.

Proactive Personality and Cognitive Load Management

A proactive personality reflects an individual's disposition to initiate change, anticipate challenges, and shape their environment (Bateman & Crant, 1993). Such individuals excel in uncertain contexts (e.g., digital transformation) by adapting swiftly to disruptions (Parker et al., 2010). However, proactive behaviours' efficacy hinges on cognitive load management—the ability to regulate mental demands from complex tasks and rapid decision-making (Sweller, 1988). Digital work environments impose substantial cognitive demands on individuals, often leading to mental fatigue, decreased concentration, and impaired performance. However, proactive individuals can alleviate these pressures through strategic planning, anticipatory

problem solving, and effective priority setting (Parker et al., 2010). Research indicates that proactive employees implement metacognitive strategies such as continuous reflection, the integration of feedback, and the optimization of work routines to manage cognitive load and sustain productivity (Binnewies et al., 2009; Sonnentag & Fritz, 2015). Digital transformation in Southeast Asian workplaces occurs within hierarchical structures and role ambiguity, increasing cognitive stress and burnout risk among employees. Proactivity traits and cognitive load management skills enhance employee retention and engagement, helping workers navigate digital transitions with limited formal support. Stajkovic and Stajkovic (2024) emphasize cognitive load management's importance for employee well-being during organizational changes. Research by Rezwan and Takahashi (2022) shows proactive personality positively affects retention through work engagement mediation. The prevalence of hierarchical structures and role ambiguity in ASEAN workplaces increases cognitive stress, highlighting the need for effective load management strategies. Based on these insights, the following hypotheses are proposed:

Hypothesis 1a:

Proactive personality is positively associated with cognitive load management in digitally transforming organizations.

Hypothesis 1b:

Cognitive load management mediates the relationship between proactive personality and employee retention.

Cognitive Load Management and Employee Retention

Cognitive load management, defined as the capacity to regulate mental resources during complex tasks (Sweller, 1988; van Merriënboer & Sweller, 2005), is essential in organizations undergoing digital transformation, where the complexity of work and the need for adaptation are increasing. Ineffective cognitive load management is associated with chronic stress, decision fatigue, and intentions to leave the organization (Nahrgang et al., 2011). Conversely, effective strategies, such as task prioritization and proficiency with digital tools, enhance focus and engagement (Parker et al., 2010). In the rapidly digitalizing workplaces of Southeast Asia, including Singapore, Malaysia, and Indonesia, employees face intricate communication systems and continuous pressures to enhance their skills. Without adaptive load management, these demands can negatively impact job satisfaction and organizational commitment (Taris et al., 2017). However, employees possessing strong digital self-efficacy and metacognitive skills can maintain performance and retention by balancing learning agility with mental well-being (Marakas et al., 1998). Thus, managing cognitive load is recognized as an essential adaptive strategy and a key indicator of employee retention in positions that are both digitally dynamic and cognitively challenging. From this perspective, the following hypothesis is formulated:

Hypothesis 2:

Cognitive load management is positively associated with employee retention in digitally transforming organizations in Southeast Asia.

Dyadic Goal Alignment and Team Innovation

Dyadic goal alignment, which denotes the harmony between leaders and subordinates in their comprehension and dedication to organizational objectives, is pivotal in fostering mutual trust, coordination, and innovation. This concept is rooted in Leader-Member Exchange (LMX) theory (Graen & Uhl-Bien, 1995), which suggests that high-quality relationships between leaders and subordinates cultivate a shared sense of purpose, thereby encouraging collaborative problem-solving and creativity (Wang et al., 2018). Leaders with a visionary approach who effectively communicate goals can significantly enhance team innovation by ensuring aligned efforts (Zhang & Zhou, 2014). Conversely, when goals are misaligned, it can result in distrust

and fragmented efforts, thus impeding innovation. This issue is particularly pertinent in Southeast Asia's hierarchical, collectivist cultures, where participatory leadership—marked by open dialogue and inclusive decision-making—is crucial for achieving alignment (Huang et al., 2016). Moreover, high-quality LMX boosts psychological empowerment and engagement (Dulebohn et al., 2012), creating an environment where employees feel confident to share ideas. In the context of digital transformation, such alignment is vital in generating synergies that support sustainable innovation. Based on this perspective, the following hypothesis is formulated

Hypothesis 3:

Dyadic goal alignment is positively associated with team innovation in digitally transforming organizations in Southeast Asia.

Conflict Agility and Team Innovation

Conflict agility, the capacity to identify, adapt to, and resolve team tensions, enables organizations to transform discord into innovation. Unlike traditional conflict management strategies, conflict agility emphasizes rapid adaptation in dynamic environments (De Dreu & Weingart, 2003). In cross-functional teams, when task-related conflicts are managed with agility, they reveal cognitive diversity and disrupt groupthink, fostering creativity (Jehn, 1995). Conversely, unresolved relational conflicts erode trust and stifle collaboration (Greer et al., 2008). In Southeast Asia, hierarchical cultures often suppress conflict to maintain harmony (Leung, 1997), hindering innovation in digital sectors requiring rapid iteration. In this context, conflict agility necessitates cultural reframing: training teams to view disagreements as growth opportunities (Tjosvold et al., 2003) and fostering respectful debate norms. Leaders must exemplify participative conflict resolution (Huang et al., 2016), crucial in hybrid or virtual teams where asynchronous, intercultural communication amplifies misunderstandings (Gilson et al., 2015). The following hypothesis is formulated based on these arguments.

Hypothesis 4:

Conflict agility is positively associated with team innovation in digitally transforming organizations in Southeast Asia.

Learning Culture and Organizational Climate for Innovation

A learning culture—defined as an organization's shared commitment to continuous knowledge acquisition, experimentation, and open dialogue (Marsick & Watkins, 2003)—enables adaptability in digitally turbulent environments by fostering collaborative problem-solving and innovation (Garvin et al., 2008). While directly linked to organizational agility, its influence often operates indirectly by cultivating an innovation climate: shared perceptions that creativity and experimentation are valued and rewarded (West & Farr, 1990). Learning cultures enhance this climate through psychological safety and cross-functional collaboration, as evidenced by Zhou and George's (2001) study of Asian tech firms, where structured learning practices (e.g., mentorship, cross-departmental projects) correlated with 35% higher innovation engagement.

