

Strategic Organizations' Sustainability, E-Business Innovation and E-HRM in the Age of Disruption: A Cultural Agency Theory Approach

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Abstract

Purpose: This paper aims to develop a conceptual framework integrating three key concepts- sustainability, e-business innovation, and e-HRM with Cultural Agency Theory (CAT). The framework demonstrates how organizations can align these concepts within their cultural, strategic, and operative systems to thrive in digital disruption.

Design/Methodology/Approach: This conceptual study synthesizes CAT principles and contemporary research on sustainability, e-business innovation, and e-HRM. The analysis incorporates empirical findings from recent studies (2024-2025) and case examples across diverse organizational contexts to validate the proposed framework.

Findings: Achieving strategic alignment within the Cultural Agency Theory-grounded conceptual framework of any organization and three concepts of testable propositions, sustainability, e-business innovation, and e-HRM, are presented as a continuous, adaptive, self-reflection and self-development process and dynamic. Success centers on an organization's ability to cultivate adaptability within its cultural system, maintain strategic coherence within its strategic system, and ensure agility in operative systems in response to disruptively dynamic environments.

Practical Implications: The CAT-informed framework for organizations to strategically integrate sustainability, e-business innovation, and e-HRM, driven by cultural adaptability, strategic coherence, and operational agility, offers a pathway to survive and thrive amidst ongoing digital disruption. It emphasizes the importance of leaders in aligning these crucial functions within their unique cultural context for enhanced resilience and competitive advantage in the global market.

Originality/Value: This paper provides a fresh perspective by integrating Cultural Agency theory with strategic alignment, delivering a valuable framework for understanding and improving organizations' sustainability amidst disruption – something missing in current research.

Keywords: Cultural Agency Theory-Grounded Conceptual Framework; Cultural System; Strategic System; Operative System; Sustainability; E-Business Innovation; E-Human Resource Management

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1. Introduction

Digital transformation, powered by AI, IoT, and data analytics, shifts from mere survival to a driver of sustainable growth and competitiveness, as demonstrated by successful disruptors such as Amazon, Starbucks, and GE (Athreya, Ramya, & Azhar, 2025; Taherdoost, H., Drazenovic, G., Madanchian, M., Khan, I. U., & Arshi, O. (Eds.), 2024), a strong foundation in business administration, vital for superior performance across operative, strategic, and cultural levels. In the disruptive digital age, strategic organizations are proactively intertwining sustainability, e-business innovation, and e-HRM, framed by Cultural Agency Theory. This integrated approach leverages digital transformation to drive sustainable performance and competitive advantage through agile e-business innovation strategies, while e-HRM fosters organizational resilience and talent adaptability. Ultimately, success hinges on cultivating a culture focusing on sustainability where human agency strategically shapes technology adoption to fuel continuous innovation and long-term viability (Alcayaga, A., & Hansen, E. G., 2025; Huang, J., & Zhou, P., 2025). Cultural Agency Theory (Yolles, 2016, cited in U-tantada, 2018) provides a valuable lens for understanding strategic organizational dynamics, focusing on the interplay of three key systems: cultural, strategic, and operative systems. It is a philosophical framework that proposes information as the fundamental substance of reality, offering a unified view of physical systems, consciousness, and complexity through informational dynamics (Yolles, M. I., 2025). How can these systems align and enable organizations to sustain competitiveness and achieve long-term performance in today's disruptive and digital business landscape? Empirical studies increasingly demonstrate that organizations strategically aligning these systems are better positioned to navigate change and secure sustainable success. However, current research lacks a new perspective integrating Cultural Agency Theory with strategic alignment to offer a robust framework for understanding and enhancing organizational sustainability amidst disruption. The framework represents a significant gap in the literature, particularly the need for more empirical studies to directly examine the complicated relationships between sustainability, e-business innovation, and e-HRM.

