Generative AI and the Transformation of Academic Work: A Conceptual Framework for Faculty Adaptation, Professional Identity Reconstruction, and Organizational Change in Indian Higher Education

[1]Siddhant Bhadouriya, [2]Sakshi Koli
[12]Research Scholar
[1]IMS, [2]SOSS
[12]Devi Ahilaya University, Indore

***Abstract*—Generative AI (GenAI) is rapidly reshaping higher education by altering teaching, assessment, research, and service roles. This paper develops a theory-driven conceptual framework for understanding how Indian university faculty adapt to GenAI, emphasizing that adaptation entails far more than mere tool adoption. Synthesizing literature on technology adoption (TAM), institutional theory, dynamic capabilities, professional identity, and sociological analyses of work, we argue that faculty adaptation involves complex processes of identity reconstruction, digital skill development, and organizational change. GenAI-driven academic work transformation (e.g. AI-assisted teaching, automated assessment, content generation) offers opportunities for personalization and productivity, but also raises ethical, privacy, and labor concerns. Faculty responses reflect ambivalence: they acknowledge AI's usefulness yet fear deskilling and displacement. Adaptation thus requires not only perceiving AI tools as useful and easy-to-use (per TAM) but also developing AI literacy and competency, overcoming resistance, and re-envisioning one's professional role. We integrate Dynamic Capability Theory (sensing, seizing, reconfiguring) to show how universities sense AI trends, seize resources (training, infrastructure), and reconfigure teaching/research processes. Professional Identity Theory explains how faculty must reconstruct identities (e.g. expert → facilitator/designer) under shifting professional logics. Institutional theory highlights external pressures (policy, accreditation, peer norms) that drive organizational adaptation and legitimize new practices. The resulting framework links individual factors (AI literacy, digital competency) and organizational factors (support, readiness) to faculty adaptation, identity reconstruction, and organizational change, with dynamic capabilities enabling the process (Figure 1). From these insights we propose 12 conceptual propositions. Contributions include extending technology adoption and organizational change theories into the domain of higher education, illuminating the identity work entailed by AI, and guiding university leaders on enabling resilient academic innovation. Practical implications emphasize faculty development in AI literacy, ethical policies, and leadership support. We conclude with a research agenda calling for longitudinal and cross-cultural studies to test and refine the framework.**

***Index Terms*—Generative AI, higher education, faculty adaptation, professional identity, digital competency, institutional readiness, dynamic capabilities, technology adoption**

I. Introduction

1.1 Background

Generative artificial intelligence (GenAI) – AI systems that create novel text, images, code or other content based on learned patterns – is emerging as a disruptive force in higher education. By automating content creation and analysis, GenAI tools (e.g. ChatGPT, Bard, Copilot) promise to personalize learning, accelerate research writing, and streamline administrative tasks. In the past, digital innovations (online learning, virtual labs, MOOCs) transformed facets of academic work, but GenAI represents a *qualitative leap*: it can digest vast educational data and tailor materials to individual learners. The COVID-19 pandemic further accelerated technology use in universities, normalizing remote teaching and opening the door to more data-driven pedagogy. Now, faculty increasingly use AI platforms for tutoring, automated assessment, and adaptive resources.

1.2 Rise of Generative AI in Higher Education

GenAI's rise has been swift since late 2022. Its capabilities include drafting lecture notes, generating quiz questions, summarizing research, and even coding. For example, recent reviews note that GenAI systems are commonly used to profile students, predict performance, provide automated feedback, and power intelligent tutoring systems. Educators report tools such as ChatGPT and GitHub Copilot as supplementing instruction or freeing time for mentoring. At the same time, awareness of the need for faculty training and digital skills has grown. Many educators remain digitally unprepared for these tools: they struggle with instabilities (e.g. learning new interfaces) and lack technical proficiency. Indeed, integrating AI effectively demands *not only* technical skill but ethical understanding and pedagogical insight.