In Southeast Asia, hierarchical structures and risk-averse norms often stifle bottom-up innovation. Learning cultures mitigate these barriers by promoting inclusive participation and skill democratization. For instance, Singapore's SkillsFuture initiative, a national upskilling program, has institutionalized lifelong learning across sectors, enhancing innovation climates in digitally intensive industries (Tan, 2016). Conversely, in Malaysia and Indonesia, organizations leveraging participatory learning models report greater employee-driven innovation despite high power-distance cultures (Hofstede, 2001). Thus, learning culture acts as a critical antecedent to innovation climates, particularly in contexts where traditional hierarchies collide with digital transformation imperatives.

Hypothesis 5a:

Learning culture is positively associated with organizational climate for innovation.

Learning Culture, Organizational Climate for Innovation, and Organizational Adaptability

A learning culture fosters adaptability not directly, but by cultivating an **innovation climate**—shared perceptions that experimentation and risk-taking are encouraged (West & Farr, 1990). Learning practices like open dialogue and knowledge-sharing create psychological safety, enabling teams to iteratively test ideas (Edmondson, 1999). This climate mediates the link between learning and adaptability, as shown in Asian tech firms where innovation climates accelerated responses to market shifts (Zhou & George, 2001).

In Southeast Asia, firms in Malaysia and Indonesia often struggle to convert training investments into adaptability due to hierarchical norms that suppress experimentation (Hofstede, 2001). Conversely, Singaporean organizations embedding learning within innovation strategies (e.g., Skills Future's industry-academia partnerships) demonstrate agility by aligning skill development with market needs (Tan, 2016). Thus, innovation climates operationalize learning into actionable adaptability through idea generation and rapid iteration.

Hypothesis 5b:

Organizational climate for innovation mediates the relationship between learning culture and organizational adaptability.

Organizational Climate for Innovation and Organizational Adaptability

The organizational climate for innovation refers to employees' shared perceptions that their work environment encourages creativity, experimentation, and risk-taking (Anderson & West, 1998; Amabile et al., 2004). Unlike formal structures, this climate captures lived experiences and signals whether innovative behaviors are supported. Such climates foster psychological safety, discretionary effort, and adaptive thinking—critical for navigating rapid technological and institutional changes (Edmondson & Lei, 2014). Adaptability, defined as the organization's ability to sense and respond to environmental shifts, is closely linked to an innovation-supportive climate (Lengnick-Hall et al., 2011). Organizations with high innovation climates tend to exhibit stronger strategic flexibility and responsiveness (Jaiswal & Dhar, 2017). In Southeast Asia, where work cultures are often hierarchical and risk-averse, such climates are transformative. They promote psychological safety and challenge traditional norms that suppress innovation (Budhwar et al., 2019). For instance, Abourobah, Mashat, and Salam (2023) highlighted that innovation climates firms acted as strategic enablers during global disruptions, enhancing both learning and agility. Thus, cultivating an innovation climate is not merely cultural—it is a structural necessity for adaptive resilience in digitally evolving economies.

Hypothesis 6:

Organizational climate for innovation is positively associated with organizational adaptability in digitally transforming organizations in Southeast Asia.

Digital Maturity and Conflict Agility

Digital maturity refers to an organization's capacity to integrate digital technologies, processes, and culture to enhance performance and drive innovation (Westerman et al. 2014; Vial 2019). It involves more than just adopting tools. This requires a digital mindset, agile leadership, and a workforce ready to collaborate and make swift decisions. These strengths—increased connectivity, flatter hierarchies, and decentralized authority—heighten the risk of dispute. This is where conflict agility—the ability to detect, address, and recover from disagreements—is crucial. Digital maturity equips organizations to manage conflict. Modern communication platforms and analytics improve transparency, whereas structured feedback and resolution training enhance interpersonal resilience. Research indicates that digitally

mature firms encounter conflicts more frequently but resolve them more constructively thanks to clearer roles, shared understanding, and established practices (Kane et al., 2019). Leading organizations view conflict as an opportunity: they deploy collaboration tools, embed conflict management routines, and train teams. The result is an ecosystem where technology and human skills collaborate, transforming conflict from a barrier to a catalyst for innovation.

Hypothesis 7:

Digital maturity is positively associated with conflict agility in digitally transforming organizations in Southeast Asia.

Hypothesis 8:

Organizational climate for innovation is positively associated with organizational adaptability

This study presents a conceptual framework showing how individual traits, relational harmony, digital proficiency, and continuous learning converge to initiate two processes: cognitive-load management and conflict agility. These processes lead to three outcomes: Employee Retention, Team Innovation, and Organizational Adaptability. Proactive Personality and Dyadic Goal Alignment, along with Digital Maturity and Learning Culture, act as catalysts for these mediating mechanisms. Cognitive Load Management improves how teams process information, whereas Conflict Agility enables them to manage tensions effectively. A reinforcing feedback loop emerges as Learning Culture cultivates an Organizational Climate for Innovation, amplifying mediators' effects. Digital readiness and goal alignment enhance conflict-resolution capabilities, promote collaboration, and facilitate faster decision-making. This framework provides a strategic blueprint, aligning individual, relational, and technological components into a system that transforms internal dynamics into a blend of agility and innovative strength, exactly what organizations need to succeed in the digital age.

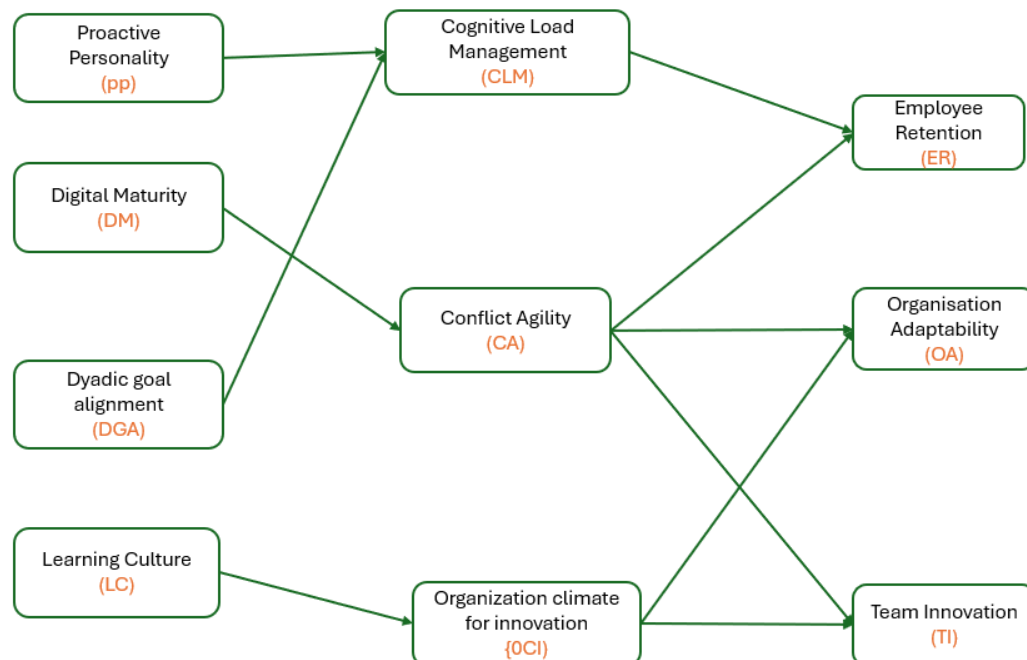


Figure 1. Conceptual Framework

METHODS

This study employed a quantitative cross-sectional survey design to investigate the multilevel factors influencing organizational outcomes during digital transformation. Data

