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Technostress in Ai-Augmented Workplaces: A Conceptual HR Framework for Employee Well-Being and Organizational Resilience

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Abstract:
AI and generative AI (GenAI) tools are spreading quickly through everyday work, changing how employees do their jobs, learn new skills, and get evaluated — and along with that comes a set of psychological pressures that most HR functions are not yet equipped to handle. Drawing on established technostress research and recent studies of AI-related anxiety, this paper builds an integrative conceptual framework connecting AI-specific technostress creators — techno-overload, techno-complexity, techno-invasion, techno-uncertainty, and algorithmic opacity — to employee well-being, engagement, and performance, with HR policy, digital upskilling, job redesign, and psychological-safety practices acting as the key organizational moderators. Drawing on peer-reviewed evidence from 2024–2026 across technostress, occupational health, and AI-adoption research, the paper identifies a gap: although the causes and health effects of AI-driven technostress are now fairly well documented, there is still little integrated guidance on how HR departments — particularly in emerging-market and services settings — can actually operationalize resilience-building interventions before, during, and after an AI rollout. A mixed-method research design combining a structured survey with semi-structured interviews across IT-enabled service organizations is proposed for future empirical testing of the framework. The paper closes with a practical HR action agenda covering AI literacy training, workload governance, transparent AI communication, and manager-led psychological support — offering both a theoretical contribution to the technostress literature and a roadmap practitioners can use to build a more AI-resilient workforce.

Keywords: Technostress, Artificial Intelligence, Generative AI, Employee Well-being, Human Resource Management, Digital Resilience, Job Design, Organizational Support.

I. INTRODUCTION

HR has already been through several waves of technological disruption — payroll automation, ERP systems, cloud-based HR information systems — but the current wave, driven by AI and generative AI (GenAI) tools such as large language models, feels qualitatively different. Earlier technologies mostly automated routine transactions; AI systems are increasingly stepping into judgment-oriented work — screening candidates, drafting content, prioritizing tasks, even evaluating performance. That shift changes not just what employees do, but how secure, capable, and in control they feel while doing it.

The psychological cost of adapting to information and communication technologies has long been studied under the label technostress — stress that arises when individuals struggle to cope with new technology in a healthy way (Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007). AI and GenAI tools appear to

intensify the classic technostress creators — overload, complexity, invasion, uncertainty, and insecurity — while adding new, AI-specific stressors of their own: worries about algorithmic opacity, output reliability, data protection, and the erosion of professional judgment (Högemann, Hein, Britsche, & Thomas, 2025).

For HR practitioners, this raises a question that goes well beyond digital-skills training: how should the HR function itself be redesigned so that AI adoption strengthens employee well-being and organizational performance rather than eroding them? This paper takes up that question by pulling recent research together into a single conceptual model and translating it into a practical HR action agenda, with particular attention to IT-enabled service organizations in emerging economies such as India, where AI adoption is moving fast across recruitment, customer service, and knowledge-work functions.

The stakes here are considerable. Unlike earlier digitization waves, which mostly touched back-office and transactional roles, GenAI tools are being rolled out across recruitment, software engineering, customer service, marketing, legal, and finance all at once — meaning the workforce exposed to AI-driven technostress spans nearly the whole organization rather than a single department. That breadth raises the cost of inaction: if AI-related anxiety, skill-relevance concerns, and workload intensification go unaddressed, the productivity gains that justified the AI investment in the first place could end up partly or fully offset by rising attrition, disengagement, and health-related absence.

This paper contributes to the growing conversation at the intersection of technostress research and strategic HRM in three ways. It pulls together dispersed empirical findings from 2024–2026 into one coherent conceptual model. It treats HR practice as an active moderating mechanism rather than a passive bystander, reframing well-being outcomes as partly a matter of organizational design rather than individual resilience alone. And it proposes a concrete, replicable research design for testing the model empirically in a high-AI-exposure setting, bridging conceptual synthesis with future primary research.

