

Agentic AI and Academic Workforce Resilience in Malaysian Higher Education: An Integrative HRD Framework

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DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v16-i10/29079>

Published Date: 16 October 2026

Abstract

This conceptual paper develops an integrative Human Resource Development (HRD) framework for understanding academic workforce resilience in Malaysian higher education institutions (HEIs) under the disruptive conditions of Agentic AI. Drawing on Cascio's BANI framework, Hobfoll's Conservation of Resources (COR) theory, the professional identity perspective, and Strategic HRD theory, the paper synthesises a curated body of contemporary literature to explain how technological disruption becomes a workforce-resilience problem. The framework advances four theoretical propositions. First, BANI conditions generate distinct resource threats through structural brittleness, professional anxiety, non-linear skill depreciation, and algorithmic incomprehensibility. Second, strategic HRD architectures can alter these appraisal pathways by replenishing individual and institutional resources. Third, sustained resilience depends on professional identity reconstruction from task-centred 'doing' towards human-centred 'being'. Fourth, agile governance and AI-adaptive leadership provide the institutional conditions through which individual resilience can contribute to organizational antifragility. The paper reframes academic resilience as a systemic HRD outcome rather than an individual coping responsibility and identifies a theory-led agenda for empirical testing in Malaysia and comparable ASEAN higher education contexts.

Keywords: Agentic AI, Academic Workforce Resilience, Human Resource Development, Bani, Conservation of Resources

Introduction

From Generative AI to Agentic AI

The recent evolution of artificial intelligence in higher education is moving beyond conversational Generative AI towards systems with greater autonomy in goal decomposition, iterative reasoning, tool use, information retrieval, output evaluation, and multi-agent coordination (Russell & Norvig, 2020; Wooldridge, 2020; Al Musawi, 2026; Narayan et al., 2026; Jayasinghe, 2026). Within academic work, this shift matters because AI is increasingly positioned not only as a writing or coding aid but as an infrastructure capable of supporting course design, feedback, analytical work, administrative workflows, and preliminary research synthesis (Alangari, 2024; Mili & Abdelaziz, 2026).

The HRD challenge therefore concerns more than digital literacy. As increasingly autonomous systems absorb or reconfigure routine cognitive work, academics must continually renew technical competence while preserving the human, relational, ethical, and interpretive capabilities that sustain the value of academic work. This creates a need to theorise resilience as a developmental and organizational phenomenon rather than as an expectation that individual academics simply adapt on their own.

Academic Work in a BANI Environment

Earlier discussions of organisational disruption frequently used the VUCA vocabulary of volatility, uncertainty, complexity, and ambiguity (Mahadi et al., 2024). The BANI framework—Brittle, Anxious, Non-linear, and Incomprehensible—offers a different diagnostic vocabulary for conditions in which apparently stable systems may fracture, uncertainty is experienced affectively, cause and effect become disproportionate, and events are difficult to interpret (Cascio, 2020). In higher education, these dimensions can be connected to fragile assessment arrangements, technostress and fears of professional obsolescence, rapidly depreciating skill sets, and opaque algorithmic processes (Chaika, 2025; Liu & Wu, 2026; Saefullah et al., 2024; Al Musawi, 2026).

BANI is useful here as a description of the disruption, but it does not by itself explain why academics respond differently to the same technological change or how institutions can intervene. This paper therefore connects BANI to COR theory, Strategic HRD, and professional identity in order to move from diagnosis towards a theoretically specified account of workforce resilience.

Malaysian Higher Education as the Context of Application

Malaysian HEIs operate within a national environment that emphasises digital transformation, talent development, and the integration of artificial intelligence. At the same time, academic work is shaped by demanding combinations of research performance expectations, indexed publication targets, quality-assurance compliance, teaching responsibilities, administrative duties, and community engagement. These simultaneous demands make Malaysia a salient context for examining how Agentic AI may intensify resource pressures while also creating new developmental opportunities. The Malaysian context is used in this paper as the setting in which the proposed theoretical relationships can subsequently be tested, rather than as the basis for a prescriptive national policy roadmap.

Theoretical Problem and Purpose

The literature represented in the reviewed corpus addresses AI disruption, employability, reskilling, leadership, human capital, psychological appraisal, and professional identity, but these strands are commonly treated in parallel. A theoretical gap remains in explaining how a macro-level condition of disruption becomes an individual resource threat, how Human Resource Development (HRD) interventions can alter that pathway, and why identity reconstruction may be necessary for resilience to persist. Treating these mechanisms separately risks reducing workforce resilience either to a list of training activities or to individual psychological coping.