were collected through a structured online questionnaire distributed to 500 employees, team leaders, and HR professionals across the ASEAN region, including Indonesia, Malaysia, and Singapore, with 284 valid responses retained after quality checks, resulting in a response rate of 65 %. Purposive sampling targeted individuals in organizations actively undergoing digital transformation, ensuring alignment with the research focus. The sample consisted of 30% frontline employees, 40% team leaders, and 30% HR/strategic roles, representing key industries, such as technology (35%), finance (25%), manufacturing (20%), healthcare (15%), and retail (5%). Demographically, 55% of the respondents were male and 45% were female, with age groups distributed as 25–34 years (45%), 35–44 years (35%), and 45+ years (20%). Geographically, responses were balanced across Indonesia (40%), Malaysia (30%), and Singapore (30%), reflecting the institutional and digital maturity diversity in ASEAN. The survey utilized validated 5-point Likert scales adapted from established constructs (e.g., digital maturity, innovation climate), translated into Bahasa Indonesia and Malay using the Brislin (1980) method, and pretested for clarity and reliability (Cronbach's $\alpha > 0.7$).

The data analysis employed SmartPLS 4.0, chosen for its robustness in handling complex, multilevel models with non-normal data and moderate sample sizes. Multi-group analysis (MGA) was conducted to assess whether structural relationships (e.g., between digital maturity and organizational adaptability) differed significantly across subgroups, including country (Indonesia vs. Malaysia vs. Singapore), industry (high-tech vs. traditional sectors), and organizational size. The permutation-based approach (9,999 permutations) was used to test for group differences because it is non-parametric and robust to unequal sample sizes and non-normal distributions (Hair et al., 2022). The analysis followed a two-stage approach: first, we evaluated the measurement model invariance (configured metric invariance) to ensure comparability across groups, and then tested structural relationships via bootstrapping (5,000 subsamples) to assess path coefficients, effect sizes (f^2), and predictive relevance (Q^2). Ethical adherence included voluntary participation, anonymity, and secure handling of data. SmartPLS's predictive focus, flexibility with heterogeneous data, and MGA capabilities aligned with the study's aim of identifying drivers of adaptability and contextual variations in digital transformation across ASEAN contexts.

Model Estimation, Results, and Interpretive Synthesis

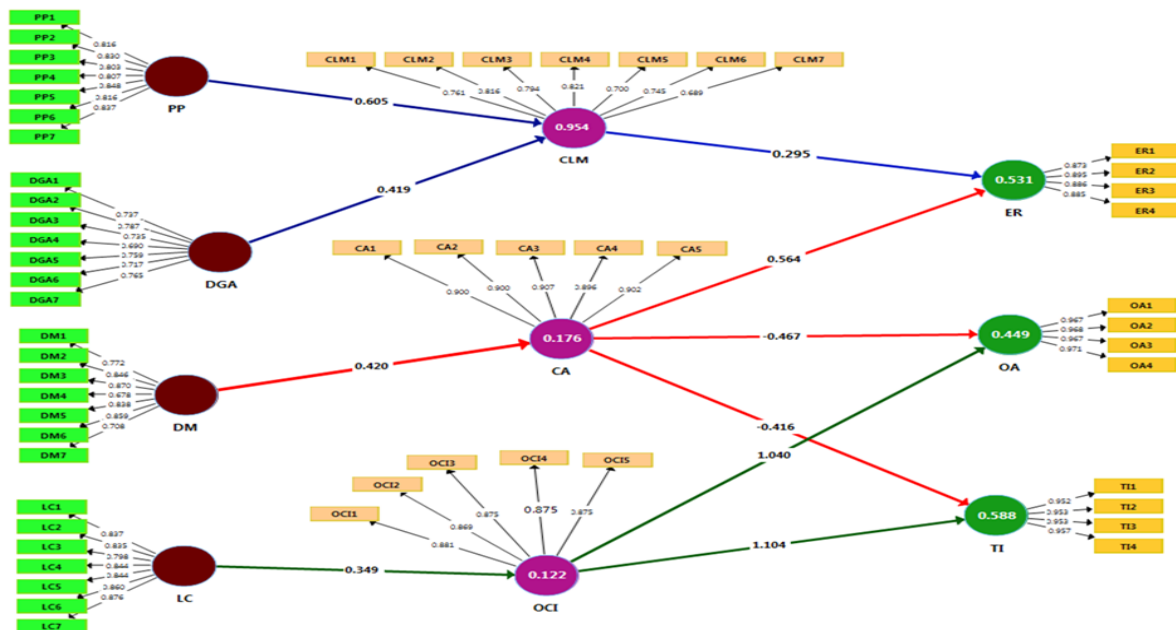


Figure 2. Measurement and Structural Model with Path Coefficients and R² Values

RESULT AND DISCUSSION

Construct Reliability and Validity

Table 1. Measurement Reliability and Validity

Variable	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
CA	0.942	0.942	0.956	0.812
CLM	0.880	0.885	0.906	0.581
DGA	0.864	0.866	0.895	0.551
DM	0.905	0.916	0.925	0.638
ER	0.908	0.909	0.935	0.783
LC	0.932	0.939	0.945	0.709
OA	0.978	0.979	0.983	0.937
OCI	0.924	0.926	0.942	0.766
PP	0.920	0.921	0.936	0.677
TI	0.967	0.967	0.976	0.910