II. NEED AND SIGNIFICANCE OF THE STUDY

Industry surveys consistently show stress, burnout, and anxiety near the top of employee well-being concerns, and organizations are only starting to treat AI-related anxiety as a strategic risk rather than a minor training issue (HR.com, 2025; AIHR, 2026). At the same time, empirical evidence shows that AI-driven workplace anxiety can measurably lower life satisfaction among service-sector employees (Zhao et al., 2025), and that unmanaged technostress, combined with work intensification, produces burnout, sleep disruption, and other health harms (Malik, Ali, Malik, & Malik, 2025).

Despite this growing evidence, most existing studies treat technostress and AI anxiety as isolated psychological phenomena rather than translating the findings into a structured HR response. Little academic work connects the technostress literature directly to actionable HR levers — job redesign, AI-literacy training, workload governance, psychological-safety practices — within a single integrated framework. That is precisely the gap this study addresses, positioning HR not as a downstream responder to AI-induced stress but as an upstream architect of how AI gets introduced, communicated, and embedded into daily work.

The significance of this study runs in three directions. Academically, it extends technostress theory into the GenAI era by pulling together three research streams — classic technostress, AI-specific anxiety, and organizational moderation — that have largely developed on separate tracks. Practically, it gives HR practitioners a structured vocabulary and diagnostic framework for something that is often discussed informally, as “AI fatigue” or “change fatigue,” but rarely measured or managed with any rigor. And

pedagogically, it gives business students and early-career HR professionals — the group most directly exposed to GenAI tools in their own working lives — a way of making sense of their own experience of AI adoption through an established academic lens, rather than relying only on informal workplace narratives.

The urgency here comes from a simple mismatch in pace: technology functions can roll a new GenAI copilot out to thousands of employees within weeks, while HR policy revision, training-curriculum design, and manager capability-building typically run on multi-month cycles. Without deliberate planning, employees are structurally likely to encounter AI-specific technostress before the corresponding HR support is even in place — which is exactly why the proactive, phased HR approach developed later in this paper matters.

III. LITERATURE REVIEW

3.1 Technostress: Conceptual Foundations

The technostress construct, introduced into the management literature by Tarafdar et al. (2007), identifies five creators of stress tied to information and communication technology use: techno-overload (being pushed to work faster and longer), techno-invasion (the blurring of work and personal life through constant connectivity), techno-complexity (feeling under-skilled to use a technology), techno-insecurity (fear of being replaced by the technology or by more capable colleagues), and techno-uncertainty (continuous, unpredictable change in tools and systems). Two decades of information-systems and HR research have consistently linked these creators to role stress, lower productivity, and reduced job satisfaction.

3.2 AI and Generative AI as Amplifiers of Technostress

Recent qualitative work suggests the classic technostress dimensions do not disappear with AI adoption — they show up differently, and new AI-specific stressors join them. Studying young professionals working with GenAI tools across research, IT, finance, and marketing, Högemann et al. (2025) found that techno-insecurity and techno-overload intensified as skill requirements changed faster than employees could keep up, and that new stressors emerged around regulatory ambiguity, data protection, over-dependence on AI outputs, and the added cognitive burden of checking AI-generated work for errors or fabricated content. Interestingly, the same study also found evidence of "techno-eustress" — a positive form of stress tied to efficiency gains and learning — suggesting AI's psychological impact is not uniformly negative and depends a lot on how it is introduced.

AIHR (2026) adds to this by synthesizing evidence that concerns about job security, skill relevance, loss of autonomy, and the pace of AI-driven change act as psychological triggers that activate the classic technostress creators, producing cognitive strain, emotional fatigue, and declines in both well-being and performance. Zhao et al. (2025) offer quantitative support for this pathway, showing that AI workplace anxiety among service-industry employees is linked to lower life satisfaction, with mediating and moderating mechanisms that HR interventions could plausibly shift.

3.3 Consequences for Employee Health, Engagement, and Performance

The health consequences of unmanaged technostress are well documented at this point. Malik et al. (2025), studying manufacturing employees, propose a dual-path model grounded in Conservation of Resources theory: technostress produces IT-related strain, work intensification produces emotional exhaustion, and both pathways feed into broader health harm — burnout, anxiety, fatigue, sleep disruption. Notably, their model identifies organizational support and satisfaction with the technology as significant moderators, both of which fall squarely within HR's remit rather than being left to individual coping.