Sustainability is a crucial strategic issue for all organizations; a key challenge is that many organizations view sustainability as a cost rather than a benefit, hindering its integration into their cultural system. However, sustainability offers a competitive advantage in line with the Sustainable Development Goals (SDGs). The Brundtland Report (1987) stated that "sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, S. W. S., 1987). The 2030 Agenda for 17 Sustainable Development Goals provides a framework

for achieving sustainability. Sustainability involves (1) economic dimension, fostering inclusive and sustainable economic growth, decent work, and responsible consumption and production; (2) social dimension, promoting equity, justice, education, health, and well-being for all; and (3) environmental dimension: protecting natural resources, combating climate change, and preserving biodiversity (UN-DESA, 2015). Shifting consumer preferences towards environmentally friendly, hygienic, and socially responsible products and services drives the need for sustainable development practices. Adopting sustainability in the cultural systems of organizations can improve corporate reputation, brand image, financial value, and competitiveness (Supramono, S., Damayanti, T. W., & Adhitya, D., 2025; VK, R. K., Saunila, M., Rantala, T., & Ukko, J., 2025). Thus, if sustainability in the cultural system, as the foundation of values, is embedded within these core values (e.g., a belief in environmental responsibility, a norm of ethical resource use), it becomes a fundamental part of the organization's identity (Martin, A. et al., 2024). It influences factors of capability intelligence, transferred into e-innovation, which is located in the "strategic system" directly linked to attributes in the "cultural system." Thus, the value of sustainability from the cultural system directly influences the strategic goals related to e-innovation.

E-business innovation within an organization's strategic system, which combines goals, strategies, and how it aims to compete, is influenced by sustainability and overall vision linked to all attributes in the operative system, where the organization's work gets done. E-innovation in the strategic system within the context of the Cultural Agency Theory can be combined into organizations' goals to balance creativity and automation, data quality, bias, interdisciplinary collaboration, and change management. It links AI to influencing firm innovation and creativity (Hardjono, R. K., 2025). It results in product and service innovation, operational efficiency, decision-making enhancement, and customer experience rationalization, changing significantly in the digital ecosystem and the corresponding need for organizations to integrate dynamic capabilities into their operational models within organizations' operative systems. Machucho, R. & Ortiz, D. (2025) study revealed that AI could efficiently facilitate unprecedented computerization, predictive capabilities, and rationalization, which catalyze innovation across various business functions. However, successful AI implementation necessitates addressing significant technical, organizational, and ethical hurdles to navigate the complexities of AI-driven business transformation and to highlight opportunities for effective AI adoption strategies. These influence consumer behaviors on e-commerce strategies, digital marketing on brand positioning, and the critical role of trust and value co-creation in online transactions. There are challenges in implementing digital strategies in emerging markets, where cultural, strategic, and operative issues are major concerns. A distinct vision for successful e-business transformation within organizations' cultural systems, employee engagement in operative systems, successful change management strategies, cybersecurity issues, and comprehensive security frameworks to protect digital assets within strategic systems is a key success element (De Silva, C. S. B., & Taherdoost, H., 2025). As supportive empirical studies worldwide that contribute to our understanding of these e-innovation and sustainability concepts, e-business innovation is making a positive impact on sustainability (economic, social, and environmental development) and creating added value for social, environmental, and economic aspects, determined by an innovative approach enhancing environmental security, responding to societal

expectations, aiming to maximize the economic impact on activities (Chomać-Pierzecka, E., 2025). Also, green finance drives renewable energy technological innovation by easing financing limitations and promoting the green transformation of industrial sectors (Shi, X., & Shi, D., 2025). Innovation in driving e-commerce expansion, a key driver of sustainable economic growth in various EU member states, supported its hypothesis that higher innovation levels lead to a greater tendency for online purchases, using the Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS) methodology (Roszko-Wójtowicz, E., Deep Sharma, G., Dańska-Borsiak, B., & Grzelak, M. M., 2024). Finally, an empirical study of 142 large- and medium-sized industrial companies through structural equation modeling (PLS-SEM) provided empirical evidence of the skills, processes, and routines (dynamic capabilities) that improve e-business innovations that support the pillars of sustainability (Zaluski, F. C., Welter, C. V. D. N., Turcato, J. C., Gomes, C. M., Moura, G. L., Bichueti, R. S., & Damke, L. I., 2024).