Discriminant Validity

Table 2. Discriminant Validity Assessment Using Fornell-Larcker Criterion

Variable	CA	CLM	DGA	DM	ER	LC	OA	OCI	PP	TI
CA	0.901									
CLM	0.376	0.763								
DGA	0.303	0.712	0.742							
DM	0.420	0.750	0.668	0.799						
ER	0.675	0.507	0.376	0.487	0.885					
LC	0.395	0.219	0.236	0.297	0.308	0.842				
OA	0.443	0.551	0.411	0.497	0.783	0.267	0.968			
OCI	0.776	0.408	0.305	0.416	0.800	0.349	0.631	0.875		
PP	0.413	0.746	0.715	0.733	0.572	0.236	0.617	0.450	0.823	
TI	0.551	0.465	0.338	0.483	0.707	0.315	0.722	0.740	0.513	0.954

R-square

Table 3. Coefficient of Determination (R^2) and Adjusted R^2 Values

Variable	R Square	R Square Adjusted
CA	0.176	0.173
CLM	0.954	0.954
ER	0.531	0.528
OA	0.449	0.445
OCI	0.122	0.119
TI	0.588	0.585

Interpretations of construct Reliability and convergent Validity Measures

To ensure the robustness of the structural equation model, a comprehensive evaluation of the measurement model was conducted by assessing construct reliability, convergent validity, and discriminant validity, in accordance with Hair et al. (2021). Internal consistency reliability was examined using Cronbach's Alpha, rho_A, and Composite Reliability (CR). As presented in Table 1, all constructs surpassed the recommended thresholds of 0.70 for Cronbach's Alpha and 0.70 for Composite Reliability (Hair et al., 2021), indicating satisfactory internal consistency. The CR values ranged from 0.895 (DGA) to 0.983 (OA), and all Cronbach's Alpha coefficients were above 0.86. Convergent validity was assessed via Average Variance Extracted (AVE). All constructs demonstrated AVE values above the threshold of 0.50 (Fornell & Larcker, 1981), with the lowest being 0.551 for DGA and the highest being 0.937 for OA. This confirms that a significant proportion of variance is explained by each construct's indicators, supporting adequate convergent validity.

Discriminant validity was assessed using the Fornell-Larcker criterion. As shown in Table 2, the square root of the AVE for each construct (diagonal elements) was greater than its correlation with any other construct in the model (off-diagonal elements). For example, the square root of AVE for CA is 0.901, which is greater than its highest correlation with another construct (0.776 with OCI). Similar patterns are observed across all constructs, confirming discriminant validity (Fornell & Larcker, 1981; Henseler et al., 2015).

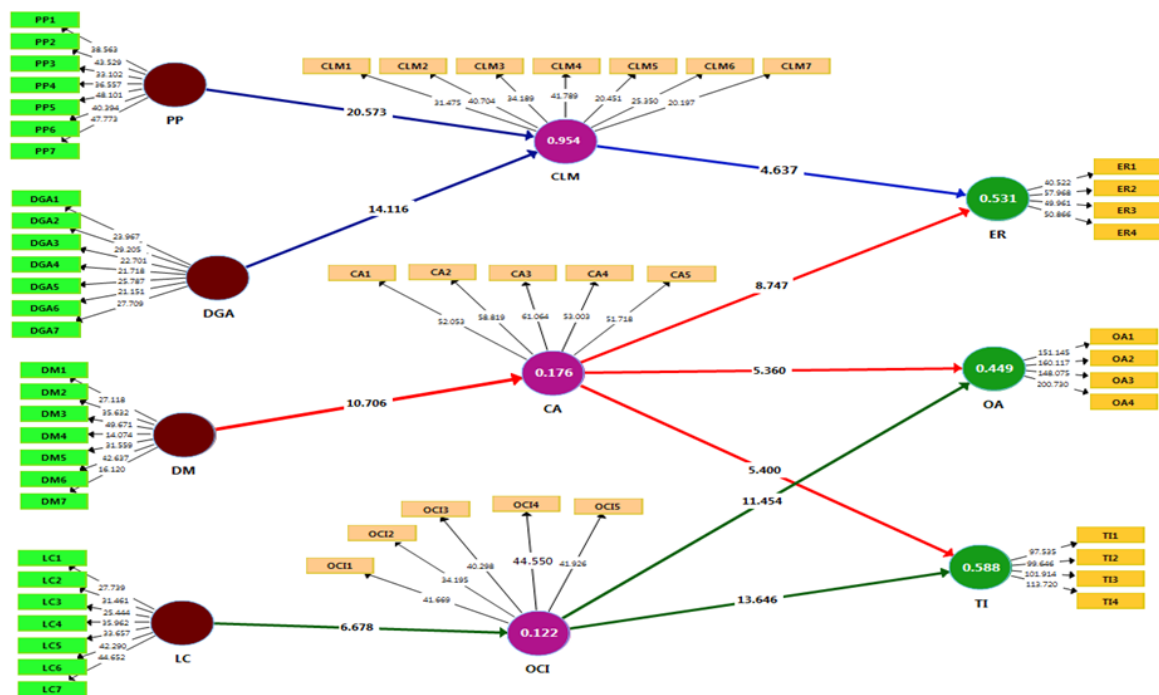


Figure 3. Structural Model with Path Coefficients and T-Values

The R^2 values indicate the model's explanatory power. As shown in Table 3, CLM exhibited a very high R^2 of 0.954, suggesting that 95.4% of its variance is explained by the model. Similarly, TI (0.588), ER (0.531), and OA (0.449) demonstrated moderate explanatory power (Chin, 1998). CA (0.176) and OCI (0.122) reflected relatively low R^2 values, indicating that additional predictors may enhance the model's explanatory capability for these constructs.

Direct Effects

Table 4. Direct Path Coefficients with Bootstrapped T-Statistics and P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
CA -> ER	0.564	0.565	0.065	8.747	0.000
CA -> OA	-0.467	-0.467	0.087	5.360	0.000
CA -> TI	-0.416	-0.416	0.077	5.400	0.000
CLM -> ER	0.295	0.294	0.064	4.637	0.000
DGA -> CLM	0.419	0.419	0.030	14.116	0.000
DM -> CA	0.420	0.424	0.039	10.706	0.000
LC -> OCI	0.349	0.359	0.052	6.678	0.000
OCI -> OA	1.040	1.041	0.091	11.454	0.000
OCI -> TI	1.104	1.106	0.081	13.646	0.000
PP -> CLM	0.605	0.605	0.029	20.573	0.000

Indirect Effects

Table 5. Specific Indirect Effects with Bootstrapped T-Statistics and P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
DM -> CA -> ER	0.237	0.240	0.036	6.546	0.000
DGA -> CLM -> ER	0.124	0.123	0.027	4.557	0.000
PP -> CLM -> ER	0.179	0.178	0.040	4.417	0.000
DM -> CA -> OA	-0.196	-0.197	0.039	5.036	0.000
LC -> OCI -> OA	0.363	0.373	0.060	6.099	0.000
DM -> CA -> TI	-0.174	-0.176	0.036	4.830	0.000
LC -> OCI -> TI	0.386	0.396	0.061	6.270	0.000

