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Professional Resilience in Business Administration Higher Education: A Human–AI Framework for Responsible Management Learning

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ABSTRACT

Artificial intelligence is reshaping managerial work by automating selected tasks, augmenting interpretation, and altering how organizations distribute authority and expertise. Business administration programs often respond by adding isolated technology content, yet tool acquisition alone does not prepare students to exercise judgment when outputs are uncertain, stakeholder interests conflict, or established routines lose relevance. This conceptual paper investigates professional resilience as an integrating basis for management education in AI contexts. Professional resilience is defined as the multi-level capacity of students, faculty, and degree programs to anticipate change, adapt managerial and educational practices, and transform routines while preserving responsible management purposes. Through a structured synthesis of management education, AI and organization, resilience, and professional learning literature, the paper develops a framework comprising five capabilities: anticipatory sensemaking, augmentation literacy, critical managerial judgment, adaptive organizing, and responsible stewardship. These capabilities are embedded in a purpose-anchored curriculum, human–AI collaborative inquiry, situated and reflective learning, inclusive professional identity formation, and adaptive program governance. Authentic assessment combines decision records, output critiques, stakeholder explanations, oral defenses, and developmental portfolios to make reasoning and revision visible. Implementation proceeds through mission diagnosis, curriculum mapping, controlled pedagogical pilots, and assurance of learning, supported by faculty collaboration and proportionate technology governance. The framework connects individual adaptability with the program's own capacity to learn, rather than treating resilience as a personality trait or resistance to curriculum change. It contributes design principles for developing managers who can work with AI without delegating accountability to it. The paper is conceptual and claims no empirical effectiveness; future research should examine the framework through longitudinal, comparative, and practice-based studies.

KEYWORDS

Business administration education; Professional resilience; Artificial intelligence; Human–AI collaboration; Management learning; Responsible management.

1. INTRODUCTION

Business administration education has long faced questions about its relationship with managerial practice. Bennis and O'Toole criticized business schools for allowing a narrow scientific model to weaken their engagement with professional problems [1]. Mintzberg similarly argued that management cannot be reduced to classroom analysis detached from experience, craft, and responsible action [2]. Artificial intelligence gives these concerns a new form. Programs must not only teach established business disciplines; they must prepare students to reconsider how decisions, coordination, and leadership are enacted when algorithmic systems participate in organizational work.

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The purposes of management education are also implicated. Ghoshal warned that influential management theories could shape conduct by normalizing self-interested assumptions [3], while Khurana traced the changing professional aspirations of American business schools [4]. These contributions remind educators that curricula communicate implicit accounts of what a manager is and whose interests management should serve. In AI contexts, an apparently technical choice about automation or decision support can therefore become a question of professional identity, authority, and social responsibility.

Calls for reform have emphasized relevance, integration, and the development of managerial competencies. Datar, Garvin, and Cullen identify the need for business education to reconnect knowing, doing, and being [5]. Rubin and Dierdorff examine alignment between required curricula and managerial competencies, highlighting potential gaps between course offerings and the capabilities practice demands [6]. AI intensifies the relevance problem because specific applications can change rapidly, while the managerial challenges of judgment, coordination, and accountability remain consequential.

Organizations are adopting AI for varied purposes rather than following a single technological trajectory. Davenport and Ronanki describe different business uses and emphasize the importance of matching initiatives with organizational needs [7]. Raisch and Krakowski conceptualize an automation–augmentation paradox in which AI can replace and support human activity in interdependent ways [8]. Jarrahi likewise presents human–AI symbiosis as a basis for organizational decision-making [9]. Management students therefore need more than operational familiarity with systems; they need to decide when delegation, augmentation, challenge, or human discretion is appropriate.

Generative AI also changes teaching and assessment. When systems can produce fluent case solutions, strategic narratives, and managerial recommendations, a polished artifact may no longer demonstrate individual understanding. UNESCO's guidance emphasizes human-centered governance, teacher capability, privacy, and critical evaluation in educational uses of AI [10]. Business programs must address both the managerial use of AI and its presence in the learning process, ensuring that students remain responsible for evidence, assumptions, and conclusions.