1.3 Problem Statement

Despite GenAI's potential, faculty often face ambiguity. On one hand, they recognize AI's *usefulness* in handling routine tasks and fostering innovation; on the other, they feel anxiety about job security, data privacy, and diminished authority. The literature shows persistent ambivalence: faculty appreciate AI as a productivity aid yet express ethical concerns and fear professional displacement. Moreover, many institutions lack clear policies or support structures, making adoption uneven. Crucially, the challenges faculty experience are not merely technical. They involve redefining what it means to be a teacher or researcher when intelligent systems can generate content or evaluate students. This implicates *professional identity* – faculty must negotiate new roles (e.g. from "sage on the stage" to "guide on the side") and legitimacy in the face of algorithmic processes.

1.4 Research Gap

Current research tends to focus on AI tool features or student outcomes. There is a gap in integrative theories on how GenAI transforms academic work and how faculty respond. Especially lacking are conceptual models linking AI adoption to identity, capability development, and organizational change. Technology Adoption Models (TAM) explain how perceived usefulness and ease-of-use drive acceptance, but they overlook identity and institutional context. Similarly, sociological studies on academic labor hint at workload effects, but do not fully explain faculty attitudes and role shifts. We need a framework capturing the *multidimensional* nature of adaptation – combining individual attitudes, social identity, and organizational strategy underpinned by dynamic capability.

1.5 Objectives

This paper aims to build a comprehensive conceptual framework of faculty adaptation to GenAI in Indian higher education. We 1) analyze how GenAI is transforming academic work (teaching, assessment, research), 2) examine adaptation beyond mere technology use, including professional identity reconstruction and competency building, and 3) develop an integrated model linking AI literacy, organizational readiness,

and dynamic capabilities to adaptation outcomes and academic innovation. We also propose testable propositions grounded in theory and literature.

1.6 Contributions

Our conceptual analysis contributes to multiple literatures. First, in **Management and Organizational Studies**, we extend Dynamic Capability Theory (sensing, seizing, reconfiguring) to the academic context of higher education. We elucidate how universities must develop sensing and learning mechanisms to keep up with AI's rapid evolution. Second, in **Sociology of Work**, we highlight the identity work faculty undertake as automation encroaches on cognitive tasks, building on theories of professional role identity. Third, in **Higher Education Research**, we propose a novel framework that links AI literacy and policy readiness to faculty behavior and institutional change – an area little theorized to date. Fourth, this enriches **technology adoption** literature by challenging the view that adoption is a singular event, showing instead a recursive process shaped by identity and legitimacy. Finally, in **Organizational Change** research, we illustrate how generative AI catalyzes structural and cultural shifts, demonstrating the interplay of institutional pressures and internal capabilities. By situating our framework in the Indian HE context (where institutional heterogeneity and regulatory factors are salient), we also offer region-specific insights.

II. Generative AI and the Transformation of Academic Work

Generative AI is reshaping the very nature of academic work. In **teaching**, AI-assisted instruction tools enable new pedagogy. For example, faculty can use AI to generate adaptive learning modules tailored to individual student profiles. Intelligent tutoring systems can serve as supplementary tutors, addressing rote practice while instructors focus on higher-level guidance. However, this also shifts the teacher's role from content-deliverer to curator and mentor. In **assessment**, AI can automate grading of essays and exams using natural language processing. Automated feedback and plagiarism detection streamline evaluation but raise concerns about fairness and reliability. Systematic reviews find that AI-based assessment yields personalized insights and flags at-risk students through predictive analytics, yet also provoke debates about academic integrity (e.g. new forms of cheating) and privacy.

In **research and knowledge production**, GenAI tools like ChatGPT and code assistants can draft literature reviews, suggest hypotheses, or generate code snippets. This can dramatically increase faculty productivity, but blurs lines of authorship and expertise. The "knowledge worker" functions of faculty – analyzing, writing, innovating – are partially automated, leading some to fear deskilling. Sociological scholars note that digital automation can intensify work or reallocate it: tasks replaced by AI may require faculty to take on new managerial or design duties.

Human–AI collaboration: Many authors conceptualize a "centaur" model in education, where humans and AI work in partnership. Faculty may become overseers of AI output, ensuring pedagogical alignment and ethical use. This hybridization offers opportunities (e.g. faculty can reach more students with AI assist) but also risks commodifying teaching labor. For instance, AAUP warns that AI could further intensify faculty workload and erode professional autonomy.