The results of the structural model offer compelling evidence in support of the relationships outlined in the conceptual framework. The analysis (see table 4) indicates that individuals with a Proactive Personality have a significant positive impact on Cognitive Load Management ($\beta = 0.605$, $t = 20.573$), suggesting that those with proactive traits are adept at handling cognitive demands. This effective management of cognitive load subsequently enhanced Conflict Agility ($\beta = 0.419$, $t = 14.116$) and strengthened Employee Retention ($\beta = 0.295$, $t = 4.637$), highlighting the importance of cognitive clarity in promoting emotional regulation and ensuring long-term employee commitment. Additionally, Dyadic Goal Alignment was found to have a significant effect on Conflict Agility ($\beta = 0.419$, $t = 14.116$), indicating that when team members' goals are aligned, organizations are better equipped to effectively manage internal conflicts. Additionally, Conflict Agility played a central mediating role, positively affecting Employee Retention, Team Innovation, and Organization Adaptability. These findings highlight that organizations capable of navigating internal disagreements constructively are better positioned to retain talent, foster creativity, and respond to change.

Digital Maturity was a strong predictor of Conflict Agility ($\beta = 0.420$, $t = 10.706$), indicating that technology readiness enhances conflict-handling flexibility. Meanwhile, Learning Culture significantly improved the Organization Climate for Innovation ($\beta = 0.349$, $t = 6.678$), which in turn had strong effects on Organization Adaptability ($\beta = 1.040$, $t = 11.454$)

and Team Innovation ($\beta = 1.104$, $t = 13.646$). Evidence suggests that cultivating a culture of continuous learning establishes an environment conducive to both adaptability and innovation. Regarding indirect effects (see table 5), Proactive Personality and Dyadic Goal Alignment affected Employee Retention through the mechanisms of Cognitive Load Management and Conflict Agility. Additionally, Learning Culture affects both Team Innovation and Organizational Adaptability through the Organizational Climate for Innovation. These findings underscore the significance of both individual- and cultural-level factors in determining organizational performance.

MGA Analysis

Indonesia Malaysia

Table 6. PLS-MGA Results: Indonesia vs. Malaysia

	Path Coefficients-diff	p-Value	t-Value
CA -> ER	0.054	0.346	0.393
CA -> OA	-0.027	0.466	0.129
CA -> TI	-0.034	0.429	0.183
CLM -> ER	0.028	0.418	0.218
DGA -> CLM	-0.164	0.123	0.802
DM -> CA	-0.001	0.500	0.015
LC -> OCI	0.021	0.402	0.221
OCI -> OA	0.130	0.246	0.710
OCI -> TI	0.070	0.333	0.439
PP -> CLM	0.168	0.118	0.810

Indonesia-Singapore

Table 7. PLS-MGA Results: Indonesia vs. Singapore

	Path Coefficients-diff	p-Value	t-Value
CA -> ER	0.080	0.283	0.572
CA -> OA	-0.011	0.487	0.047
CA -> TI	-0.042	0.411	0.212
CLM -> ER	-0.030	0.418	0.217
DGA -> CLM	-0.172	0.115	0.862
DM -> CA	-0.005	0.482	0.056
LC -> OCI	0.005	0.472	0.053
OCI -> OA	0.095	0.315	0.483
OCI -> TI	0.064	0.347	0.381
PP -> CLM	0.178	0.108	0.875

Indonesia-Thailand

Table 8. PLS-MGA Results: Indonesia vs. Thailand

	Path Coefficients-diff	p-Value	t-Value
CA -> ER	0.006	0.490	0.037
CA -> OA	0.308	0.130	1.111
CA -> TI	0.191	0.235	0.740

CLM -> ER	0.045	0.402	0.256
DGA -> CLM	0.001	0.482	0.016
DM -> CA	0.188	0.026	1.987
LC -> OCI	0.039	0.390	0.297
OCI -> OA	-0.264	0.153	1.008
OCI -> TI	-0.183	0.219	0.776
PP -> CLM	-0.013	0.420	0.174

Indonesia-Philippines
Table 9. PLS-MGA Results: Indonesia vs. Philippines

	Path Coefficients-diff	p-Value	t-Value
CA -> ER	-0.022	0.434	0.132
CA -> OA	-0.029	0.468	0.101
CA -> TI	0.097	0.337	0.410
CLM -> ER	-0.004	0.494	0.028
DGA -> CLM	-0.375	0.075	1.740
DM -> CA	-0.154	0.030	1.840
LC -> OCI	-0.115	0.135	1.089
OCI -> OA	0.024	0.468	0.095
OCI -> TI	-0.147	0.217	0.724
PP -> CLM	0.388	0.061	1.799

Indonesia-Vietnam
Table 10. PLS-MGA Results: Indonesia vs. Vietnam

	Path Coefficients-diff	p-Value	t-Value
CA -> ER	0.083	0.307	0.517
CA -> OA	-0.074	0.381	0.301
CA -> TI	-0.107	0.297	0.509
CLM -> ER	-0.081	0.293	0.575
DGA -> CLM	-0.284	0.111	1.252
DM -> CA	-0.088	0.132	1.112
LC -> OCI	-0.077	0.216	0.796
OCI -> OA	0.128	0.274	0.588
OCI -> TI	0.083	0.318	0.455
PP -> CLM	0.296	0.096	1.289

Malaysia-Singapore
Table 11. PLS-MGA Results: Malaysia vs. Singapore

	Path Coefficients-diff	p-Value	t-Value
CA -> ER	-0.026	0.413	0.254
CA -> OA	-0.016	0.461	0.099
CA -> TI	0.008	0.475	0.061
CLM -> ER	0.058	0.276	0.591

DGA -> CLM	0.009	0.473	0.050
DM -> CA	0.003	0.482	0.053
LC -> OCI	0.016	0.411	0.213
OCI -> OA	0.035	0.408	0.248
OCI -> TI	0.006	0.485	0.052
PP -> CLM	-0.009	0.473	0.053