Accordingly, this paper develops an integrative Human Resource Development (HRD) framework with four objectives: (1) to conceptualize the Brittle, Anxious, Non-linear, Incomprehensible (BANI) dimensions as distinct resource threats in academic work; (2) to specify Strategic HRD as an institutional resource architecture; (3) to position professional identity reconstruction as a condition for sustained resilience; (4) to explain how agile governance can connect individual adaptation with organizational antifragility.

Theoretical Framework*BANI as a Diagnostic Framework*

Cascio's (2020) BANI framework characterises disruption through four related but analytically distinct conditions. Brittleness refers to systems that appear efficient yet possess limited capacity to absorb shocks. In academic settings, standardised assessment and rigid delivery arrangements can become vulnerable when AI changes the cost, speed, and provenance of cognitive production (Cheville et al., 2018; Mili & Abdelaziz, 2026). Anxiety captures the affective consequences of perceived uncontrollability and possible obsolescence, including technostress, role ambiguity, and concerns about integrity and professional value (Chaika, 2025; Liu & Wu, 2026). Non-linearity concerns disproportionate and rapidly changing effects. Skills, workflows, and labour-market assumptions can be reconfigured faster than conventional curriculum and professional-development cycles can respond (Saefullah et al., 2024; Panjaitan et al., 2025). Incomprehensibility concerns opacity: academics and managers may be required to act on AI-supported outputs without being able to fully inspect the reasoning processes that produced them (Al Musawi, 2026; Narayan et al., 2026). These four dimensions describe the environment, but a mechanism is needed to explain how such conditions translate into strain or adaptive action.

Conservation of Resources Theory

COR theory proposes that individuals seek to obtain, retain, and protect valued resources, including time, energy, status, knowledge, self-efficacy, and supportive conditions (Hobfoll, 1989). Stress becomes more likely when resources are threatened, lost, or not replenished after substantial investment. This perspective is directly relevant to academic AI disruption because learning new systems, redesigning assessment, verifying outputs, and renegotiating professional roles all require resource investment.

Liu and Wu (2026) distinguish between challenge and hindrance appraisals of AI. A hindrance appraisal frames AI as a threat to autonomy or competence and can be associated with withdrawal and stress; a challenge appraisal frames it as an opportunity for mastery and can support self-regulated adaptive behaviour. COR theory therefore supplies the micro-level

mechanism linking BANI pressures to resilience: the same technological development may trigger a loss spiral or a gain spiral depending on the resources available and the meaning attached to the disruption.

Strategic HRD as an Institutional Resource Architecture

Strategic HRD extends development beyond isolated training events by connecting individual development, career development, and organisational development to changing environmental demands (Yorks et al., 2022; Norlia et al., 2024). The literature in the corpus points towards continuous learning, competency renewal, leadership development, and evidence-based talent management as mechanisms through which institutions can replenish the resources required for adaptation (Dede & Richards, 2020; Sposato, 2024; Narayan et al., 2026).

Dede and Richards' (2020) 60-Year Curriculum is particularly relevant because it rejects the assumption that formal qualifications provide durable competence across a career. Applied to academics, this principle implies a continuing development architecture in which reskilling and upskilling are normal components of academic work. The literature also suggests a dual-track competency requirement: technical fluency in AI-supported work must develop alongside human-centred capabilities such as critical reflection, communication, ethical judgement, and creative synthesis (Abusayam et al., 2026; Bowen-Withington, 2025).

Professional Identity: From 'Doing' to 'Being'

Skills development alone may be insufficient when technological change challenges the meaning of professional work. Lavercombe (2026) conceptualises a shift from professional identity grounded in 'doing' towards identity grounded in 'being'. In academia, the 'doing' dimension includes tasks such as drafting, grading, information synthesis, and routine content production—activities increasingly supported by AI. The 'being' dimension emphasises ethical role modelling, mentorship, judgement, dialogue, relational work, and the cultivation of wisdom (Bowen-Withington, 2025; Lavercombe, 2026).

Identity reconstruction is therefore treated in this paper not as a decorative outcome of AI

Adoption but as a condition for sustained resilience. Where academics continue to define professional worth primarily through tasks that AI can increasingly assist or automate, technical upskilling may coexist with continuing threat appraisal. Where professional value is reconstructed around distinctively human contributions, development can support both competence and renewed professional purpose.