Academic labor implications: GenAI introduces ambivalence. Faculty acknowledge AI's *usefulness* as a productivity tool, yet simultaneously express anxiety. The narrative review by Buele and Llerena-Aguirre finds that educators feel both "usefulness of such technologies" and "ethical concerns, technical insecurity, and fear of professional displacement". Major barriers include lack of training, limited institutional support, and absence of AI governance policies. At the institutional level, universities face pressures (from accreditation bodies, global competition, and student expectations) to innovate with AI, while balancing legitimacy and educational quality. In short, GenAI is not a plug-in efficiency; it is transforming pedagogical models, assessment practices, and academic labor relations in ways that pose profound opportunities (personalized learning, research acceleration) and risks (ethical dilemmas, labor anxieties).

Table 1. Definitions of Key Constructs

Construct	Definition	Key Sources
Generative AI	AI systems capable of producing text, images, code, and other content based on learned patterns	Dwivedi et al. (2023); Kasneci et al. (2023)
Faculty Adaptation	Process through which faculty modify practices, competencies, and roles in response to technological change	Rogers (2003); Teece (2007)
Professional Identity Reconstruction	Reconfiguration of self-concept, professional role, and legitimacy under changing work conditions	Ibarra (1999); Beijaard et al. (2004)
AI Literacy	Knowledge and competencies required to effectively understand, evaluate, and use AI systems	Long & Magerko (2020)
Dynamic Capability	Organizational ability to sense, seize, and reconfigure resources in changing environments	Teece (2007)

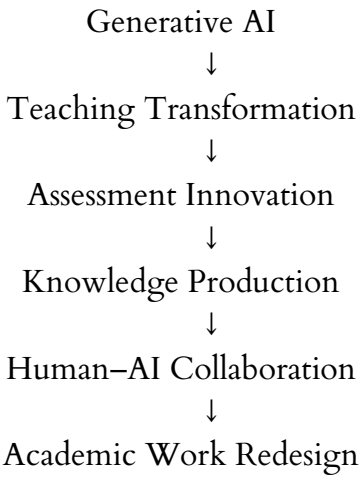

Figure 1. Transformation of Academic Work through Generative AI

III. Faculty Adaptation to Generative AI

Adaptation processes: Faculty adaptation is multifaceted. Under the Technology Acceptance Model, *perceived usefulness* and *ease of use* predict intention to adopt new technology. Thus, faculty who see GenAI tools as relevant to their teaching or research are more likely to experiment with them. However, adaptation goes beyond individual attitudes. It involves *learning new skills* (reskilling/upskilling), trial-and-error integration of tools into workflows, and often collaborative learning with peers. Professional development programs (workshops, AI literacy academies) emerge as key enablers; one study of an "AI Academy" showed that structured exploration combined with ethical reflection helped instructors build AI literacies and responsible practices.

Technology acceptance and resistance: As TAM suggests, if faculty find AI tools easy and useful, adoption increases. But resistance to change is common. Faculty may distrust AI due to unfamiliarity or fear of redundancy. For example, Buele et al. report that less digitally fluent educators exhibit higher anxiety and find it harder to adapt to AI systems. Such resistance is also socially and institutionally mediated – if departmental culture is skeptical or if there is no mandate, faculty may delay engagement. Overcoming resistance thus entails not just training but addressing concerns about workload and fairness.

Professional learning and capability development: Ongoing professional learning is critical. Faculty must develop *digital competencies* (basic ICT skills) as well as specific *AI literacy* (understanding AI capabilities,

limitations, and ethics). AI literacy is defined as "the ability to understand, critically evaluate, and effectively interact with AI systems". This encompasses knowing when to trust AI output, recognizing bias, and grasping data privacy implications. Institutions are starting to offer AI-fluency programs; one case study designed a participatory AI curriculum for instructors, emphasizing that faculty need to become "designers of responsible AI practice" rather than just tool users. Such capability development transforms adaptation into an ongoing learning journey.