On the more encouraging side, Bibi, Tan, and Yao (2025) find that AI-driven organizational capabilities can meaningfully improve employee well-being when mediated by what they call "cybernetic thinking" and moderated by organizational ambidexterity — a firm's ability to exploit existing capabilities while also exploring new ones. Their large-sample study of healthcare professionals suggests AI's effect on well-being is not fixed: it depends a great deal on whether employees are positioned as active co-creators of AI-enabled work rather than passive recipients of automated decisions.

3.4 The Role of HR as an Organisational Moderator

A consistent theme runs through this literature: the health and performance consequences of AI-driven technostress are not fixed properties of the technology itself — they are shaped by organizational design choices, including how work is structured, how transparently AI is communicated, how much control employees keep, and how much support is available when things go wrong. That makes HR a central, if still under-theorized, moderating force. This paper builds directly on that insight, treating HR policy and practice as the primary lever for reshaping the technostress-to-outcome relationship.

3.5 Theoretical Lenses Used in Prior Research

Three theoretical lenses show up repeatedly across the reviewed literature and together inform the framework developed here. The Person–Environment Fit perspective, built into the original technostress construct, explains strain as a mismatch between an individual's skills and the demands of a fast-changing technological environment (Tarafdar et al., 2007). Conservation of Resources (COR) theory, applied by Malik et al. (2025), explains why cumulative digital and organizational demands feel depleting: employees draw on finite cognitive and emotional resources to cope with AI-driven change, and health harm follows when resource loss outpaces replenishment. Dynamic-capabilities thinking, applied by Bibi et al. (2025) through the idea of organizational ambidexterity, explains why the same AI tools can produce very different well-being outcomes across firms — the difference being whether the organization uses AI purely for efficiency or also uses it to expand employee capability and voice. Together, these three lenses support treating HR practice not as a byproduct of AI adoption but as a resource-replenishing, fit-restoring, capability-building intervention in its own right.

3.6 The Indian IT-Enabled Services Context

India's IT and IT-enabled services (IT/ITeS) sector, which employs several million knowledge workers, has been among the fastest adopters of GenAI copilots, AI-assisted coding tools, and AI-driven customer service platforms. This context stands out for at least three reasons relevant to technostress research. First, a very large share of the workforce is early-career and digitally native — a group Högemann et al. (2025) identify as both the most exposed to GenAI tools and the most likely to feel both techno-eustress and AI-specific stressors like skill-relevance anxiety. Second, the sector runs under intense client-driven productivity and turnaround-time pressure, which plausibly interacts with techno-overload in ways that echo the work-intensification pathway Malik et al. (2025) identified in manufacturing. Third, HR functions in Indian IT/ITeS firms tend to be large, centralized, and policy-driven, which means the kind of organization-wide interventions proposed in Section VIII are actually feasible to design and roll out — making this a particularly suitable setting for testing the framework empirically.

Indian ITeS organizations have also historically invested heavily in structured onboarding, learning-management systems, and employee-assistance programs, giving them existing HR infrastructure onto which AI-literacy and psychological-support interventions could plausibly be layered without building entirely new organizational capability from scratch. That combination of high AI exposure and existing

HR infrastructure is one reason this paper recommends Bengaluru-based IT/ITeS organizations as the target population for the empirical phase outlined in Section VII.

3.7 Sector and Occupational Variation in AI-Related Technostress

The scale and character of AI-driven technostress seems to vary meaningfully by sector. Malik et al. (2025) document strong stressor-to-health-harm pathways in manufacturing, a sector marked by fairly standardized digital tools and limited individual discretion over how technology gets used. Bibi et al. (2025), by contrast, studying healthcare professionals, find that AI capabilities can be positively linked to well-being when mediated by cybernetic thinking and moderated by organizational ambidexterity — suggesting that in professional, judgment-intensive occupations, AI's well-being effect depends heavily on whether practitioners keep interpretive control over AI-assisted decisions. Högemann et al. (2025), looking at knowledge-work functions like R&D, IT, finance, and marketing, find that GenAI-specific stressors — reliability concerns, verification burden, role shift — outweigh classical overload concerns, while Zhao et al. (2025) show that in service-industry, customer-facing roles, AI-related anxiety translates fairly directly into lower life satisfaction. This sectoral variation suggests a single, one-size-fits-all HR policy is probably not optimal; interventions should be calibrated to the occupational mix of the organization, with knowledge-work and professional roles needing more emphasis on interpretive control and judgment-retention, and standardized or customer-facing roles needing more emphasis on workload governance and direct psychological support.