This paper asks: how can business administration programs cultivate professional resilience while preserving disciplinary rigor, responsible management, and equitable participation? It addresses the question through conceptual synthesis rather than empirical testing. No dataset, statistical analysis, financial model, or computational model is used. The paper contributes a five-capability framework, an aligned pedagogy, and an implementation approach that connects student development with faculty and program learning. Its purpose is to clarify design principles for subsequent examination across institutional settings.

2. CONCEPTUAL FOUNDATIONS

2.1 From Employability to Professional Resilience

Employability is an important educational concern, but a static inventory of competencies can become obsolete as technologies and occupational boundaries change. A resilience perspective shifts attention from possessing today's techniques to continuing professional formation. Duchek conceptualizes organizational resilience through anticipation, coping, and adaptation, emphasizing capabilities developed before disruption as well as responses during it [11]. Sutcliffe and Vogus likewise associate resilience with processes that sustain competence and enable adjustment under pressure [12].

Applied to business administration education, resilience operates at three connected levels. Students need to interpret unfamiliar situations, learn new tools, revise decisions, and sustain a responsible professional identity. Faculty need to experiment with pedagogy, update disciplinary connections,

and evaluate unintended consequences. Programs need governance that can revise outcomes, reallocate resources, and build external relationships. Strategic human resource research connects resilience with systems that develop collective adaptive capacity rather than relying on isolated individual effort [13].

Academic resilience research offers a complementary but limited perspective. Martin and Marsh examine students' capacity to deal with academic challenge and setback [14], while Yeager and Dweck show why beliefs about the developability of personal characteristics matter for adaptive responses [15]. These ideas support learning under uncertainty, but persistence alone is not professional resilience. Continuing to defend an inappropriate strategy with greater confidence is not adaptation; students must also diagnose, seek feedback, redirect effort, and recognize when a routine should be abandoned.

Professional resilience is therefore defined here as the multi-level capacity to anticipate change, adapt educational and managerial practices, and transform routines while preserving responsible management purposes. The definition combines continuity with renewal. Critical thinking, communication, ethical commitment, and understanding of organizations remain stable concerns, even as AI changes their enactment. Resilience means neither preserving every existing course nor adopting every innovation; it requires principled review of what should remain, change, or end.

2.2 AI, Managerial Work, and Organizational Judgment

AI affects management not only by performing tasks, but also by changing how knowledge and authority are organized. Faraj, Pachidi, and Sayegh argue that learning algorithms have implications for working and organizing, including the boundaries of expertise and coordination [16]. A recommendation produced outside a traditional functional hierarchy can challenge who is considered knowledgeable and who is expected to respond. Management education must therefore examine organizational design and accountability alongside technical functionality.

Hybrid intelligence provides a useful complement to simple substitution narratives. Dellermann and colleagues conceptualize complementary human and machine contributions to collective intelligence [17]. For managers, the key question is not whether humans or AI are universally superior, but how work should be allocated under particular goals, uncertainties, and obligations. Students should learn to compare task characteristics, identify required human oversight, and reconsider allocations when context or system behavior changes.

Human–AI interaction also depends on how system conduct is communicated. Amershi and colleagues provide guidelines for interaction design, including setting expectations, supporting efficient correction, and clarifying system limitations [18]. These ideas can be translated into management learning: students can examine whether users understand what a system does, whether they can challenge its output, and how errors are escalated. Managerial responsibility includes designing the conditions under which others can work with AI safely and intelligently.

The NIST AI Risk Management Framework organizes attention around governance, mapping, measuring, and managing AI risks [19]. Without treating such guidance as a universal managerial answer, educators can use it to show that risk and responsibility must be addressed throughout system use. AI competence thus includes anticipation of harm, documentation of decisions, stakeholder communication, and continuing review. These requirements reinforce the need for managerial judgment rather than reducing management to technical supervision.