Integration of the Four Perspectives

These four perspectives form an integrated theoretical architecture rather than four independent explanations. BANI describes the nature of the disruption. COR theory explains the psychological mechanism through which academics appraise and respond to resource threats. Strategic HRD identifies institutional interventions capable of changing those appraisal pathways by replenishing resources and enabling capability renewal. The professional identity perspective specifies an ontological condition for sustained resilience: development must address not only what academics can do with AI, but also how they understand their continuing professional value. Together, these perspectives produce a

multi-level account in which environmental disruption, individual appraisal, institutional development, identity, and organisational adaptation are theoretically connected.

Literature Base and Synthesis Approach

This conceptual paper draws on the curated corpus assembled in the original review: 27 scholarly sources published between 2018 and 2026 and identified through Scopus using search terms combining artificial intelligence, higher education, human resource development or human capital, reskilling, workforce resilience, and governance. Sources were retained for their relevance to AI-related disruption, academic or higher-education work, HRD, employability, leadership, professional learning, or organisational resilience. The corpus includes empirical studies, reviews, conceptual work, conference research, and scholarly monographs.

Rather than presenting the corpus as an empirical dataset, the present revision uses theory-driven synthesis. Evidence was organised through four analytical lenses—BANI, COR theory, Strategic HRD, and professional identity—to identify recurring mechanisms and to formulate theoretical propositions. This approach is consistent with the paper's revised purpose: theory development rather than a policy roadmap or a claim of exhaustive systematic-review coverage.

Table 1

Condensed Synthesis of the Literature Base

Author/Year	Focus	Key idea	Contribution to framework
Alangari, H. (2024)	Disrupting Education: Artificial Intelligence in Higher Education	Details the disruptive transformation of HE through adaptive learning, predictive analytics, and automated administrative workflows. Identifies ethical challenges and pedagogical role shifts.	Highlights the transition of faculty from traditional lecturers to mentors and learning experience designers; advocates for continuous professional development in AI literacy.
Apatova, N.V., Ostapenko, I.N., & Usenko, R.S. (2021)	Decision-making on human individual capital investment	Develops logistic regression and neural network models to assess ROI on individual human capital in universities. Identifies key predictive factors: specialist knowledge, self-education culture, and age.	Provides an algorithmic Decision Support System (DSS) framework for strategic HRD, demonstrating that regular self-education culture directly drives university intellectual capital.

Rahardja, U., Hidayanto, A.N., Hariguna, T., & Aini, Q. (2019)	Design Framework on Tertiary Education System in Indonesia Using Blockchain Technology	Examines technological infrastructure and national research masterplans (RIRN). Proposes decentralized blockchain architectures integrated with AI platforms for tertiary systems.	Emphasizes that technological modernization in developing ASEAN higher education must be matched by massive, deliberate investment in human and social capital.
Sposato, M. (2024)	Leadership training and development in the age of artificial intelligence	Examines leadership development needs in AI- saturated environments. Argues traditional leadership training is obsolete;	Formulates strategic leadership HRD: leaders must foster a culture of psychological safety, continuous digital reskilling, and
Author/Year	Focus	Key idea	Contribution to framework
		leaders must cultivate digital agility, ethical oversight, and human- machine teaming.	collaborative human-AI organizational symbiosis.
Vătămănescu & Dominici (2024)	Great reset? opportunity or threat?: Business Systems Laboratory International Symposium, Palermo, Italy, 2024	Gathers interdisciplinary contributions addressing systemic complexity, linguistics, digital transformation, and talent management during global institutional resets.	Demonstrates that HRD cannot treat AI as an isolated tool but must adopt a whole-systems perspective, balancing technological platforms with systemic human well- being.
Uzoagba, N.C., Idoko, N.A., & Onyam, I.D. (2026)	Bridging Divides, Building Futures: Curriculum Innovation, Digital Inclusion, and Decolonization...	Evaluates how academic departments adapt to technological disruptions, systemic resource deficits, and digital divides through curriculum innovation and faculty readiness.	Underscores that faculty readiness is the critical linchpin of institutional survival; HRD must prioritize digital inclusion, pedagogical decolonization, and equitable resource allocation.