3.8 Generational and Experience-Based Differences

A further pattern in the literature concerns career stage. Högemann et al. (2025) specifically studied young professionals as early adopters of GenAI and found this group is simultaneously the most fluent with the tools and the most exposed to skill-relevance anxiety, since their professional identity and career trajectory are still forming at exactly the moment when the skills traditionally associated with entry-level knowledge work — drafting, coding, first-pass analysis — are becoming AI-assisted. That raises an HR consideration largely missing from earlier technostress research, which tended to focus on mid-career employees adapting established routines to new systems: early-career employees may need career-development support that clarifies which human skills still differentiate them in an AI-augmented workplace, alongside the AI-literacy training more commonly proposed for the workforce as a whole.

IV. RESEARCH GAP

Existing studies tend to split into two separate streams: psychological and occupational-health research that documents the causes and consequences of AI-related technostress with limited attention to organizational remedies, and practitioner-oriented commentary that recommends AI-literacy training or well-being programs without grounding those recommendations in a testable conceptual model. Few studies bring both streams together into a single framework that specifies which AI-specific technostress creators matter most in services and knowledge-work contexts, identifies the HR-controllable moderators most likely to weaken the stressor-to-strain pathway, and proposes a research design through which HR practitioners in emerging markets — India's IT-enabled services sector, for instance — can actually test and refine these interventions. This paper addresses that integration gap.

V. OBJECTIVES OF THE STUDY

The specific objectives of this paper are:

- To review and pull together recent (2024–2026) empirical and conceptual literature on AI-driven tech-

nostress and its consequences for employee well-being and performance.

- To develop an integrative conceptual framework linking AI-specific technostress creators to employee outcomes, with HR practices positioned as moderating mechanisms.
- To identify the research gap in translating technostress evidence into actionable HR design levers.
- To propose a mixed-method research design for future empirical validation of the framework in IT-enabled service organizations.
- To outline a practical HR action agenda for building an AI-resilient workforce.

VI. CONCEPTUAL FRAMEWORK AND RESEARCH PROPOSITIONS

Drawing on the literature reviewed above, this paper proposes a framework in which five AI-specific technostress creators act as antecedent stressors, two strain pathways — cognitive/IT-related strain and emotional exhaustion — act as mediating mechanisms, and employee well-being, engagement, and performance act as outcome variables. Four HR-controllable factors — AI-literacy and digital upskilling, job and workload redesign, transparent AI governance and communication, and manager-led psychological support — are proposed as moderators that weaken both the stressor-to-strain and strain-to-outcome relationships. Table 1 summarizes the constructs and their theoretical basis.

Table 1: Constructs of the Proposed Conceptual Framework

Construct Category	Illustrative Elements	Key Source(s)
AI-specific technostress creators	Techno-overload, techno-complexity, techno-invasion, techno-uncertainty, algorithmic opacity/reliability concerns	Tarafdar et al. (2007); Högemann et al. (2025)
Strain pathways (mediators)	IT-related cognitive strain; emotional exhaustion	Malik et al. (2025)
Employee outcomes	Well-being, life satisfaction, engagement, performance, turnover intention	Zhao et al. (2025); Bibi et al. (2025)
HR moderators	AI literacy training, job/workload redesign, transparent governance, manager support, organisational ambidexterity	AIHR (2026); Bibi et al. (2025); Malik et al. (2025)

Based on this framework, the paper advances four research propositions intended for future empirical testing:

- P1: AI-specific technostress creators are positively associated with cognitive/IT strain and emotional exhaustion among employees using AI or GenAI tools in their daily work.
- P2: Cognitive/IT strain and emotional exhaustion are negatively associated with employee well-being, engagement, and performance.
- P3: HR-controllable moderators (AI literacy, job redesign, transparent governance, manager support) weaken the positive relationship between AI-specific technostress creators and strain.
- P4: Organizations that position employees as active co-creators of AI-enabled work, rather than passi-

ve recipients, report significantly higher employee well-being than organizations that do not.