2.3 Professional Learning and Responsible Management Formation

Constructive alignment requires intended outcomes, learning activities, and assessment to reinforce one another [20]. If programs claim to develop adaptive managers but examinations reward only reproduction of frameworks, students learn that stability of recall matters more than quality of

revision. Outcomes for professional resilience should be expressed as observable actions: framing an ambiguous problem, evaluating an AI-supported recommendation, coordinating alternative perspectives, and explaining a responsible course of action.

Shulman's concept of signature pedagogies highlights the practices through which professions prepare newcomers to think, perform, and act with integrity [21]. Management education commonly uses cases, simulations, presentations, and team projects. In AI contexts, these pedagogies can be extended to include review of machine-assisted recommendations, negotiation over human oversight, and explanation of stakeholder consequences. The aim is not to replace management pedagogy, but to enlarge the situations in which accountable judgment is practiced.

Schön's reflective practitioner explains why formal knowledge alone is insufficient when situations are uncertain or value-laden [22]. Reflection-in-action questions an operative framing, while reflection-on-action evaluates experience afterward. Lave and Wenger's situated learning perspective adds that professional capability develops through participation in communities of practice [23]. Students consequently need meaningful activity, interaction with experienced others, and guided reflection on the relationship between managerial action, organizational context, and identity.

These foundations rule out two simplistic responses. One treats AI as another content block added to an unchanged curriculum; the other assumes that immersive technology use will automatically produce managerial competence. Professional resilience instead requires aligned outcomes, stable conceptual resources, opportunities for responsible experimentation, and feedback that helps students understand why a decision should be revised. Responsibility is embedded in ordinary managerial tasks rather than confined to a separate ethics lecture.

3. A MULTI-LEVEL PROFESSIONAL RESILIENCE FRAMEWORK

The proposed framework comprises five capabilities: anticipatory sensemaking, augmentation literacy, critical managerial judgment, adaptive organizing, and responsible stewardship. These capabilities connect three levels of development. Students enact them in managerial learning tasks, faculty enact them in pedagogical review, and programs enact them in curriculum governance. Table 1 summarizes the capabilities and their educational evidence. The categories are mutually reinforcing: technical allocation without stewardship can be irresponsible, while ethical intention without adaptive organization may remain symbolic.

3.1 Five Capabilities for AI-Context Management Education

Anticipatory sensemaking involves scanning changes in technology, markets, institutions, and stakeholder expectations without assuming that every trend demands immediate adoption. Students can compare alternative interpretations of an AI-related development and identify implications for organizational purpose. Faculty can use the same capability when reviewing whether course outcomes remain relevant. Programs can apply it through structured dialogue with employers, graduates, technology specialists, and public-interest groups.

Augmentation literacy is the ability to allocate work among people and AI systems in a transparent and revisable manner. It includes understanding task requirements, recognizing limitations, specifying human review, and documenting accountability. This capability differs from software proficiency because it concerns the organization of work. A student may demonstrate augmentation literacy by explaining why a recommendation should remain human-led even when an automated alternative is available.

Critical managerial judgment integrates evidence, conceptual knowledge, organizational context, and stakeholder interests. Students should be able to challenge a fluent AI output, distinguish factual support from plausible assertion, and identify assumptions embedded in an apparent recommendation.

Judgment also involves knowing when evidence is insufficient and when consultation or escalation is required. It prevents augmentation literacy from becoming a technical checklist detached from organizational consequences.

Adaptive organizing concerns the revision of roles, routines, and relationships as conditions change. Management students can redesign a workflow, reconsider team responsibilities, or propose a new feedback mechanism after an AI-supported process produces unexpected problems. Responsible stewardship sets the normative boundary for all five capabilities. It requires attention to fairness, privacy, human dignity, sustainability, and public value, ensuring that adaptability serves legitimate organizational and societal purposes.