Moreover, there is a growing interest in AI-driven HRIS (Human Resource Information Systems), which can enhance traditional HRM functions such as recruitment, HR planning, performance evaluation, training, and development (Benabou, A., & Touhami, F., 2025), acknowledged for their positive contributions to HR service quality. However, many organizations rarely leverage e-HRM to enhance HR functions' improvement, satisfaction, and performance, some visionary organizations' operative systems adopt a clear strategy for e-HRM implementation, involving employees and providing necessary support and pieces of training (Amour, A., & Benyoucef, A., 2025; Benabou, A., & Touhami, F., 2025; Shahreki, J., Chin, A. L. L., Ghanad, A., Gowindasamy, M., & E-Vahdati, S., 2024; Sharma, C., Ahmad, S., Kumar, S., Kumari, N., & Ahmad, R., 2025; Waseem, S. N., Amsaal, W., & Shaikh, O. A., 2025). In addition, 246 employees in organizations analyzed by SPSS and AMOS software revealed a significant positive relationship between adopting E-HRM, green HRM practices, and environmental sustainability, indicating that E-HRM serves as a critical facilitator in promoting eco-friendly initiatives within organizations, which strengthens their commitment to sustainability and improve their overall environmental performance, studied by Sharma, C. et al. (2025). As revealed by a supportive research, organizational agility can boost efficiency, reduce waste, and promote sustainability. It analyzed 200 questionnaires using SmartPLS software and found that e-HRM had a positive but slight effect on sustainability performance; it significantly increased labor productivity (Sentoso, A. Junestin, J. & Nelson, A., 2024).

Organizations risk stagnation and failure to achieve lasting improvements without a solid framework. Embedding sustainability fuels e-innovation for a powerful engine for achieving their goals. To maximize this synergy, organizations should continuously refine their e-business innovation strategies and e-HRM practices. To fill the gap, the paper proposes a conceptual framework; it emphasizes the need for future research to validate this framework empirically across various global contexts. The current review primarily synthesizes existing literature and theoretical perspectives, highlighting a gap in empirical studies that can directly test the relationships between sustainability, e-business innovation, and e-HRM within the CAT framework. This paper aims to develop a conceptual framework integrating three key concepts—sustainability, e-business innovation, and e-HRM with the CAT. The framework demonstrates how organizations can align these concepts within their cultural, strategic, and operative systems to thrive in an

era of disruption and digitization. It emphasizes the importance of testable proposition concepts aligning with cultural, strategic, and operative systems and dynamics of the CAT interacting with its environment competitive, disruptive, and digital environments. It is designed to offer a self-reflection of proposed testable proposition concepts within the proposed CAT-grounded conceptual framework, which can be generalized to broader literature and future research. This paper also attempts to answer a question: "How do testable proposition concepts: sustainability, e-BI, and e-HRM from broad literature and empirical studies applied in the CAT-grounded conceptual framework work?"

Following the introduction, section 2 overviews the general literature on the CAT and its three testable propositions: sustainability, e-business innovation, and e-human resource management at the intersection of digital, disruptive, and the Sustainable Development Goals environment, as a background; then, section 3 describes how a brief overview of proposed organizations' conceptual framework within this theoretical framework, the CAT; and finally, section 4 offers a discussion and concludes the paper.

2. Literature review

A comprehensive conceptual framework development grounded by the CAT, proposed for private or state agencies, decision-policymakers, scholars, and technology providers is essential for maximizing the potential of sustainable agencies worldwide. By embracing disruptive sustainability and digital transformation, organizations can drive dynamically on their proposition concepts within cultural, strategic, and operative systems to enhance innovation and resilience in a disruptive global market in the age of the digital era. For example, the world's top-five startups and cosmetics companies staying agile and adapting to these evolving trends and consumer values (e.g., transparency, safety, and eco-conscious practices) in the digital transformation era ensure continued success and relevance in the rapidly changing beauty landscape (Park, Y. W., & Hong, P., 2024). They create value by considering social, environmental, and economic factors depending on innovative approaches, investing more in innovation to achieve better sustainability results, and spending on innovative solutions, especially product innovation, to better meet market demands (Chomać-Pierzecka, E., 2025).