6.1 Mapping Propositions to Reviewed Evidence

Proposition P1, linking AI-specific technostress creators to strain, draws direct support from Högemann et al.'s (2025) finding that GenAI intensifies techno-insecurity and techno-overload while adding verification-related cognitive load, and from Malik et al.'s (2025) quantitative confirmation that technostress predicts IT-related strain. Proposition P2, linking strain to reduced well-being, is supported by Zhao et al.'s (2025) finding that AI workplace anxiety reduces life satisfaction and by Malik et al.'s (2025) evidence that IT strain and emotional exhaustion converge on broader health harm. Proposition P3, on HR moderators, has more indirect support: Malik et al. (2025) show that perceived organizational support and user satisfaction weaken the strain-to-harm relationship, while AIHR (2026) argues that treating AI anxiety as a strategic HR risk — rather than an individual coping issue — is central to a successful AI transformation. Proposition P4, on employee co-creation and organizational ambidexterity, is most directly supported by Bibi et al.'s (2025) finding that AI capabilities improve well-being specifically when mediated by cybernetic thinking and moderated by ambidexterity, rather than automatically. Table 1 above, together with this mapping, is the theoretical basis for treating the four propositions as testable rather than speculative.

Table 2: Indicative HR Action Roadmap Across the AI Adoption Lifecycle

Phase	Indicative HR Action	Primary Stressor Targeted	Responsible Party
Pre-rollout	Workload/role-impact assessment; transparent communication of AI scope and rationale	Techno-uncertainty	HR + Business Unit Heads
Pre-rollout	Baseline AI-literacy and tool-specific training	Techno-complexity	Learning & Development
Rollout	Rapid-feedback channel for early user-experience issues	Techno-overload / reliability concerns	Line Managers + HRBP
Rollout	Manager training on recognising early strain signals	Emotional exhaustion	HR + People Managers
Post-adoption	Periodic well-being and workload re-measurement	Work intensification	HR Analytics

VII. PROPOSED RESEARCH METHODOLOGY

This paper is conceptual, built through a structured narrative synthesis of peer-reviewed literature published between 2024 and 2026 on technostress, AI anxiety, and employee well-being. To move from conceptual synthesis to empirical validation, the mixed-method design below is proposed as the next stage of this research programme.

7.1 Research Design

A convergent mixed-method design is proposed, combining a cross-sectional quantitative survey with semi-structured qualitative interviews. This allows statistical testing of the proposed relationships (P1–P3) alongside contextual, sector-specific insight into how employees actually experience AI-related technostress (P4).

7.2 Population and Sample

The target population is employees at IT-enabled service (ITeS), IT, and business-process-management organizations in Bengaluru, India, that have implemented AI or GenAI tools within the past twelve months. A stratified random sample of roughly 250–300 employees across junior, mid, and senior levels is recommended for the quantitative phase, in line with sample sizes used in comparable technostress studies (e.g., Malik et al., 2025, N = 252), supplemented by 15–20 semi-structured interviews for the qualitative phase, following the design used by Högemann et al. (2025).

7.3 Data Collection Instrument

The quantitative instrument would adapt validated technostress creator scales (Tarafdar et al., 2007) alongside AI-specific stressor items drawn from recent GenAI technostress research, employee well-being and engagement scales, and HR-practice perception measures — AI-literacy training exposure, perceived job redesign, communication transparency, and manager support. All items would use a five-point Likert scale and be piloted on a small sample before full deployment. The qualitative protocol would probe employees' lived experience of AI adoption, their sense of control, and the specific HR practices they associate with easier or harder adaptation.