Table 1. Professional Resilience Capabilities and Learning Evidence

Resilience capability	Student-level development	Faculty and program expression	Illustrative learning evidence
Anticipatory sensemaking	Interpret technological and institutional change in relation to organizational purpose	Review outcomes through structured stakeholder and environmental scanning	Scenario memo distinguishing signals, assumptions, and possible implications
Augmentation literacy	Allocate tasks and review responsibilities between people and AI systems	Design transparent guidance for educational AI use and support	Work-allocation rationale with oversight, correction, and accountability arrangements
Critical managerial judgment	Integrate evidence, context, concepts, and stakeholder interests	Calibrate expectations through shared review of student reasoning	Output critique and defended recommendation acknowledging uncertainty
Adaptive organizing	Revise roles, routines, and coordination when conditions change	Redesign courses and governance through controlled pedagogical learning	Team redesign plus individual explanation of feedback-based revisions
Responsible stewardship	Evaluate fairness, dignity, privacy, sustainability, and public value	Align innovation with mission, inclusion, and responsible management	Stakeholder impact statement identifying limits and escalation conditions

3.2 Purpose-Anchored Curriculum Architecture

A resilient curriculum distinguishes an enduring conceptual core from a renewable AI-related layer. The core includes strategy, organizational behavior, operations, marketing, finance, entrepreneurship, business ethics, and research literacy. The renewable layer includes AI-assisted decision support, algorithmic coordination, digital platforms, and emerging governance practices. Treating these layers as complementary prevents both defensive preservation of existing courses and technology-driven fragmentation of management education.

Integration should occur across functional courses rather than remain within a single elective. Strategy can examine how AI changes sources of advantage and organizational purpose; organizational behavior can examine trust, authority, and work identity; operations can examine human oversight in automated workflows; marketing can examine personalization and consumer vulnerability; and entrepreneurship can examine opportunity recognition under resource and legitimacy constraints. Shared program outcomes help students connect these experiences.

Curriculum review should begin with managerial questions rather than product features. “How should a manager establish accountability for an AI-supported decision?” is more durable than instruction in a particular interface. Tool-specific practice may support this question, but should not dominate program outcomes. Review panels can periodically examine whether content remains meaningful, where duplication exists, and which activities should be withdrawn to create space for integrative learning.

The curriculum should also distinguish foundational, integrative, and transformative learning. Early study establishes concepts and critical expectations; intermediate study connects functions and stakeholder perspectives; advanced study addresses ambiguous organizational redesign and public consequences. This progression makes resilience developmental rather than a generic graduate attribute. Students gradually assume greater responsibility for framing problems and justifying the routines they choose to preserve or change.

3.3 Human–AI Collaborative Inquiry and Assessment

Human–AI collaboration should be taught as an accountable division of intellectual work. AI can serve as an object of critical study, a source of alternative framings, and a simulated counterpart in managerial dialogue. Students can compare outputs, identify unsupported claims, request missing justification, and decide when human review is necessary. Instructors should clarify permitted assistance for each task and require meaningful disclosure without treating every use as identical.

Management cases offer distinctive opportunities for critical collaboration. A proposed market entry can be challenged for assumptions about customers and institutions; a restructuring recommendation can be examined for effects on employees and coordination; and an operations proposal can be evaluated for resilience when automated processes fail. Fluent language and coherent structure are not substitutes for valid premises or responsible action. Students must connect recommendations with organizational realities.

Research on large language models in education identifies both opportunities and challenges, including the need for critical use and appropriate pedagogical integration [24]. Business programs should therefore avoid unrestricted dependence and blanket prohibition. Structured comparison, supervised inquiry, and explicit critique can make AI a stimulus for reasoning rather than a substitute for it. Confidential organizational information should never be uploaded to unapproved systems.

Assessment needs to capture process as well as product. Students can submit decision records, source evaluations, relevant prompts or queries, output critiques, and explanations of why particular suggestions were accepted or rejected. Oral defenses and supervised demonstrations can selectively confirm individual understanding. Documentation should remain proportionate; excessive process requirements can encourage ritual compliance and distract from the quality of managerial reasoning.