Dede, C.J., & Richards, J. (2020)	The 60-year New curriculum: models for lifelong learning in the digital economy	Conceptualizes the "60-Year Curriculum" (60YC)—a paradigm shift from terminal degrees to continuous lifelong learning spanning six decades of professional life amid relentless technological disruption.	Serves as the ultimate architectural blueprint for academic HRD: universities must structure continuous micro-credentials and lifelong upskilling pathways for their own faculty workforce.
Chaika, O. (2025)	Educational Policy and Reforms: The Impact of Globalization	Analyzes globalization, GenAI (ChatGPT, Copilot), academic staff autonomy, professional burnout, emotional well-being, and the "Economics of Happiness" in educational institutions.	Identifies burnout mitigation, emotional well-being, and human resource development management as indispensable pillars for sustaining academic potential and institutional resilience.
Narayan, U., Sharath Kumar, K.M., Baba, M.S., & Saremi, H. (2026)	The Vital Role of Artificial Intelligence in the Dynamics of	Applies Resource-Based View (RBV) to HR in HEIs. Demonstrates how AI	Grounds HRD in strategic management theory: academic faculty are rare, valuable,
Author/Year	Focus	Key idea	Contribution to framework
	Human Resource Management	enhances competency mapping, skill-gap identification, talent retention, and performance management systems.	inimitable human resources whose competencies must be dynamically mapped and cultivated via AI-enhanced HRD.
Ladha, A. (2022)	Creating engaging curriculum using innovative technology in education	Investigates adaptive learning technologies, virtual reality, and online modalities in continuing education. Demonstrates how tech fosters flexibility and student engagement.	Emphasizes that instructional innovation requires sustained faculty professional development; educators need hands-on institutional support to overcome technophobia.

Panjaitan, M.S., Lubis, F.F., Romansyah, Y., & Sembiring, J. (2025)	Disruptive Technologies in Indonesian Higher Education Institutions: A Case Study	Explores stakeholder perceptions of disruptive AI in Indonesian universities. Reveals acute institutional inertia, wide disparities in tech literacy, and urgent need for structured support.	Shows that without institutionalized HRD interventions, faculty experience anxiety and resistance; institutional change requires clear guidelines and localized upskilling programs.
Mulfag, F.C.P., Idris, & Rino (2026)	Perceived Employability Under Digital Transformation: A Multilevel Systematic Review..	Analyzes multilevel antecedents of perceived employability amid digital disruption and labor market instability. Highlights career self-management, human capital, and proactive adaptability.	Extends employability theory to academics: faculty resilience requires active career self-management, continuous human capital reinvestment, and agile skill reconfiguration.
Vuc, D.E., Stroe, V.D., Fanea-Ivanovici, M., Pana, M.C., & Maftai,...	Higher Education in Romania in the Age of AI: Reskilling for Resilience and Sustainable Human...	Investigates curricula misalignment with AI labor market demands. Identifies prevailing skill mismatches and proposes systemic reskilling strategies to build sustainable human capital.	Argues that university workforce resilience directly underpins national human capital sustainability; faculty must be systematically reskilled to avoid institutional obsolescence.
Liu, F., & Wu, H. (2026)	Threat or opportunity? Challenge vs hindrance appraisals	Tests Conservation of Resources (COR) theory among	Provides foundational empirical evidence for academic resilience:
Author/Year	Focus	Key idea	Contribution to framework
	of generative AI and self-regulated...	educators. Proves challenge appraisals of AI foster self-regulated teaching and resilience, whereas hindrance appraisals cause stress and withdrawal.	HRD must actively design interventions that shift faculty mental models from threat/hindrance to opportunity/challenge.