7.4 Proposed Statistical Tools

For the quantitative phase, Partial Least Squares Structural Equation Modelling (PLS-SEM) is recommended to test the mediated-moderation model implied by propositions P1–P3, in line with recent technostress studies using this method (Bibi et al., 2025; Malik et al., 2025). Reliability and validity would be assessed through Cronbach's alpha, composite reliability, and average variance extracted, with common method bias tested using Harman's single-factor test. For the qualitative phase, thematic content analysis guided by established technostress dimensions is recommended, following the approach used by Högemann et al. (2025).

7.5 Proposed Measurement Constructs and Item Sources

Table 3 sets out the proposed measurement constructs for the quantitative instrument, along with an indicative number of items per construct and their conceptual source, to guide future scale development and pilot testing.

Table 3: Proposed Survey Constructs for Empirical Validation

Construct	Indicative Item Focus	Approx. Items
Techno-overload / techno-complexity	Perceived pace of AI-driven change; adequacy of skills relative to tool demands	6
Techno-invasion / techno-uncertainty	Blurring of work-life boundaries; unpredictability of tool changes and expectations	5

AI-specific stressors	Trust in AI output reliability; data-privacy concern; perceived over-dependency	6
Cognitive / IT strain and emotional exhaustion	Mental fatigue after AI-assisted tasks; emotional depletion at end of workday	6
Employee well-being / engagement	Job satisfaction; vigour and absorption at work; life satisfaction	6
HR moderators	Perceived AI-literacy training quality; workload adjustment; governance transparency; manager support	8

7.6 Ethical Considerations

Any future empirical study building on this framework should secure institutional ethical approval, obtain informed consent, protect the anonymity of survey and interview responses, and let participants withdraw at any stage. Because the subject matter touches on employee anxiety about job security and AI-driven monitoring, particular care should be taken to assure participants that individual responses will not be shared with, or traceable by, their employer, and that participation is voluntary and unrelated to performance evaluation.

VIII. DISCUSSION: AN HR STRATEGIC FRAMEWORK FOR AI-RESILIENCE

Translating the conceptual model into practice, four interlinked HR intervention areas stand out from the literature as the most promising levers for weakening the link between AI adoption and employee strain.

8.1 AI Literacy and Digital Upskilling

Because techno-complexity and techno-insecurity are rooted in a perceived skills gap, structured AI-literacy programs — covering both technical use and the limits of AI outputs — target the source of the stressor rather than just its symptoms. Högemann et al. (2025) emphasize that AI literacy helps convert potentially negative technostress into "techno-eustress" by building employees' confidence to use AI tools productively rather than fearfully.

8.2 Job and Workload Redesign

Techno-overload and work intensification are structural problems, not just psychological ones, so they need structural remedies. HR and line managers should reassess workload and output expectations whenever AI tools are introduced, making sure efficiency gains get partly redistributed toward reduced hours or higher-value work rather than only toward higher output targets — echoing the job-crafting recommendations for reducing techno-overload put forward by Malik et al. (2025).

8.3 Transparent AI Governance and Communication

Ambiguity about how AI decisions get made, how employee performance is evaluated, and how data gets used is itself a stressor. Clear, proactively communicated AI governance policies — covering data protection, decision transparency, and human oversight — reduce techno-uncertainty and build the trust needed for sustained adoption (AIHR, 2026; Högemann et al., 2025).

8.4 Manager-Led Psychological Support and Organisational Ambidexterity

Perceived organizational support consistently moderates the relationship between technostress and health harm (Malik et al., 2025). HR should equip line managers to recognize early signs of AI-related strain and

to position employees as co-creators of AI-enabled workflows rather than passive recipients of automated decisions — an approach linked to significantly better well-being outcomes in organizations with higher "organizational ambidexterity," the capacity to balance efficiency-driven AI adoption with continued exploration and employee voice (Bibi et al., 2025).