Academic integrity should be approached through assessment validity and professional responsibility. Authentic contexts, staged development, individual explanation, and clear rules provide a stronger basis than surveillance alone. Evaluation criteria should reward justified revision, recognition of limitations, and stakeholder-aware communication. These practices align integrity in the classroom with accountability in managerial work, where reliance on a system does not remove responsibility for consequential decisions.

3.4 Situated, Experiential, and Reflective Learning

Professional resilience develops through guided encounters with meaningful uncertainty. Cases and simulations can introduce changing customer expectations, incomplete information, conflicting stakeholder demands, or unexpected system behavior. The purpose is not difficulty for its own sake, but opportunities for students to diagnose a situation, select a response, and explain their reasoning. Controlled variation helps them discover when an initially plausible managerial routine no longer fits.

Kolb's experiential learning cycle connects concrete experience, reflective observation, conceptualization, and experimentation [25]. This cycle prevents simulations from becoming self-justifying activity. After an exercise, students should connect events with management concepts, reconsider their framing, and test a revised approach. Structured debriefing is therefore as important as scenario design, and faculty should reserve sufficient time for conceptual consolidation.

Workplace-connected projects and internships provide situated participation, but exposure alone is insufficient. Students need supervision, ethical boundaries, and opportunities to discuss differences between formal AI policies and observed practices. Practitioners can explain constraints and challenge recommendations, while faculty retain responsibility for learning outcomes. Where placements are unavailable, anonymized practice documents and practitioner-led case interruptions can provide alternative forms of participation.

Reflection should examine both managerial action and the student's own reasoning. Decision journals, team debriefs, and developmental portfolios can record initial assumptions, feedback, revisions, and unresolved questions. Repeated reflection across courses helps students recognize habits such as overvaluing technical confidence or avoiding stakeholder conflict. It also supports a professional identity in which learning and consultation are normal managerial responsibilities.

3.5 Responsible, Inclusive, and Identity-Oriented Formation

The Principles for Responsible Management Education call on business schools to develop capabilities for sustainable value and responsible leadership through purpose, values, methods, partnerships, and dialogue [26]. In AI contexts, these commitments require students to examine whose interests are represented in system use, who bears the costs of error, and how organizational choices affect long-term social and environmental value. Responsibility must inform design and evaluation, not follow innovation as an afterthought.

Ethical reflection should be embedded in ordinary management tasks. A marketing case can investigate manipulation and consumer vulnerability; a human resource case can examine fairness and employee voice; and a strategy case can consider whether efficiency gains justify shifting risks to weaker stakeholders. Students should learn that professional judgment includes deciding when a technically feasible action should not be taken and when organizational pressure must be challenged.

Inclusion is equally important. Unequal access to devices, connectivity, accessible interfaces, language support, and prior AI experience can turn technology-enhanced learning into a mechanism of exclusion. Programs should provide equivalent learning routes, accessible materials, and supported opportunities to develop digital confidence. The language of resilience must not be used to blame students for structural barriers or to normalize excessive workloads.

Professional identity provides continuity amid changing tasks. Students should see themselves not as future operators of a particular system, but as accountable participants in organizing, decision-making, and value creation. A resilient managerial identity is confident enough to revise and humble enough to seek assistance. It connects adaptability with stewardship, enabling graduates to treat continuing learning as part of responsible practice rather than a response to technological fashion.

4. IMPLEMENTATION AND QUALITY ASSURANCE

4.1 Staged Implementation and Contextual Differentiation

Implementation should begin with mission and context. Institutions differ in student populations, disciplinary strengths, employer relationships, technological infrastructure, and public responsibilities. A program should identify which aspects of management education it seeks to preserve, which AI-related changes it must anticipate, and which constraints are most consequential.

This diagnosis supports selective reform rather than imitation of technology-intensive programs with different missions.