Bowen-Withington, J. (2025)	Exploring the Use of Generative AI for Developing Reflective Practice and Critical Thinking...	Investigates GenAI in nursing education. Demonstrates how AI can be leveraged for reflective learning, critical inquiry, and work-integrated learning (WIL) rather than rote tasks.	Demonstrates that faculty must develop reflective pedagogical competencies; AI handles informational processing while humans orchestrate critical ethical reflection.
Waly, S., & Al Aqra, M. (2026)	"We All Need a Personal Assistant": Exploring Faculty Perceptions About the Role of AI in Higher...	Conducts in-depth interviews with university professors. Uncovers that faculty view AI not as an existential competitor, but as an indispensable "personal assistant" for administrative and teaching offloading.	Informs HRD strategy: positioning AI as an administrative personal assistant substantially lowers faculty resistance, liberates cognitive bandwidth, and builds collaborative resilience.
Ballestas, C.L., Peiró-Signes, A., Segarra-Oña, M., &...	Drivers and barriers to innovation performance: evidence from an interpretative literature review	Analyzes internal and external barriers to organizational innovation. Identifies structural rigidity, risk aversion, and lack of absorptive capacity as primary impediments.	Highlights that academic institutions must dismantle rigid bureaucratic silos and invest in absorptive capacity to allow faculty to innovate with emerging technologies.
Rouaga, E., Azzaime, Y., Abdouni, A., & Moumen, A. (2025)	AI-Driven Governance and Graduate Employability in Morocco: Building a Smarter Higher Education...	Demonstrates how AI-driven predictive analytics and smart governance modernize university-labor interfaces, mitigating regional disparities and structural skill mismatches.	Advocates for AI-driven academic governance: HRD departments must utilize predictive workforce analytics to forecast future academic skill requirements and proactively reskill faculty.
Liu, H.J., Wang, J., & Wijma, F.J. (2026)	What Can a Business School Do When Generative Artificial	Analyzes the erosion of routine entry-level cognitive tasks by GenAI. Outlines	Directly challenges academic workforce models: as AI replaces basic cognitive tasks,
Author/Year	Focus	Key idea	Contribution to framework
	Intelligence Replaces Entry-Level...	institutional strategies to cultivate an "AI-ready workforce" through meta-cognitive and problem-solving curricula.	academics must pivot toward teaching complex synthesis, ethical judgment, and high-level strategy.

Lavercombe, M. (2026)	From doing to being: Generative AI, workplace affordances, and professional identity	Seminal conceptualization of the transition "from doing to being." Argues that as AI automates routine tasks ("doing"), professional identity must anchor in human values, ethics, and mentorship ("being").	Crucial psychological pillar for academic resilience: HRD must help faculty deconstruct task-based self-worth and reconstruct their professional identity around human mentorship and wisdom.
Alqahtani, M.M. (2023)	Artificial intelligence and entrepreneurship education: A paradigm in Qatari higher education...	Examines post-pandemic educational continuity and AI adoption in Qatari HEIs. Finds entrepreneurial mindset and agile leadership are primary enablers of technology adoption.	Establishes that academic resilience requires an "intrapreneurial" mindset; HRD programs must cultivate agility, experimentation, and proactive problem-solving among academic staff.
Abusayam, B.S., Mahmoud, A.M., & Abdelrhman, A.M. (2026)	Leveraging Industry 4.0 Soft Skills for Innovation and Sustainable Business Growth...	Analyzes workforce readiness in 4IR. Proves that soft skills (communication, emotional intelligence, critical thinking, adaptability) are the paramount determinants of sustainable innovation alongside AI.	Reinforces the dual-track HRD model: technical AI training must be coupled with human-centric soft skills; emotional intelligence and adaptability are the ultimate buffers against obsolescence.
Al Musawi, H.K. (2026)	The Double-Edged Sword: AI in Education as a Challenge to Management Theory and Human Capital...	Argues AI integration challenges foundational institutional and management theories. Highlights the erosion of academic integrity, commodification of knowledge, and governance vacuums.	Calls for urgent restructuring of university governance and HRD policies; universities must develop ethical guardrails and robust human capital development systems to
Author/Year	Focus	Key idea	Contribution to framework
			safeguard academic integrity.

Yorks, L., Abel, A.L., & Rotatori, D. (2022)	The Scope of Human Resource Development: Both an Academic Discipline and Professional Practice	Establishes the comprehensive scope of HRD across individual, organizational, and societal dimensions. Details strategic HRD mechanisms for navigating environmental turbulence and VUCA/BANI conditions.	Provides the overarching operational definition and theoretical architecture for this study's HRD framework, asserting that workforce resilience is an intentional outcome of strategic HRD design.
Mili, K., & Abdelaziz, K. (2026)	Are Universities Becoming Obsolete in the Age of Artificial Intelligence?	Investigates whether AI-driven scalable skill delivery and personalized learning render traditional universities obsolete. Asserts universities must radically redefine their value proposition.	Highlights the existential stakes of academic workforce resilience: universities survive only if their academic workforce evolves from content deliverers into architects of deep human transformation.
Saefullah, E., Suseno, B.D., & Rohaeni, N. (2024)	Navigating uncertainty: The interplay of future job forecasting, learning agility, responsiveness,...	Investigates workforce dynamics under WEF future job projections. Confirms that learning agility, responsiveness, and adaptability significantly mediate workforce survival in uncertainty.	Validates learning agility as the core psychological competency of academic resilience; HRD must prioritize agile learning environments where faculty rapidly absorb new technologies.
Cheville, R.A., Heywood, J., Larkin, C.J., & Corbet, S. (2018)	Economic and pedagogical analysis of an alternative model of engineering education	Analyzes systemic deficiencies and economic unsustainability of traditional higher education structures. Proposes alternative, agile organizational models for long-term viability.	Illustrates structural brittleness in legacy educational economics; proves that institutional and workforce resilience requires fundamental structural redesign rather than cosmetic adjustments.