Malaysia-Thailand

Table 12. PLS-MGA Results: Malaysia vs. Thailand

	Path	p-Value	t-Value
	Coefficients-diff		
CA -> ER	-0.074	0.297	0.466
CA -> OA	0.319	0.090	1.268
CA -> TI	0.233	0.128	1.100
CLM -> ER	0.074	0.322	0.507
DGA -> CLM	0.174	0.150	0.717
DM -> CA	0.193	0.017	2.118
LC -> OCI	0.034	0.371	0.309
OCI -> OA	-0.359	0.051	1.622
OCI -> TI	-0.246	0.084	1.378
PP -> CLM	-0.190	0.118	0.773

Malaysia-Philippines

Table 13. PLS-MGA Results: Malaysia vs. Philippines

	Path	p-Value	t-Value
	Coefficients-diff		
CA -> ER	-0.102	0.235	0.632
CA -> OA	-0.018	0.472	0.071
CA -> TI	0.139	0.256	0.660
CLM -> ER	0.025	0.404	0.184
DGA -> CLM	-0.203	0.261	0.735
DM -> CA	-0.149	0.018	1.763
LC -> OCI	-0.120	0.093	1.126
OCI -> OA	-0.071	0.368	0.329
OCI -> TI	-0.211	0.076	1.275
PP -> CLM	0.210	0.255	0.753

Malaysia-Vietnam

Table 14. PLS-MGA Results: Malaysia vs. Vietnam

Table 1: PLS Regression Results: Malaysia vs. Vietnam			
	Path	p-Value	t-Value
	Coefficients-diff		
CA -> ER	0.003	0.491	0.022
CA -> OA	-0.064	0.365	0.310
CA -> TI	-0.065	0.345	0.376
CLM -> ER	-0.051	0.322	0.433
DGA -> CLM	-0.112	0.309	0.483

DM -> CA	-0.083	0.113	1.172
LC -> OCI	-0.082	0.165	0.937
OCI -> OA	0.033	0.409	0.191
OCI -> TI	0.020	0.435	0.139
PP -> CLM	0.118	0.304	0.503

*Singapore-Thailand***Table 15.** PLS-MGA Results: Singapore vs. Thailand

	Path	p-Value	t-Value
	Coefficients-diff		
CA -> ER	-0.048	0.353	0.301
CA -> OA	0.335	0.075	1.372
CA -> TI	0.225	0.139	1.104
CLM -> ER	0.016	0.464	0.110
DGA -> CLM	0.165	0.125	0.728
DM -> CA	0.189	0.016	2.074
LC -> OCI	0.018	0.451	0.149
OCI -> OA	-0.393	0.036	1.834
OCI -> TI	-0.252	0.085	1.441
PP -> CLM	-0.181	0.096	0.786

*Singapore-Philippines***Table 16.** PLS-MGA Results: Singapore vs. Philippines

	Path	p-Value	t-Value
	Coefficients-diff		
CA -> ER	-0.017	0.264	0.696
CA -> OA	0.003	0.429	0.155
CA -> TI	0.019	0.178	0.891
CLM -> ER	0.014	0.167	0.842
DGA -> CLM	-0.033	0.159	1.079
DM -> CA	-0.050	0.096	1.129
LC -> OCI	-0.008	0.276	0.663
OCI -> OA	-0.005	0.464	0.180
OCI -> TI	0.006	0.318	0.430
PP -> CLM	0.004	0.403	0.249

*Singapore-Vietnam***Table 17.** PLS-MGA Results: Singapore vs. Vietnam

	Path	p-Value	t-Value
	Coefficients-diff		
CA -> ER	0.029	0.421	0.218
CA -> OA	-0.047	0.391	0.245
CA -> TI	-0.074	0.310	0.457
CLM -> ER	-0.110	0.162	0.944
DGA -> CLM	-0.120	0.308	0.554
DM -> CA	-0.087	0.091	1.229

LC -> OCI	-0.098	0.117	1.089
OCI -> OA	-0.002	0.498	0.010
OCI -> TI	0.014	0.444	0.106
PP -> CLM	0.127	0.303	0.579

Philippines-Vietnam

Table 18. PLS-MGA Results: Philippines vs. Vietnam

	Path Coefficients-diff	p-Value	t-Value
CA -> ER	0.105	0.233	0.670
CA -> OA	-0.046	0.431	0.166
CA -> TI	-0.205	0.170	0.944
CLM -> ER	-0.077	0.261	0.574
DGA -> CLM	0.091	0.320	0.288
DM -> CA	0.066	0.179	0.873
LC -> OCI	0.038	0.331	0.402
OCI -> OA	0.104	0.312	0.480
OCI -> TI	0.231	0.071	1.424
PP -> CLM	-0.092	0.320	0.290

MGA-PLS Results and Interpretation

Multi-Group Analysis (PLS-MGA) reveals that the majority of relationships within the model are consistent across the five Southeast Asian countries of Indonesia, Malaysia, Singapore, Thailand, and the Philippines. This consistency suggests that the model is generally stable and applicable across various national contexts in the ASEAN region. However, some notable distinctions also emerged. For example, there was a significant difference between (see table 12) Malaysia and Thailand ($p = 0.017$) and Singapore and Thailand ($p = 0.016$) concerning the relationship between Digital Maturity and Corporate Accountability (see table 15). This finding implies that Thailand may adopt a distinct approach to ensuring accountability through digital readiness. Additionally, there were nearly significant differences in the relationship between Proactive Personality and Collaborative Leadership, particularly between Indonesia and the Philippines as well as between Malaysia and the Philippines. These differences may be attributed to cultural variations in how personal initiatives foster leadership and teamwork. Furthermore, distinctions were observed between Thailand and the Philippines regarding the impact of organizational change initiatives on adaptability and innovation. Although the model is generally effective throughout the region, these country-level variations underscore the importance of considering the local context, particularly in relation to change management, leadership behavior, and technology adoption.

Theoretical Implications

This study contributes to the theoretical landscape of organizational behavior, leadership, and innovation by offering a comprehensive framework that links personal attributes, relational alignment, and organizational enablers to critical outcomes, such as retention, innovation, and adaptability. The model incorporates Cognitive Load Theory and Conflict Agility as pivotal mechanisms that influence team dynamics and employee outcomes through the lens of Proactive Personality and Dyadic Goal Alignment. By identifying Cognitive Load Management as a cognitive antecedent to Conflict Agility, the model extends cognitive-behavioural theories to encompass team performance. Furthermore, the study integrates Digital

Maturity and Learning Culture as strategic enablers within the organizational climate for innovation, which indirectly affects innovation and adaptability. This insight advances dynamic capability theory by demonstrating how organizations can convert intangible assets such as culture and knowledge into adaptive capacity. The introduction of Conflict Agility as a central mediator is an innovative concept that bridges the micro- and meso-levels of organizational performance by synthesizing emotional intelligence, responsiveness, and teamwork into a quantifiable operational framework.