The second stage is curriculum mapping. Existing outcomes, activities, and assessments can be reviewed against the five capabilities. Mapping should reveal where AI content is taught but not assessed, where ethics is separated from managerial tasks, and where students are expected to demonstrate independence without structured support. Programs can then define a small number of shared outcomes that express resilient managerial performance in observable terms.

Controlled pilots constitute the third stage. A course team might redesign a strategy case to include critique of AI-assisted recommendations or introduce a common decision journal across organizational behavior and operations. Evaluation should focus on reasoning, accessibility, workload, and feedback usefulness rather than novelty. Piloting is organizational learning, not statistical proof; its purpose is to improve design before wider adoption.

The final stage is institutionalization. Approved changes should enter course documentation, assessment guidance, faculty development, and review cycles. Cross-course coordination prevents contradictory rules about AI use, while removal of outdated activities creates space for new learning. Resource-constrained programs can prioritize shared cases and open materials; others may develop interdisciplinary laboratories. Proportionate pathways can embody the same principles without identical infrastructure.

4.2 Authentic Assessment and Evidence for Improvement

Assessment should examine whether students can integrate management knowledge, evaluate AI-supported outputs, organize responsible action, and learn from changing conditions. Evidence can include case recommendations, decision records, oral explanations, team redesigns, and developmental portfolios. These sources are not interchangeable. A polished team project may conceal individual dependence, while an oral explanation alone may not demonstrate sustained development across contexts.

Table 2. Assessment Architecture for Professional Resilience

Assessment component	Primary resilience focus	Evidence of learning	Safeguard against superficial performance
AI-supported case critique	Augmentation literacy and critical judgment	Source evaluation, assumption challenge, and justified recommendation	Require explanation of rejected outputs and missing evidence
Decision and revision record	Adaptive organizing	Initial framing, feedback, changed decision, and remaining limitations	Assess reasoning quality rather than retrospective confidence
Managerial role simulation	Sensemaking, judgment, and stewardship	Response to new information and competing stakeholder demands	Rotate roles and include individual follow-up questions
Individual oral defense	Ownership and integrated judgment	Explanation of trade-offs, oversight, and escalation conditions	Use common core questions with task-specific probes
Developmental portfolio	Transfer and responsible identity	Selected artifacts and synthesis across courses or practice settings	Require specific evidence of development, not generic claims

Table 2 presents an aligned assessment architecture. Each component makes a different aspect of resilience visible and includes a safeguard against superficial performance. Programs should select a manageable combination rather than implement every component in every course. The purpose is trustworthy evidence of reasoning, not maximal documentation. Shared rubric dimensions can support comparison across courses while allowing disciplinary differences in tasks.

Feedback is central to adaptive learning. Carless and Boud argue that students need feedback literacy to understand comments and use them in subsequent work [27]. AI systems may provide immediate suggestions, but students still need to judge relevance, correctness, and ethical implications. Peer review, teacher commentary, and practitioner challenge can help them compare forms of feedback and develop standards for self-evaluation.

Program-level review should examine the educational system as well as student artifacts. Faculty can consider whether course sequencing supports transfer, whether assessment workloads are realistic, and whether students with different prior experiences can participate. Review committees should record which premises were challenged, what changes were authorized, and when they will be revisited. Resilient programs can explain not only what changed, but why the change was justified.

4.3 Faculty Capability, Governance, and Quality Assurance

Students cannot develop professional resilience if faculty structures are rigid. Redecker's DigCompEdu framework connects educator digital competence with professional engagement, resources, teaching, assessment, learner empowerment, and learners' digital competence [28]. This broad view locates technology within educational relationships. Faculty development should therefore combine technical learning with collaborative course redesign, peer observation, and review of student work rather than isolated software training.

Interdisciplinary teams can bring together management faculty, information specialists, learning designers, librarians, legal scholars, and practitioners. Management instructors need not become full-time AI engineers, but they must understand enough about system use to select appropriate activities and evaluate managerial implications. Workload allocation, recognition in promotion processes, technical support, and time for review determine whether such collaboration is sustainable.