Theoretical Development

Proposition 1: BANI Conditions as Distinct Resource Threats

The reviewed literature supports treating the four BANI dimensions as different forms of resource threat rather than as interchangeable labels. Brittleness threatens the reliability of established academic structures. Assessment models, routine knowledge-transmission roles, and fixed professional-development cycles may lose value when AI changes how cognitive

work is produced and evaluated (Cheville et al., 2018; Mili & Abdelaziz, 2026; Uzoagba et al., 2026). In COR terms, the threat is not merely technological; it concerns the possible loss of conditions and routines through which academics previously converted expertise into recognised performance.

Anxiety represents a more direct threat to personal resources. Liu and Wu (2026) show that hindrance appraisals of AI can be associated with stress and withdrawal, while Mulfag et al. (2026) connect digital transformation to perceived employability and career adaptability. These findings suggest that perceived professional obsolescence can deplete self-efficacy and psychological energy even before any actual job displacement occurs.

Non-linearity threatens the durability of competence. When technological change outpaces formal review and training cycles, academics can experience repeated skill depreciation and escalating demands for reinvestment in learning (Saefullah et al., 2024; Panjaitan et al., 2025). Incomprehensibility, meanwhile, threatens epistemic control: opaque systems make it difficult to determine why outputs were produced or how decisions should be audited (Al Musawi, 2026; Narayan et al., 2026). Each BANI condition therefore maps onto a different resource problem.

Proposition 1. Agentic AI disrupts academic work through four distinct BANI mechanisms -brittleness of academic structures, anxiety over professional obsolescence, non-linear skill depreciation, and incomprehensibility of algorithmic decision-making - each of which constitutes a distinct resource threat under COR theory.

Proposition 2: Strategic HRD as a Mediating Resource Architecture

If BANI pressures operate through resource threats, institutional HRD can be theorised as a resource architecture that changes the relationship between disruption and resilience. Dede and Richards (2020) provide a lifelong-learning logic in which capability renewal continues throughout working life. For academics, this implies development systems that normalise recurrent reskilling rather than treating AI competence as a one-off workshop topic. Ladha (2022) and Vuc et al. (2026) similarly emphasise sustained development and reskilling under technological change.

The corpus also indicates that capability renewal should be dual-track. Technical competence is necessary for working effectively with AI-supported systems, but human-centred competencies remain important to innovation, reflection, judgement, and learning relationships (Abusayam et al., 2026; Bowen-Withington, 2025). Predictive talent analytics and competency mapping may further allow HRD functions to identify emerging gaps and target development resources (Apatova et al., 2021; Narayan et al., 2026; Rouaga et al., 2025).

The theoretical implication is that HRD does more than add skills after disruption has occurred. By increasing access to learning, time, support, competence, and developmental pathways, HRD can replenish resources that shape whether AI is appraised as an uncontrollable hindrance or a manageable challenge. The proposed mediating role is therefore a mechanism to be empirically tested rather than an assumption that training automatically produces resilience.

Proposition 2. Strategic HRD architectures - particularly continuous career-long learning, dual-track competency development, and evidence-based talent analytics - mediate the relationship between BANI pressures and academic resilience by replenishing individual and institutional resource reservoirs.

Proposition 3: Cognitive Reappraisal and Professional Identity Reconstruction

COR theory indicates that resource gain depends partly on appraisal. Liu and Wu (2026) provide direct support for distinguishing hindrance and challenge appraisals of AI. Waly and Al Aqra (2026) add a complementary relational insight: faculty can frame AI as a 'personal assistant' that offloads routine work rather than as a direct professional competitor. Such reframing can free cognitive bandwidth for higher-value academic activity.

However, reappraisal may be unstable if professional identity remains anchored in tasks that AI increasingly performs. Lavercombe's (2026) 'doing to being' perspective explains why identity must be incorporated into HRD theory. Development that focuses exclusively on tool proficiency may improve technical capability while leaving the underlying question of professional worth unresolved. By contrast, development that also reinforces mentorship, ethical judgement, critical dialogue, reflective practice, and interdisciplinary synthesis can help academics relocate professional value towards roles less reducible to automated task execution (Bowen-Withington, 2025).