2.1 Cultural Agency Theory (CAT) by Yolles, M. 2016, is a modeling theory used to represent complex, adaptable viable systems. CAT is a cybernetic living system paradigm that models complex adaptive systems focusing on sociocultural dimensions (Yolles, M., 2016, as cited in U-tantada, S., 2018). It consists of a self-evident substructure of cybernetic principles associated with autonomous "living" systems, culturally based social systems to be used to explore different aspects of organizational dynamics, focusing on cultural, strategic, and operative attributes (e.g., Rautakivi, T., & Yolles, M., U-tantada, S., 2018; U-tantada, S., Yolles, M., Mujtaba, B. G., & Shoosanuk, A. 2019). CAT (Yolles, M., 2016) can be used to model all organizations aimed to explore both their internal and external dynamics as a diagnostic tool for locating organizations' sub-structural unhealthiness or attributes that include a capacity for sustainability and adaptability in their systems while interacting with environments which are determined by organizations' external, internal attributes and limitations that can drive organization persistence. So, any durable organization should be

seen as a cultural entity, enabling the use of the Cultural Agency Theory (Yolles, M. 1999; 2006; 2016; U-tantada et al., 2019) as follows:

2.1.1 A cultural system: its key elements include the shared values, beliefs, and norms (Yolles, M. 2016) that influence decision-making and the organization's capacity to adapt. Empirical evidence suggests that organizations with these cultural attributes demonstrate enhanced strategic responsiveness, and adaptive organizational cultures consistently predict success in disruptive environments.

2.1.2 A strategic system is concerned with cognitive attributes, e.g., attitude, ideologies, goals, strategies, ethics, and self-image (Yolles, M., 2016) of any stable organizations as studied in U-tantada, S. (2018) and U-tantada, et al. (2019) 's research works. Its processes and dynamics provide direction and purpose for its operative system. Organizations' operative system must align their strategic intent with capabilities and agile methodologies to maintain competitiveness.

2.1.3 An operational system is any durable organization's structure and operations concerned with social structures and their potential for behavior, operational performance, self-organization, and a specific interactive function. Execution information directs structuring through decision role specifications, related operative activities, and any decision-related rules, goals, strategies, and testable proposition concepts are required to guide operative processes within its environment (Yolles, M. 2006; 2016).

This comprehensive conceptual framework development is grounded by CAT and supported by recent empirical studies to confirm that operational efficiency and agility are critical determinants of organizational performance (VK, et. al., 2025). In summary, operational excellence requires (1) flexible implementation, adapting operational processes to fit local cultural contexts while maintaining efficiency; (2) appropriate technology integration: selecting and implementing technologies that complement local workforce capabilities; and (3) cross-cultural process optimization; designing processes that work effectively across different cultural settings.

2.2 Sustainability, the achievement of economic, social, and environmental goals in a balanced and integrated manner, which is in line with the Sustainable Development Goals (SDGs), shifting consumer preferences towards environmentally friendly, hygienic, and socially responsible products/services are driving the need for sustainable practices. Adopting sustainability in the cultural systems of organizations can improve corporate reputation, brand image, financial value, and competitiveness. Following, the empirical study of Supramono, et al. (2025) found that the dynamic capabilities, financial behavior, and speed of performance recovery are determinants of business sustainability. These findings highlight the importance of MSME actors in continuing to monitor the dynamics of their environment and respond to them with products and services that meet the demands to achieve the long-term sustainability of medium-sized business performance. Also, VK et al.'s (2025) study revealed that smart technologies significantly enhance business sustainability, positively affecting environmental sustainability. The implications extend to the necessity of a strategic, holistic approach to sustainability in organizations, emphasizing the intricate roles played by smart technologies.