Governance should address vendor dependence, privacy, accessibility, and unequal access. Institutions can prioritize interoperable materials, protect data ownership, maintain alternatives when platforms become unavailable, and limit mandatory adoption to educationally justified tools. Periods of consolidation are necessary to prevent continuous reform from exhausting staff and students. Resilience includes the capacity to pause, simplify, and recover attention.

AACSB's accreditation principles emphasize mission alignment, learner success, engagement, innovation, impact, and continuous improvement [29]. These ideas support assurance processes in which evidence informs dialogue rather than serving only compliance documentation. Quality review should examine unintended consequences as well as successful innovations, including whether AI use narrows participation, weakens explanation, or shifts unreasonable burdens onto faculty and students.

5. DISCUSSION

5.1 Theoretical Implications

This framework extends management education research by shifting attention from AI content to the relationships through which students, faculty, and programs learn. Technological competence remains necessary, but its educational value depends on curriculum alignment, assessment, organizational support, and responsible governance. Professional resilience offers a connecting

construct for research that has often treated skills development, pedagogical innovation, and institutional reform separately.

The five capabilities also distinguish resilience from both stability and unrestricted flexibility. Stability without review can produce obsolescence, while flexibility without purpose can fragment managerial identity. Responsible stewardship connects continuity with transformation: programs preserve management's contribution to organized and socially legitimate action by revising how students learn to enact that contribution. This interpretation complements organizational resilience research by placing professional formation at the center of adaptation.

The multi-level approach avoids locating adaptability solely within students. Individual confidence and persistence matter, but they are shaped by feedback systems, access to resources, course coherence, and faculty working conditions. Professional resilience is consequently a shared achievement and shared responsibility. This perspective opens research questions about how program governance, pedagogical practice, and student development influence one another over time.

5.2 Practical Implications and Limitations

For program leaders, the immediate priority is not another isolated AI course, but a review process connecting mission, outcomes, assessment, and faculty capacity. A small number of high-impact managerial tasks can serve as starting points for human–AI collaborative learning. Programs should invest in shared teaching resources and clear use guidance before expecting uniform adoption across all courses.

For faculty, the framework supports selective experimentation. Instructors can redesign one assessment to make reasoning and revision visible, introduce one structured comparison of AI outputs, or add one reflective debrief after an authentic task. Their central contribution is to connect digital activity with managerial judgment, not to master every technology. Practitioners can support this work by providing meaningful dilemmas rather than product demonstrations.

The study is limited by its conceptual design. It does not test the framework, compare institutional outcomes, or establish causal relationships between educational practices and managerial performance. The framework may also travel unevenly across national education systems, degree levels, and resource contexts. These limitations require contextual interpretation rather than presentation as a universal implementation package.

6. CONCLUSION

This paper has proposed a multi-level framework for professional resilience in business administration higher education. It integrates anticipatory sensemaking, augmentation literacy, critical managerial judgment, adaptive organizing, and responsible stewardship with curriculum, pedagogy, assessment, and governance. Its central argument is that AI transformation requires management programs to become learning systems capable of revising educational routines while preserving responsible purposes.

For universities, professional resilience is neither a fixed attribute nor a destination reached through curriculum modernization. It is an ongoing capacity expressed through aligned outcomes, accountable AI use, supportive faculty structures, inclusive learning opportunities, and evidence-informed governance. Students' adaptability and programs' adaptability are interdependent; neither can substitute for the other.

Future research should examine how the framework operates across institutional types and national systems. Longitudinal studies could trace curriculum revision and graduate learning, while comparative case studies could investigate governance, resource constraints, and professional partnerships. Practice-based research should also examine how students develop judgment when AI-

supported outputs are plausible but unreliable. Such work would refine the framework and distinguish broadly applicable principles from context-dependent practices.

CONFLICTS OF INTEREST

The author declares no conflict of interest.

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