Identity reconstruction is therefore proposed as a contingency on the conversion of new resources into sustained resilience. It links capability to meaning: academics need both the resources to work with AI and a coherent account of why their human contribution remains valuable.

Proposition 3. HRD interventions that reframe AI from a hindrance threat to a challenge affordance can activate resource-gain spirals, but sustained resilience depends on professional identity reconstruction from task-centred 'doing' towards human-centred 'being'.

Proposition 4: Agile Governance as a Boundary Condition for Antifragility

Individual capability cannot compensate indefinitely for rigid organisational arrangements. Sposato (2024) argues that leadership development in AI-intensive environments requires digital agility, ethical oversight, and human-machine collaboration. Ballestas et al. (2026) identify structural rigidity and limited absorptive capacity as barriers to innovation, while Panjaitan et al. (2025) highlight institutional inertia and uneven technological readiness. These studies imply that the benefits of individual learning depend on whether the institution permits experimentation, learning, and adjustment.

Agile governance in the present framework does not mean abandoning accountability. It refers to institutional capacity to update processes, clarify responsible AI use, support learning from experimentation, and align development with changing academic and labour-market requirements. Rouaga et al. (2025) further illustrates how data-informed governance can connect higher education with emerging capability needs. Such conditions determine whether resource gains remain individual or become embedded in organisational routines.

Proposition 4. Agile governance and AI-adaptive leadership are institutional boundary conditions that enable individual-level resource gains and resilience to become embedded as organisational learning and antifragility.

Integrative HRD Framework

The four propositions form a sequential but recursive framework. Agentic AI is interpreted through BANI conditions, which generate threats to structural, psychological, competency, and epistemic resources. COR appraisal processes shape whether these pressures are experienced primarily as hindrances or challenges. Strategic HRD intervenes by replenishing resources through continuous learning, competency development, and talent support. Professional identity reconstruction influences whether newly acquired capabilities translate into durable professional meaning. Agile governance then determines whether individual adaptation is retained, shared, and converted into organisational learning. Feedback loops are expected: successful adaptation can enlarge future resource reservoirs, whereas poorly supported change can intensify loss spirals.

BANI condition	Primary resource threat	HRD response	Identity implication	Expected resilience pathway
Brittle	Loss of reliable structures and routines	Continuous learning; assessment/work redesign capability	Value moves beyond routine task execution	Greater adaptive capacity
Anxious	Self-efficacy, energy, security and status threats	Psychological safety; supported experimentation; development access	Renewed professional purpose	Hindrance-to-challenge reappraisal
Non-linear	Rapid skill depreciation and repeated learning costs	Career-long reskilling; dual-track competencies	Identity becomes learning-oriented rather than task-fixed	Resource renewal and learning agility
Incomprehensible	Loss of epistemic control and confidence	AI literacy; verification; ethical judgement; leadership development	Human judgement and accountability become salient	Responsible experimentation and organisational learning

Discussion

Theoretical Contributions

This paper makes three specific theoretical contributions. First, it connects BANI's macro-level diagnosis to COR theory's micro-level resource mechanism. Rather than using BANI as a descriptive list of contemporary problems, the framework specifies how brittleness, anxiety,

non-linearity, and incomprehensibility can be interpreted as different threats to valued resources in academic work. This creates a clearer route from environmental disruption to testable individual-level outcomes.

Second, the framework advances Strategic HRD by proposing a mediating role for institutional development architecture. Continuous learning, dual-track competency development, and evidence-based talent support are not treated merely as recommended practices; they are theorised as mechanisms that replenish resources and alter cognitive appraisal. This makes it possible for future research to test when and how HRD changes the relationship between AI disruption and resilience.

Third, the framework integrates professional identity into HRD theorising. Identity reconstruction is positioned as a precondition for sustained resilience rather than simply a consequence of successful adaptation. This distinction is important because an academic may become technically proficient with AI while continuing to experience identity threat. The 'doing to being' perspective explains why capability development and professional meaning need to be addressed together.

Implications for HRD Research and Practice

For HRD researchers, the framework suggests that AI-related development should be examined as a multi-level process. Future studies can distinguish resource threats, appraisal mechanisms, HRD resource provision, identity change, and organisational embedding rather than collapsing these processes into a single measure of AI readiness. This would allow more precise testing of mediation, moderation, and cross-level effects.