Dynamic Capability for adaptation: We apply Dynamic Capability Theory (Teece 1997) to faculty adaptation. "Sensing" involves scanning for AI innovations and pedagogical possibilities. Universities and faculty need to detect shifts (e.g. new ChatGPT updates) and student behaviors. "Seizing" means mobilizing resources (institutional training, obtaining licenses for AI platforms) to capitalize on these opportunities. "Reconfiguring" entails redesigning courses and processes – for instance, shifting from essay exams to critical reflection assignments when automated essay writing is easy. In practice, universities that actively build these capabilities (through research offices, IT units, and curricular innovation centers) enable faculty to adapt more fully.

In sum, faculty adaptation encompasses psychological acceptance, technical learning, and behavioral change, supported by organizational and institutional contexts. It is a complex process of integrating new practices into one's professional repertoire.

Table 2. Summary of Major Theoretical Foundations

Theory	Core Concepts	Relevance
TAM	Perceived usefulness, ease of use	Explains initial adoption
Dynamic Capability Theory	Sensing, Seizing, Reconfiguring	Explains adaptation and capability building
Institutional Theory	Legitimacy, institutional pressures	Explains organizational responses
Professional Identity Theory	Identity reconstruction, role transition	Explains changing academic roles
Sociology of Technology	Digital labor, knowledge work	Explains transformation of academic work

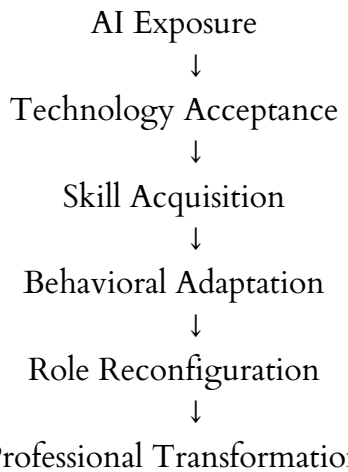

Figure 2. Faculty Adaptation Process Model

IV. Professional Identity Reconstruction

Generative AI challenges long-standing academic identities. Traditionally, faculty identity centers on expertise in a discipline and authority as knowledge creators. AI's ability to generate content can erode the uniqueness of these roles. We draw on Professional Identity Theory to analyze this shift. Professional role

identity is "the way that professionals see themselves in terms of who they are and what they do". When AI automates tasks (e.g. grading, preliminary research drafts), faculty may feel a threat to their expertise and legitimacy.

Academic identity: Academy insiders distinguish between *academic identity* (commitment to scholarly values, autonomy) and more specific teaching/research identities. Under GenAI, an educator might reconceive themselves less as a sole content-deliverer and more as a *learning designer* or *critical thinker guide*. For example, one review observes a "shift in the teaching role" toward "mediation, supervision, and critical analysis of [AI]-generated output". This signals identity work: professors must integrate AI into their self-concept (forming what Bennett & Royce call an "AI Identity" – a self-concept of comfort, competence, and agency in leveraging AI).

Identity reconstruction: According to Goto (2021), new technologies force professionals to reconfigure roles and, by extension, identities. In our context, faculty may undergo a similar reconstruction. Some may embrace a hybrid identity (part scholar, part technologist), while others resist, clinging to traditional markers of legitimacy (e.g. sole authorship). Institutional narratives and professional communities influence this. Collective identities (through faculty unions or scholarly societies) can provide templates: for instance, a professional association might articulate an "AI-augmented educator" identity, helping members make sense of changes. Conversely, lack of a shared narrative can leave individuals fragmented, increasing anxiety.

Authority and legitimacy: AI also raises questions about authority. If a machine can write a competent essay or answer a problem, what remains unique about the professor? One consequence is an intensified need for *legitimization*: faculty may double down on critical thinking, creativity, and ethical reasoning as sources of academic legitimacy. Some educators argue that GenAI accentuates the irreplaceable human elements (pedagogical intuition, moral guidance). As one study notes, developing an AI identity involves reflective competencies and judgment (phronesis) that go beyond technical skill. Thus, professional legitimacy in the AI era may hinge on a faculty member's ability to frame AI as a tool within a scholarly mission – a process that is inherently identity-reconstructive.