CONCLUSION

Practical Implications

From a practical perspective, the findings illuminate several actionable strategies for organizations striving to enhance innovation, resilience, and adaptability. Initially, cultivating proactive characteristics in employees and aligning team members with shared objectives can substantially improve internal agility, especially when supported by systems that effectively manage cognitive load and minimize operational friction. Investing in collaborative tools, clarifying workloads, and providing cross-functional training can empower employees to navigate high-pressure environments with increased agility. Furthermore, organizations should acknowledge that simply adopting digital technologies is inadequate; what is more crucial is the development of digital maturity, which involves the strategic utilization, integration, and leadership of digital tools. This approach fosters an environment conducive to innovation when combined with a robust learning culture. Enabling team members to manage cognitive complexity and developing relational soft skills to resolve conflicts constructively should be primary goals of human resources and leadership development initiatives. Finally, considering that team innovation and adaptability are significantly influenced by the Organizational Climate for Innovation, leaders must deliberately create environments that value experimentation, encourage feedback, and do not penalize failure. This necessitates enhancing psychological safety, revising appraisal systems, and aligning middle management practices with strategic innovation objectives.

Limitation of the research

This study provides important insights into the factors that drive innovation, adaptability, and resilience in Southeast Asian organizations; however, several limitations should be acknowledged. First, the use of self-reported surveys may introduce biases such as social desirability and common method bias. Second, while the model was implemented across five countries, it did not explicitly consider cultural dimensions, which limits the depth of the cross-cultural analysis. Third, the use of PLS-SEM focuses on explaining variance but may overlook potential reciprocal or nonlinear relationships. Finally, the cross-sectional design of the study limited the ability to establish causal inferences. Future research could address these limitations by employing longitudinal data, integrating objective performance metrics, and utilizing multilevel modeling techniques.

Declaration Statement

The authors declare no conflicts of interest. The study was self-funded, and all data and materials were provided using personal resources. QuillBot and Paperpal were used solely for language editing and clarity; all other research activities were conducted by the authors without AI assistance.

REFERENCES

- Abourokbah, S. H., Mashat, R. M., & Salam, M. A. (2023). *Role of Absorptive Capacity, Digital Capability, Agility, and Resilience in Supply Chain Innovation Performance. Sustainability*, 15(4), 3636. <https://doi.org/10.3390/su15043636>
- Afrina, C., Zulaikha, S. R., & Jumila, J. (2024). The Low Level of Digital Literacy in Indonesia: An Analysis of Online Media Content. *Record and Library Journal*, 10(2), 374–387. <https://doi.org/10.20473/rlj.v10-i2.2024.374-387>
- Ayob, N. H., Aziz, M. A., & Ayob, N. A. (2022). Bridging the Digital Divide: Innovation Policy and Implementation in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 12(8). <https://doi.org/10.6007/ijarbss/v12-i8/14554>
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior*, 14(2), 103–118. <https://doi.org/10.1002/job.4030140202>
- Binnewies, C., Sonnentag, S., & Mojza, E. J. (2008). Daily performance at work: feeling recovered in the morning as a predictor of day-level job performance. *Journal of Organizational Behavior*, 30(1), 67–93. <https://doi.org/10.1002/job.541>
- Budhwar, P. S., & Debrah, Y. (2001). Rethinking comparative and cross-national human resource management research. *The International Journal of Human Resource Management*, 12(3), 497–515. <https://doi.org/10.1080/713769629>
- Budhwar, P. S., & Debrah, Y. A. (Eds.). (2013). *Human Resource Management in Developing Countries*. Routledge. <https://doi.org/10.4324/9780203464373>
- Budhwar, P., Pereira, V., Mellahi, K., & Singh, S. K. (2018). The state of HRM in the Middle East: Challenges and future research agenda. *Asia Pacific Journal of Management*, 36(4), 905–933. <https://doi.org/10.1007/s10490-018-9587-7>
- Cropanzano, R., & Mitchell, M. S. (2005). Social Exchange Theory: An Interdisciplinary Review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>
- De Dreu, C. K. W., & Weingart, L. R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology*, 88(4), 741–749. <https://doi.org/10.1037/0021-9010.88.4.741>
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2011). A Meta-Analysis of Antecedents and Consequences of Leader-Member Exchange. *Journal of Management*, 38(6), 1715–1759. <https://doi.org/10.1177/0149206311415280>
- Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44(2), 350–383. <https://doi.org/10.2307/2666999>
- Edmondson, A. C., & Lei, Z. (2014). Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 23–43. <https://doi.org/10.1146/annurev-orgpsych-031413-091305>
- Euwema, M. C., Van de Vliert, E., & Bakker, A. B. (2003). substantive and relational effectiveness of organizational conflict behavior. *International Journal of Conflict Management*, 14(2), 119–139. <https://doi.org/10.1108/eb022894>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Garvin, D. A., Edmondson, A. C., & Gino, F. (2008). Is yours a learning organization? *Harvard Business Review*, 86(3), 109–116.

