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Peer Review

Review of: "The Human Factor in HR 5.0: Technological Innovation, Workforce Adaptability, and Cognitive Balance in Developing Economies"

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The manuscript examines how digital transformation can support workforce adaptability and well-being while also creating cognitive demands and technostress. It focuses on Zimbabwe and considers how infrastructure, economic conditions, organizational support, and Ubuntu-informed workplace practices may shape employees' experiences with technology. Drawing on Job Demands–Resources theory, Cognitive Load Theory, and Ubuntu, the author proposes a model linking technological innovation and HR practices to workforce adaptability, cognitive balance, and employee and organizational outcomes.

Overall assessment: The manuscript addresses a relevant question for work and organizational psychology. Its strongest insight is that the consequences of a digital tool depend on the conditions under which employees use it. A cloud-based workflow may save time when connectivity and technical support are reliable, while recurring outages can require employees to repeat tasks, maintain parallel records, and manage delays. The focus on Zimbabwe gives the author an opportunity to identify conditions that broad accounts of digital transformation can overlook. The attention to collective support also broadens the discussion of how employees adapt to technological change.

Two issues currently limit the contribution. First, inconsistencies in the review reporting make it difficult to establish what evidence was included and how it supports the five synthesis findings. Second, the proposed model gives several constructs overlapping definitions and presents causal pathways whose status is unclear. The paper would be stronger if the reader could trace the findings to a defined body of literature and see exactly what the conceptual model adds to that evidence.

Major concerns

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- Section 2 describes a systematic review, and Section 2.1 states that all 39 included studies were synthesized qualitatively and that no meta-analysis was conducted. Figure 1 instead assigns 28 studies to qualitative synthesis and 11 to a quantitative synthesis labeled “meta-analysis.” It also reports six records from hand searching and reference lists whose disposition is unclear in the screening totals, and it lists 15 records excluded by automation without explaining the procedure. Please reconcile the figure with the actual review process and clarify whether the included units are unique studies, publications, or a mix of empirical studies and other sources.
- If the systematic-review designation is retained, please provide the search dates and database-specific search strings, including language and date restrictions, and explain how eligibility decisions were made. An appendix listing the included sources and a study-characteristics table would allow readers to trace the synthesis. Please also explain how the credibility and relevance of empirical studies, conceptual papers, prior reviews, and institutional reports were assessed, and how differences between these source types affected the conclusions. The PRISMA 2020 checklist provides a useful guide to making these decisions transparent. If the search and selection process cannot be reconstructed, an integrative review with a transparent account of source selection would be a more defensible basis for the conceptual contribution.
- The objectives refer to assessing the impact of technology, infrastructure, and HR practices in Zimbabwean organizations. The synthesis draws on sources that address different settings and outcomes, and the manuscript gives the reader limited guidance on which findings are supported by evidence from Zimbabwean workplaces. For example, Insight 1 cites reference 34 in support of the claim that persistent volatility has fostered adaptive capacity among employees in Zimbabwe. As listed, that report concerns digital skills demand in online vacancies in South Africa, Nigeria, Kenya, and Uganda. It cannot directly establish how Zimbabwean employees respond to economic volatility. A national infrastructure report can similarly document connectivity constraints while leaving their effects on employee strain to be established through workplace evidence.
- Please organize the five insights so readers can identify the setting, study design, and outcome behind each substantive claim. Where direct evidence is limited, identify the mechanism as a proposition and explain why it might transfer from another context. The objectives and conclusions should reflect what the reviewed evidence can support. This would also help replace broad comparisons between “developing economies” and the “Global North” with specific boundary conditions, such as the reliability of connectivity, the availability of technical support, or differences in who bears the cost of a digital transition.

- The manuscript uses HR 5.0 to describe both the use of advanced technologies in HR functions and the HR practices that support employees through wider changes in their work. Figure 2 makes a potentially useful distinction between technological innovation and organizational practices, but the text often combines them. Please define what makes a practice part of HR 5.0 and explain how the concept extends existing accounts of digital HRM, employee participation, and work redesign. The observation that technology can create both demands and resources provides a good starting point. The distinctive contribution would be to specify when and through which mechanisms a tool creates each, and what HR practices can change those conditions.
- The definition of cognitive balance also needs tightening. In Section 6, it encompasses manageable cognitive demands, psychological health, work–life equilibrium, and mental resilience. Several of these concepts then reappear as outcomes the model seeks to explain. This overlap makes it difficult to tell what a test of the model would establish. Please define cognitive balance more narrowly, distinguish it from cognitive load, technostress, and well-being, and indicate how it could be observed or measured. Cognitive Load Theory could then explain a specific process, such as how recurring system failures create avoidable mental effort during a task, while JD-R explains how sustained demands and available job resources relate to longer-term strain and motivation.
- Section 3.3 is titled "The Ubuntu Philosophy as a Cultural Intermediary," but its text largely repeats the preceding discussion of Cognitive Load Theory. This leaves a central contribution underdeveloped. Please provide a substantive account of Ubuntu, engage with relevant scholarship, and explain how its emphasis on reciprocity and collective responsibility changes the proposed response to technological disruption. For example, if reciprocal mentoring is the mechanism, explain what makes it Ubuntu-informed, which employees participate, and how it is expected to affect learning or strain. Please also distinguish evidence for such a mechanism from the manuscript's proposal to apply it in this setting.
- Figure 2 and the accompanying text would benefit from a clearer account of which variables act at which level and how they are expected to relate. The text emphasizes a sequence from HR practices through adaptability and cognitive balance to outcomes, while the figure depicts paths from HR practices to both adaptability and cognitive balance. The manuscript also describes Ubuntu variously as an intermediary, a resource, and a buffer. Each role implies a different claim. For example, peer support could buffer the relationship between system disruptions and strain, or participatory implementation could increase peer support, which then improves adaptability. Please identify the pathways essential to the model, justify their ordering, and label those that remain to be tested. It would also help to distinguish employee outcomes such as burnout or engagement from

organizational outcomes such as productivity or retention, and to explain how changes at one level are expected to affect the other.

Minor concerns

- Please use consistent terminology. Please standardize cognitive balance, cognitive equilibrium, and cognitive harmony unless these terms denote different constructs. The same applies to workforce adaptability and workforce flexibility, which may imply different outcomes.
- Check citations against the claims they accompany. Insight 3 cites reference 17, a paper on cognitive load, in the discussion of Ubuntu. References 5 and 33 appear to refer to the same World Bank country diagnostic, and references 10 and 37 share a DOI. Please check these entries and ensure that duplicate citations do not obscure the count of included sources.
- Improve the presentation. Please correct “PRSIMA” in the Figure 1 caption, check the section numbering, and replace references to the “chapter” with wording appropriate to a journal article. The introduction, synthesis, and conclusion repeat several points about infrastructure and skills. Condensing those passages would make room for the evidence and theoretical development requested above.

Recommended decision “Major Revision”: The manuscript has a potentially valuable contribution in explaining how infrastructure and workplace support shape the human consequences of digital transformation. The priority is to reconcile the review record and establish what evidence supports the Zimbabwe-focused conclusions. A revised model should then show how that evidence informs distinct, clearly specified pathways involving HR practices, adaptability, cognitive demands, and well-being.

Declarations

Potential competing interests: No potential competing interests to declare.