For HRD practitioners in HEIs, the synthesis suggests that isolated tool demonstrations are unlikely to address the full resilience problem. Development portfolios can combine technical AI fluency with critical verification, ethical reasoning, reflective pedagogy, communication, and mentoring. The 60-Year Curriculum logic also implies that development should be recurrent and integrated with academic careers rather than episodic. Predictive competency mapping may be useful where it is applied transparently and as a developmental aid rather than as an opaque performance-control mechanism (Apatova et al., 2021; Narayan et al., 2026).

Leadership development is similarly relevant because organisational conditions influence whether academics can experiment safely, share learning, and convert individual capability into collective routines (Sposato, 2024; Ballestas et al., 2026, Mahadi et al., 2025). These implications are intentionally framed at the level of HRD practice rather than as prescriptive recommendations for specific ministries, agencies, or university office-holders.

Relevance to Malaysian Higher Education

The Malaysian context provides a theoretically important setting for empirical validation because academic staff operate under simultaneous expectations for teaching, research, quality assurance, administration, and engagement while digital transformation is accelerating. The framework predicts that resilience will vary not only with access to AI tools but with the resources academics can mobilise, the developmental support available, the

meaning they attach to professional change, and the adaptability of institutional arrangements.

Empirical work should therefore avoid assuming that Malaysian HEIs constitute a homogeneous environment. Public and private institutions, research-intensive and teaching-oriented universities, disciplines, career stages, and regions may differ in resource availability and exposure to AI-related change. These differences provide opportunities to test the boundary conditions of the proposed framework without turning contextual variation into unsupported policy claims.

Limitations and Future Research

The literature base has several limitations. The original corpus was assembled from Scopus and therefore does not capture every potentially relevant source indexed exclusively in regional or specialist databases. Agentic AI is also a rapidly developing area; consequently, the corpus combines early empirical studies with conceptual analyses, reviews, conference work, and scholarly monographs. The propositions should therefore be understood as theory-building claims that require empirical testing rather than as established causal effects.

Future research can test the framework through longitudinal and multi-level designs. Survey-based studies could examine whether BANI-related resource threats predict burnout, learning agility, turnover intention, or adaptive performance, and whether Strategic HRD mediates these relationships. Structural equation modelling could test the proposed appraisal and identity pathways, while longitudinal designs could assess whether resource-gain spirals persist over time.

Qualitative and ethnographic research could examine how academics renegotiate professional identity while working with increasingly autonomous systems. Comparative studies across Malaysian institution types and ASEAN settings could identify contextual boundary conditions. A further research stream should examine fairness, transparency, and accountability when AI-supported analytics are used in academic talent management, especially where algorithmic recommendations may influence development opportunities or career decisions.

Conclusion

Agentic AI creates a workforce-development challenge because it changes not only the tools used in academic work but also the stability of work structures, the durability of competence, the transparency of decision processes, and the meaning of professional expertise. This paper responds by integrating BANI, COR theory, Strategic HRD, and professional identity into a single conceptual framework for academic workforce resilience.

The central argument is that resilience should not be reduced to individual coping. BANI pressures generate distinct resource threats; appraisal processes shape whether those pressures become hindrances or challenges; Strategic HRD can replenish resources and renew capability; identity reconstruction helps preserve professional meaning; and agile governance enables individual adaptation to become organisational learning. The resulting four propositions provide a focused agenda for empirical research in Malaysian higher education and comparable settings.

Theoretical and Contextual Contribution

Theoretically, this research contributes to existing knowledge by integrating BANI, Conservation of Resources theory, Strategic HRD, and professional identity into a multi-level explanation of academic workforce resilience under Agentic AI disruption. It specifies how environmental pressures become resource threats, how institutional development support can replenish resources and reshape appraisal, and how identity reconstruction and agile governance can sustain adaptation and embed it in organisational learning. The contribution is a set of theoretically grounded propositions for empirical testing, rather than demonstrated causal effects. Contextually, the framework gives Malaysian higher education institutions a basis for examining resilience amid the combined demands of teaching, research, quality assurance, administration, and community engagement. By recognising variation across institution types, disciplines, and career stages, it supports context-sensitive investigation of AI literacy, continuing capability development, professional meaning, and institutional support, thereby extending AI-related workforce discussions beyond tool adoption and individual coping.

Acknowledgements

The authors gratefully acknowledge Universiti Teknikal Malaysia Melaka (UTeM) for the institutional support and research facilities provided throughout the preparation of this manuscript.

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