8.5 A Phased Change-Management Timeline

The literature suggests the timing of HR interventions matters as much as their content. Before an AI roll-out, HR should carry out a workload and role-impact assessment, communicate the rationale and scope of the tool, and begin baseline AI-literacy training so employees are not encountering the technology for the first time on go-live day. During the roll-out itself, HR and line managers should set up feedback channels through which early user-experience issues — confusion, unrealistic new targets, trust concerns about AI outputs — can be surfaced and addressed quickly, consistent with evidence that early, responsive support reduces the conversion of technostress into strain (Malik et al., 2025). In the post-adoption phase, HR should periodically re-measure well-being and workload perceptions, using instruments such as the one proposed in Table 2, to check whether initial efficiency gains are turning into sustainable working patterns or quietly re-accumulating as work intensification.

8.6 Building HR's Own AI Capability

A recurring insight across the reviewed studies is that HR functions cannot credibly design AI-adoption support if they do not themselves have a working understanding of how the relevant AI tools function, what their limitations are, and what they imply for data governance. That points to a parallel capability-building agenda within HR itself: HR business partners and learning-and-development teams should be trained not just in change-management technique but in the practical mechanics of the AI tools being introduced — so they can translate technical AI documentation into role-specific guidance, credibly answer employee questions about reliability and oversight, and design AI-literacy curricula grounded in the actual tools employees use rather than generic digital-skills content.

IX. MANAGERIAL AND THEORETICAL IMPLICATIONS

Theoretically, this paper extends the technostress literature by explicitly positioning HR practice as a moderating variable rather than treating organizational response as an afterthought to individual coping. This reframing is consistent with, and extends, Conservation of Resources theory as applied by Malik et al. (2025), by spelling out the resource-replenishing role HR-designed interventions can play.

For practitioners, the framework suggests AI roll-out plans should be treated as HR projects as much as technology projects: literacy training, workload review, governance communication, and manager preparation should be scheduled alongside — not after — the technical deployment of AI tools. Organizations that treat employee well-being as a design constraint on AI adoption, rather than a downstream consequence to be managed later, are likely to see stronger engagement and lower attrition as AI use expands.

9.1 Implications for HR Education and Business-School Curricula

Because the entry-level knowledge workers most exposed to GenAI-specific stressors are also the population currently moving through business-school HR and management programs, this study has implications for curriculum design too. Postgraduate management education should treat AI-literacy and technostress-awareness not as a standalone elective but as a thread running through core human resource management, organizational behaviour, and change-management courses, so future HR professionals enter the workforce already equipped with a diagnostic vocabulary for AI-related strain rather than picking

it up informally on the job. Embedding the constructs summarized in Table 1 — technostress creators, strain pathways, and HR moderators — into HRM coursework would also give students a ready-made lens for interpreting their own early-career experience of AI-augmented work.

X. LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

As a conceptual paper, this study synthesizes existing literature rather than presenting new primary data; the propositions advanced here are therefore theoretical and need empirical testing through the mixed-method design proposed in Section VII before they can be generalized. The framework also draws mostly on studies from manufacturing, healthcare, and general service-sector contexts, so its applicability to India-specific ITeS environments should be confirmed empirically rather than assumed. Future research should also examine whether the proposed HR moderators work differently across employee seniority levels, age cohorts, and degrees of AI-tool exposure, and should track outcomes longitudinally as AI adoption matures within organizations.

XI. CONCLUSION

As AI and generative AI tools become embedded in everyday work, the technostress they generate is no longer a peripheral IT concern — it is a core HR responsibility. This paper has synthesized recent evidence to show that AI-specific technostress creators — overload, complexity, invasion, uncertainty, and concerns about algorithmic reliability — translate into measurable strain and reduced well-being, but that this pathway is not fixed: it can be significantly weakened through deliberate HR design choices around literacy, workload, governance, and support. The integrative framework and proposed research design offered here are meant as both a theoretical contribution to the technostress literature and a practical starting point for HR functions looking to build genuinely AI-resilient organizations.

Ultimately, the central argument of this paper is a reframing more than a wholly new discovery: employee well-being in the age of AI should be treated as a design variable that HR actively shapes through the timing, transparency, and structure of AI adoption, rather than as a residual outcome to be measured and fixed after the fact. Organizations, business schools, and future researchers who adopt this design-oriented view of HR's role are better positioned to capture the productivity benefits of AI while protecting the workforce whose adaptation makes those benefits possible.

XII. ACKNOWLEDGMENT

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