In sum, Generative AI induces an identity struggle: faculty must negotiate new definitions of their roles and expertise. This process – reconstructing one's professional identity to incorporate AI – is central to genuine adaptation.

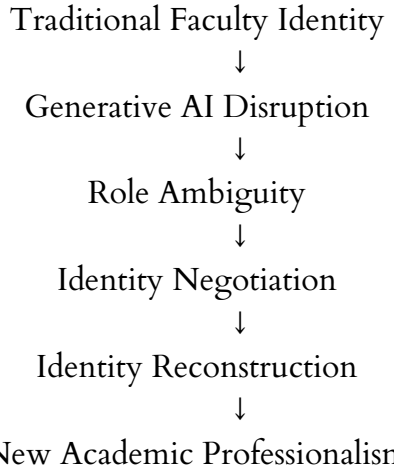

Figure 3. Professional Identity Reconstruction Framework

V. Digital Competency and AI Literacy

Effective adaptation hinges on **digital competency** and **AI literacy**. Digital competency refers to the baseline skills in using digital technologies (computer literacy, online communication, data handling).

Without these, faculty cannot even begin to engage with AI tools. Studies in higher ed report that faculty with higher digital fluency adapt more easily to new instructional technologies.

AI literacy is a more specialized construct. As Buele et al. define, AI literacy is the capacity "to understand, critically evaluate, and effectively interact with AI systems". This includes knowing how AI-generated content is produced (data and algorithmic underpinnings), and being able to judge its quality. It also involves ethical literacy: awareness of privacy issues, data biases, and societal impact of AI. For example, lack of epistemic confidence limits mentors' ability to guide students in responsible use.

Reskilling and upskilling: Faculty development must address these literacies. Workshops and continuous learning programs should be established as part of lifelong learning for educators. Early evidence suggests that targeted training increases faculty AI competencies and confidence. Without such support, even willing faculty struggle: Buele et al. note that the most frequent barriers to AI use are "lack of training, limited institutional support, and the absence of clear policies".

Role in adaptation: Faculty with greater digital and AI competence perceive lower ease-of-use obstacles (TAM's PEOU) and higher usefulness, thereby increasing adoption. Conversely, those lacking skills often harbor anxiety, which impedes adaptation. We therefore propose that AI literacy and digital competency are foundational prerequisites for meaningful adaptation. They also influence identity: a faculty member confident in AI is more likely to reshape their professional identity positively around new roles (e.g. as AI-informed instructor) rather than defensively reject technology.

In summary, digital competence and AI literacy mediate the adaptation process. They enable faculty to move from reluctance to exploration, laying the groundwork for deeper changes in practice and identity.

Table 3. Faculty Adaptation Dimensions

Dimension	Description
Technical Adaptation	Learning AI tools
Pedagogical Adaptation	Redesigning teaching practices
Cognitive Adaptation	Developing AI understanding
Professional Adaptation	Role transformation
Ethical Adaptation	Responsible AI use
Organizational Adaptation	Alignment with institutional policies

VI. Organizational Change in Higher Education

Generative AI's arrival necessitates organizational change at universities. Drawing on **Institutional Theory** and **Dynamic Capability Theory**, we outline how institutions adapt.

Institutional pressures and readiness: Universities operate in a field of regulatory and normative pressures. Accrediting agencies, funding bodies, and government agencies may impose or encourage AI integration (coercive pressures). Peer institutions and professional networks create mimetic pressures: universities may adopt AI platforms because other universities do. Normative pressures arise from professional standards for teaching and research, which increasingly include digital competencies. Institutional theory teaches that organizations seek legitimacy by conforming to such pressures (DiMaggio & Powell). In India, bodies like the University Grants Commission have begun issuing guidelines on online and AI teaching, creating formal mandates. Thus, institutional readiness – the extent to which universities have vision, policies, and infrastructure for AI – is crucial. Leaders must communicate a strategic vision of AI, establish ethics committees, and integrate AI goals into academic plans. One study notes that digital transformation is more successful when it is part of a clear institutional strategy.