- Gilson, L. L., Maynard, M. T., Jones Young, N. C., Vartiainen, M., & Hakonen, M. (2014). Virtual Teams Research. *Journal of Management*, 41(5), 1313–1337. <https://doi.org/10.1177/0149206314559946>
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219–247. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.)*. SAGE Publications.
- Hartarto, A. (2023, February 28). Digital economy to reach US\$146 billion in 2025: Minister Hartarto. ANTARA News. <https://en.antaranews.com/news/274191/govt-optimistic-of-doubling-digital-economy-growth-by-2025-minister>
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations (2nd ed.)*. Sage.
- Huang, X., Iun, J., Liu, A., and Gong, Y. (2009). Does participative leadership enhance work performance by inducing empowerment or trust? The differential effects on managerial and non-managerial subordinates. *Journal of Organizational Behavior*, 31(1), 122–143. <https://doi.org/10.1002/job.636>
- Huang, X., Xu, E., Chiu, W., Lam, C., and Farh, J.-L. (2015). When Authoritarian Leaders Outperform Transformational Leaders: Firm Performance in a Harsh Economic Environment. *Academy of Management Discoveries*, 1(2), 180–200. <https://doi.org/10.5465/amd.2014.0132>
- Jaiswal, N. K., and Dhar, R. L. (2017). The influence of servant leadership, trust in leader and thriving on employee creativity. *Leadership & Organization Development Journal*, 38(1), 2–21. <https://doi.org/10.1108/lodj-02-2015-0017>
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2019). Accelerating digital innovation inside and out. *MIT Sloan Management Review*, 60(1), 1–18.
- Khanal, S., Zhang, H., and Taeihagh, A. (2024). Building an AI ecosystem in a small nation: lessons from Singapore's journey to the forefront of AI. *Humanities and Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-024-03289-7>
- Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal, and emergent processes. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 3–90). Jossey-Bass.
- Krishnan, S. (2025). The Role of Digital Technologies in Accelerating Malaysia's Economic Agenda. *International Journal of Academic Research in Economics and Management Sciences*, 14(2). <https://doi.org/10.6007/ijarems/v14-i2/24741>
- Lengnick-Hall, C. A., Beck, T. E., and Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21(3), 243–255. <https://doi.org/10.1016/j.hrmr.2010.07.001>
- Leung, K. (1997). Negotiation and reward allocations across cultures. In P. C. Earley & M. Erez (Eds.), *New perspectives on international industrial and organizational psychology* (pp. 640–675). Jossey-Bass.
- Lianingsih, N., Irman, D., and Nurnisaa, N. (2025). The Impact of the Digital Economy on Employment and Workforce Structure in Indonesia. *International Journal of Business, Economics, and Social Development*, 6(1), 139–145. <https://doi.org/10.46336/ijbesd.v6i1.889>
- Marakas, G. M., Yi, M. Y., and Johnson, R. D. (1998). The Multilevel and Multifaceted Character of Computer Self-Efficacy: Toward Clarification of the Construct and an

- Integrative Framework for Research. *Information Systems Research*, 9(2), 126–163. <https://doi.org/10.1287/isre.9.2.126>
- Marsick, V. J., and Watkins, K. E. (2003). Demonstrating the Value of an Organization's Learning Culture: The Dimensions of the Learning Organization Questionnaire. *Advances in Developing Human Resources*, 5(2), 132–151. <https://doi.org/10.1177/1523422303005002002>
- Nahrgang, J. D., Morgeson, F. P., and Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. *Journal of Applied Psychology*, 96(1), 71–94. <https://doi.org/10.1037/a0021484>
- OECD. (2024). Breaking the Vicious Circles of Informal Employment and Low-Paying Work. OECD. <https://doi.org/10.1787/f95c5a74-en>.
- Parker, S. K., Bindl, U. K., and Strauss, K. (2010). Making Things Happen: A Model of Proactive Motivation. *Journal of Management*, 36(4), 827–856. <https://doi.org/10.1177/0149206310363732>
- Pratama, A. S., Sridadi, A. R., Eliyana, A., Anggraini, R. D., & Kamil, N. L. M. (2023). A systematic review of proactive work behavior: Future research recommendation. *The Journal of Behavioral Science*, 18(2), 136–151.
- Rezwan, R. B., and Takahashi, Y. (2021). Retention intention: does having a proactive personality matter? *Personnel Review*, 51(2), 528–542. <https://doi.org/10.1108/pr-02-2020-0073>
- Sarstedt, M., Ringle, C. M., & Hair, J. F. (2022). Partial least squares structural equation modeling (PLS-SEM): A useful tool for management research. *Journal of Business Research*, 142(5), 123–135.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. Broadway Business.
- Suyanto, B., Sugihartati, R., Egalita, N., Mas'udah, S., Singgih, D. S., and Sudarso (2023). Digital literacy and survival mechanism of micro-small enterprises in practicing sharing economy. *Cogent Social Sciences*, 9(2). <https://doi.org/10.1080/23311886.2023.2245691>
- Stajkovic, A. D., and Stajkovic, K. S. (2024). *Human Sustainability and Cognitive Overload at Work*. Routledge. <https://doi.org/10.4324/9781003399087>
- Sonnentag, S., and Fritz, C. (2014). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior*, 36(S1), S72–S103. <https://doi.org/10.1002/job.1924>
- Sweller, J. (1988). Cognitive Load During Problem Solving: Effects on Learning. *Cognitive Science*, 12(2), 257–285. https://doi.org/10.1207/s15516709cog1202_4
- Tan, C. (2016). Lifelong learning through the SkillsFuture movement in Singapore: challenges and prospects. *International Journal of Lifelong Education*, 36(3), 278–291. <https://doi.org/10.1080/02601370.2016.1241833>
- Taris, T. W., Ybema, J. F., and Beek, I. van. (2017). Burnout and engagement: Identical twins or just close relatives? *Burnout Research*, 5, 3–11. <https://doi.org/10.1016/j.burn.2017.05.002>
- Tett, R. P., and Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88(3), 500–517. <https://doi.org/10.1037/0021-9010.88.3.500>
- Tjosvold, D., Hui, C., and Yu, Z. (2003). Conflict Management and Task Reflexivity for Team In-Role And Extra-Role Performance In China. *International Journal of Conflict Management*, 14(2), 141–163. <https://doi.org/10.1108/eb022895>

- Tjosvold, D., Law, K. S., and Sun, H. (2006). Effectiveness of Chinese Teams: The Role of Conflict Types and Conflict Management Approaches. *Management and Organization Review*, 2(2), 231–252. <https://doi.org/10.1111/j.1740-8784.2006.00040.x>
- van Merriënboer, J. J. G., and Sweller, J. (2005). Cognitive Load Theory and Complex Learning: Recent Developments and Future Directions. *Educational Psychology Review*, 17(2), 147–177. <https://doi.org/10.1007/s10648-005-3951-0>
- Vial, G. (2019). Understanding digital transformation: A review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118–144. <https://doi.org/10.1016/j.jsis.2019.01.003>
- West, M. A. (1990). *Innovation and creativity at work: Psychological and organizational strategies*. Wiley.
- Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Press.
- Yu, M. (2024). The development of Southeast Asia's digital economy: current status, development motivation and challenges. *Economic and Regional Studies / Studia Ekonomiczne i Regionalne*, 17(2), 314–330. <https://doi.org/10.2478/ers-2024-0017>
- Zhang, X., and Zhou, J. (2014). Empowering leadership, uncertainty avoidance, trust, and employee creativity: Interaction effects and a mediating mechanism. *Organizational Behavior and Human Decision Processes*, 124(2), 150–164. <https://doi.org/10.1016/j.obhdp.2014.02.002>
- Zhou, J., and George, J. M. (2001). WHEN JOB DISSATISFACTION LEADS TO CREATIVITY: ENCOURAGING THE EXPRESSION OF VOICE. *Academy of Management Journal*, 44(4), 682–696. <https://doi.org/10.2307/3069410>