2.3 E-Business Innovation (EBI), the significant changes in the digital ecosystem, and the corresponding need for businesses to integrate dynamic capabilities into their operational models. These influence

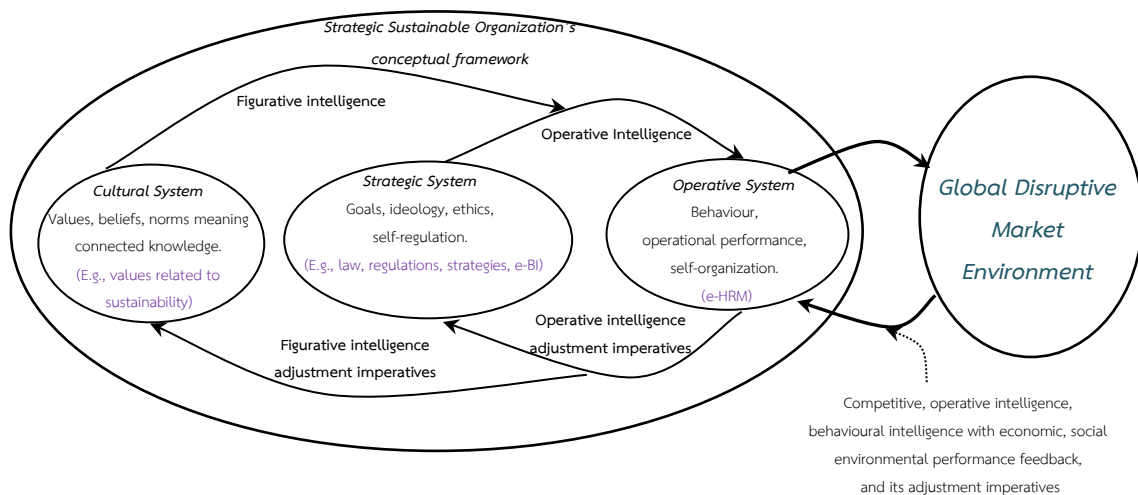
consumer behaviors on e-commerce strategies, digital marketing on brand positioning, and the critical role of trust and value co-creation in online transactions. There are challenges in implementing digital strategies in emerging markets, where cultural and infrastructural issues are major concerns. Strong leadership and a distinct vision for successful e-business transformation within organizations' cultural systems, employee engagement in operative systems, successful change management strategies, cybersecurity issues, and comprehensive security frameworks to protect digital assets within strategic systems are key success elements. Organizational objectives and customer expectations are aligned with technological initiatives, and data analytics can enhance competitive positioning and strategic decision-making (De Silva, C. S. B., & Taherdoost, H., 2025). Acting as a strategic method for upgrading business operations is made in e-business dynamics, a strategic gap due to the rapid advancement of technology and rising digital expectations of consumers, so data-based agile strategies for maintaining competitive positions, data protection regulations, and friendly innovation frameworks are needed to be created by policy directors (Naaman, D. W., Ahmed, B. T., & Zeebaree, S. R., 2025). Many empirical studies have shown some implications for business managers, governments, policymakers, and academics, such as e-business innovation (e-BI), a pivotal factor for foundations to compete in the digital age. With the adoption of advanced e-business platforms, digital marketing strategies, novel approaches, and customer engagement, e-BI is a one-size-fits-all concept. It also enhances organizations' operational efficiency, market reach, and customer engagement and drives competitive advantage (Changalima, I. A., Ismail, I. J., & Amani, D., 2025).

2.4 Electronic-Human Resource Management (E-HRM). Due to organizations' complex nature and continuous advancements in information technology driving their performances, e-HRM within organizations' operative systems is a significant evolution in HRM, as it has strategic advantages and transformation potential. Implementing challenges, ethical implications, and understanding the interplay between technology, organization, and people to fully realize e-HRM's benefits, such as real-time communication, seamless collaboration, and data-driven decision-making, are essential for managing geographically dispersed teams and fast-paced market dynamics in highly competitive and disruptive environments. Ultimately, e-HRM tools are an effective solution for digital transformation in human resources, accelerating HR processes, fostering organizational innovation, and creating flexible work environments to meet the needs of contemporary organizations globally (Sheikholeslami Kandelousi, N., 2025). Awadh Aljuaid, A. (2025) study found that e-HRM can enhance HR functions, drive firm performance, and foster employee work engagement within the logistics industry. El Saeed, M., Maarouf, H. M., & Younis, R. A. A. (2025)'s empirical study revealed that e-HRM has a direct, significant, and positive impact on perceived job performance and organizational performance. Thus, e-HRM systems should be implemented to support organizational workflow and allow employees to do a variety of tasks more efficiently to enhance job and organizational performance through improved higher-quality HRM services quality as an empirical study by Shahreki, J., Chin, A. L. L., Ghanad, A., Gowindasamy, M., & E-Vahdati, S. (2024). Also, the effective use of e-HRM contributes significantly to the perceived improvement in the efficiency of human resources management processes within organizations in the context of Moroccan concerning resistance to change and cultural adaptation, which may hinder this digital transformation (Abdallaoui, I., & Elkharraz, A., 2025). Moreover, the