Organizational learning and support: Leadership support and change management are key. Administrators and department heads must invest in campus-wide learning (e.g. centers for teaching innovation). Institutional theory suggests that change often comes through "translation" of new practices into the existing logic – for example, framing AI adoption as enhancing research outputs or global rankings. Universities can encourage pilots and share successes to build momentum. Institutional adaptation may involve decoupling (espousing AI initiatives without fully implementing them) if pressures are high but resources low. However, our framework assumes that proactive universities engage in true coupling: altering curricula, reward structures (e.g. recognizing AI-enhanced scholarship), and hiring practices.

AI governance and policies: Formal structures (committees, governance frameworks) for AI are emerging. Issues like data privacy, intellectual property of AI-generated content, and academic integrity require policy frameworks. Institutions with clear governance will legitimize faculty use of AI by setting guidelines and protecting stakeholders.

Dynamic capabilities: We apply the DC lens at the institutional level. **Sensing:** Universities must maintain awareness of AI developments (e.g. emerging tools, research on pedagogy). This could involve dedicated roles (e.g. CIOs or innovation labs) scanning the tech horizon. **Seizing:** Institutions then allocate resources – funding AI labs, negotiating vendor licenses, creating faculty fellowships in AI pedagogy. **Reconfiguring:** Crucially, universities must restructure. This includes revising curricula (integrating AI topics across disciplines), rethinking assessment policies (e.g. accepting AI-assisted assignments), and possibly reorganizing administrative processes (AI in scheduling, admissions). This reconfiguration aligns with strategic adaptation: it embeds AI into the organizational "routine" in a sustainable way.

In sum, organizational change in HE under GenAI is driven by a combination of institutional legitimacy-seeking and deliberate capability-building. Universities that develop these dynamic capabilities are better positioned to support faculty adaptation and drive innovation across the academic enterprise.

Table 4. Comparative Analysis of Major Theories

Dimension	TAM	Institutional Theory	Dynamic Capability Theory	Professional Identity Theory
Focus	Technology acceptance	Organizational legitimacy	Adaptation capability	Identity transformation
Level	Individual	Organizational	Organizational	Individual-social
Main Outcome	Adoption	Compliance	Strategic adaptation	Identity reconstruction
Contribution to AI Research	Initial acceptance	Institutional response	Long-term adaptation	Faculty transformation

VII. Integrated Conceptual Framework

Based on the above analysis, we propose an integrated framework (Figure 1). At the **individual level**, faculty adaptation is driven by *AI Literacy* and *Digital Competency* – the knowledge and skills to use generative AI effectively. These directly influence *Perceived Usefulness* and *Ease-of-Use* of AI tools (TAM constructs) and shape attitudes. At the **contextual level**, *Organizational Support* (leadership encouragement, training, resources) and *Institutional Readiness* (strategic vision, policies, legitimacy) create an enabling environment. Together, these four antecedents feed into **Faculty Adaptation** – the behavioral and cognitive change processes through which instructors incorporate AI into their work.

Faculty Adaptation then leads to two intermediate outcomes: *Professional Identity Reconstruction* and *Organizational Change*. In the framework, adaptation induces identity shifts – faculty re-

envision their roles (e.g. from lecturer to facilitator of AI-mediated learning) as they gain experience with GenAI. Simultaneously, as many faculty adapt, collective practice changes accumulate into organizational change – new teaching models, altered workflows, revised policies. These changes enable *Academic Innovation* – the generation of new pedagogies, courses, and research agendas that leverage AI.

Dynamic Capability (DC) acts as an overarching mechanism. The institution's DC – its ability to sense AI trends, seize resources, and reconfigure structures – facilitates all linkages. For example, sensing helps faculty become aware of AI literacy opportunities; seizing means the university provides training; reconfiguring means embedding AI into curricula. Thus, DC interconnects with AI Literacy, Organizational Support, and beyond.

Each arrow in the model is grounded in theory: TAM underpins the effects of literacy and competency on adaptation; Professional Identity Theory explains the link from adaptation to identity change; Institutional Theory informs how organizational support and readiness legitimize adoption and change; and DC Theory informs the enabling processes throughout. Figure 1 (below) illustrates these relationships.

VIII. Research Propositions

Based on the framework, we propose the following propositions:

1. **P1:** *Higher AI literacy (knowledge and skills) positively influences faculty's perceived usefulness of GenAI tools. Justification:* According to TAM, those who understand a technology's capabilities are more likely to appreciate its value.
2. **P2:** *Greater digital competency (technical skill) leads to higher perceived ease-of-use and adoption of GenAI. Justification:* Faculty with stronger ICT skills face fewer barriers, reducing anxiety.
3. **P3:** *Organizational support (training, leadership encouragement) moderates the relationship between AI literacy and adaptation. Justification:* Even skilled faculty need institutional resources (training, time) to apply knowledge.
4. **P4:** *High institutional readiness (clear policies, AI strategy) enhances the effectiveness of faculty adaptation. Justification:* Institutional legitimacy reduces uncertainty, as Meyer and Rowan suggest that aligning with formal structures fosters smoother adoption.
5. **P5:** *Faculty who perceive GenAI as threatening to their traditional expertise will experience stronger identity conflict and slower adaptation. Justification:* Professional identity theory predicts that perceived threat (to who "I am") causes resistance.
6. **P6:** *Faculty who successfully develop an "AI identity" (comfort and agency with AI) adapt more completely to GenAI integration. Justification:* Bennett & Royce's notion of AI Identity indicates that embracing AI into one's self-concept promotes proactive use.
7. **P7:** *Higher sensing capabilities (awareness of AI trends) in an institution lead to earlier faculty adaptation. Justification:* Dynamic Capability Theory emphasizes that sensing is critical for timely change.
8. **P8:** *Greater seizing capabilities (resource mobilization for AI initiatives) are associated with more extensive organizational change. Justification:* Organizations that invest (capital, staffing) can implement new AI-driven processes, consistent with Teece's seizing concept.
9. **P9:** *Continuous reconfiguring of pedagogical practices mediates the link between faculty adaptation and academic innovation. Justification:* Only by reconfiguring (transforming) teaching will novel AI-enabled curricula and research emerge.

10. **P10:** *Professional identity reconstruction mediates the effect of adaptation on organizational change. Justification:* As faculty update their self-concepts, they legitimize new practices, driving broader institutional change.
11. **P11:** *Institutional pressures (normative/coercive) accelerate both faculty adaptation and organizational change in tandem. Justification:* DiMaggio and Powell's isomorphism suggests that external demands spur organizational alignment with innovation.
12. **P12:** *Academic innovation (new teaching/research models) is positively related to the extent of faculty adaptation and identity change. Justification:* When faculty integrate AI deeply, they are more likely to develop innovative pedagogies (e.g. AI-enhanced project-based learning).

These propositions are conceptual and require empirical validation. They integrate TAM, identity, institutional, and DC perspectives.

IX. Theoretical Contributions

This conceptual analysis offers several scholarly contributions. **Management literature:** We extend Dynamic Capability Theory into the higher education sector, detailing how sensing, seizing, and reconfiguring processes operate in a non-corporate context. By situating DC across individual and institutional levels, we show how universities can orchestrate adaptation. This bridges strategy research with the sociology of academia. **Sociology literature:** We deepen understanding of professional role identity in the face of automation. Drawing on Goto's collective identity study, we illustrate how faculty negotiate identity amid GenAI, highlighting the interplay of individual interpretations of technology and professional logics. Our framework links these micro and macro identity dynamics. **Higher education studies:** This work provides a novel lens for GenAI in universities, emphasizing faculty experiences and identity rather than student outcomes alone. It also surfaces the importance of AI literacy and institutional policy as contextual factors – areas previously under-theorized. **Technology adoption literature:** We critique and extend TAM by embedding it in a richer context. The model recognizes that perceived usefulness and ease-of-use alone are insufficient; identity and legitimacy concerns must be integrated. Thus, we move beyond mere behavioral intention to consider identity-related motivation. **Organizational change literature:** By combining institutional theory with dynamic capabilities, we offer a dual perspective on educational transformation. We contribute a framework of AI-driven change that accounts for both external legitimacy pressures and internal learning processes.

X. Practical Implications

Our findings have implications for universities, policymakers, faculty developers, and academic leaders. First, **universities** should invest in comprehensive faculty development: not just short workshops on tools, but sustained programs to build AI literacy and digital skills. For instance, creating an "AI Academy" for instructors (as tested in prior work) can foster a community of practice. Second, institutions must formulate clear AI governance policies – addressing academic integrity, data use, and faculty roles – to reduce uncertainty and legitimize AI use in the curriculum. Our review shows that lack of policy is a key barrier, so proactive policy design will ease resistance. Third, **academic leaders** should champion a vision of new faculty roles (e.g. "learning designer" or "data-empowered researcher") and recognize these in promotion criteria, helping reconstruct professional legitimacy. Reward systems might include recognition for AI-enhanced teaching or publications on pedagogical innovation. Fourth, **faculty development centers** should integrate AI topics into existing training, emphasizing ethical and pedagogical dimensions along with technical instruction. This aligns with calls for ethical grounding in AI integration. Finally, **policymakers** (e.g. UGC, NAAC in India) need to set accreditation standards that encourage AI readiness (e.g. requiring AI courses, infrastructure benchmarks). By including dynamic capacity indicators in

evaluation metrics, regulators can drive resource allocation. In sum, stakeholders at all levels must coordinate to create an ecosystem where AI adoption is technically feasible, pedagogically sound, and professionally affirming.

XI. Future Research Agenda

We identify several research directions. **Short-term priorities:** Conduct qualitative case studies and surveys to map current levels of AI literacy and faculty attitudes across Indian universities. Examine how different departments (humanities vs STEM) experience GenAI. Develop and validate instruments for "AI identity" (building on Bennett & Royce's AI Identity model). Test our propositions empirically, perhaps via structural equation modeling. **Medium-term priorities:** Implement longitudinal studies tracking identity and practice change as faculty gain AI experience. Study institutional change processes: how do policy changes in one department diffuse across a university? Compare how public vs private institutions (or global vs local universities) vary in readiness and outcomes. Use ethnography to understand the micro-process of identity reconstruction. **Long-term priorities:** Explore generational shifts – will incoming faculty who grow up with AI have inherently different professional identities? Investigate the impact of AI-adapted teaching on student learning outcomes over time. Theoretically, refine the framework by integrating additional perspectives (e.g. critical theory on tech power dynamics). Open questions include: How do student and faculty identities interact in the AI era? What forms of governance best balance innovation and ethics? How does AI change notions of academic labor and value creation? Addressing these questions will extend the conceptual model and guide evidence-based policy.

Table 6. Future Research Agenda

Timeline	Research Priorities
Short-Term	AI literacy measurement, faculty adaptation pathways
Medium-Term	Identity reconstruction processes, AI governance
Long-Term	Institutional transformation, academic workforce redesign

XII. Conclusion

The advent of Generative AI in higher education is catalyzing a multidimensional transformation of academic work. Our conceptual analysis shows that faculty adaptation is not a simple matter of clicking "on"; it involves reconstructing professional identity, developing new competencies, and navigating organizational change. By synthesizing Dynamic Capability Theory, Professional Identity Theory, Institutional Theory, and TAM, we have built a framework that captures how AI literacy, digital competency, and institutional support jointly enable faculty to sense, seize, and reconfigure their roles. In doing so, we highlight that successful AI integration demands more than technology proficiency – it requires reshaping the meaning of scholarship and teaching. The propositions derived here provide avenues for empirical testing and theory refinement. Importantly, our framework underscores the active role of universities: only by building organizational dynamic capabilities and legitimacy can institutions truly harness AI for academic innovation. In the Indian context, where higher education is rapidly expanding and diversifying, understanding this complex adaptation is critical. We hope this work spurs further research and informs strategies to empower faculty as they navigate the AI-enhanced academy.