process of using AI to reshape HRM to be more efficient, accurate, ethical, strategic, and innovative practices, e-HRM is the essential digital infrastructure that enables the integration of AI in e-HRM systems (Benabou, A., & Touhami, F., 2025) within organizations worldwide.

3. Design/Methodology/Approach

This study combines conceptual analysis with practical applications, synthesizing insights from the theory of cultural agency and three testable proposition concepts: sustainability within the cultural system, e-business innovation in the strategic system, and e-HRM in the operative system. The superstructure framework is illustrated with case examples from diverse geographical and organizational contexts, demonstrating CAT's applicability across cultural boundaries and organizational types (U-tantada, 2018; U-tantada, S, Yolles, M., Shoosanuk, A., & Mujtaba, B. G., 2020; U-tantada, S., Yolles, M., & Mujtaba, B. G., 2019; U-tantada, S., Yolles, M., Mujtaba, B. G., & Shoosanuk, A. 2019, U-tantada, S., Yolles, M., Mujtaba, B. G., Shoosanuk, A., & Rautakivi, T. 2019;). Proof readings by Prof.Dr. Maurice Yolles, there are sub-structural (generic model of CAT by Yolles, M., 1999; 2006; 2017); sub-structural (generic model of CAT for the context of any durable organization in the intersection of digital, disruptive, and the Sustainable Development Goals environment; and super-structural details built into the CAT model showing the dynamics of organizational attributes by Siribuppa U-tantada. The following figure is a strategic sustainable organization's conceptual framework, developed from the Cultural Agency Theory (Yolles, M., 2016; Yolles, M. I., 2025), created by Siribuppa U-tantada.



The above model is a qualitative model to explore how three testable proposition concepts: sustainability within the cultural system, e-business innovation in the strategic system, and e-HRM in the operative system work within the CAT-grounded organization aimed in line with the track of the sustainable development goals. The three-system generic model of CAT-grounded organization presents the relationship between self-processes and self-dynamics. It includes its three proposition concepts that interact within the global disruptive environment. At the same time, co-value creations arise for the organization, employees, stakeholders, etc. The three-system generic model of any durable organization

called "strategic sustainable organization, the cultural agency" explains the relationship between powerful dynamic self-processes for co-value creations in its global disruptive market environment. When interacting in its environment for survival, these are linked together by a reflection cycle of dynamic intelligence networks of processes, called "figurative intelligence" and "operative intelligence," These are linked together.

Since sustainability and other attributes, e.g., beliefs, values, and norms connected to global knowledge in the cultural system as the foundation of values, are embedded within these core values (e.g., a belief in economic, social, and environmental responsibilities, a norm of ethical resource use), it becomes a fundamental part of the organization's identity. These influence factors of capability intelligence transferred into e-innovation, e.g., the cultural system values economic, social, and environmental protection, and the strategic system might prioritize e-innovation that reduces waste, minimizes carbon footprint, or promotes circular economy models. Also, its organizational strategic attributes, e.g., goals, ideology, ethics, and self-regulation, are located in the "strategic system" directly linked to the "cultural system." In summary, sustainability values act as guiding principles for e-innovation strategies. They shape the criteria for evaluating and selecting e-innovation projects that are not pursued for their own sake but contribute to the organization's broader sustainability objectives that yield sustainable benefits over the long run.

The strategic system defines an organization's goals, strategies, ideology, ethics, self-regulation, and how it aims to compete. E-innovation strategies are formulated here, outlining how the organization will use digital technologies to innovate its products/services, processes, organization, and marketing (Mortensen, P. S., Bloch, C. W., & Core group on the revision, 2005). This system is influenced by factors like marketing orientation, technological advancements, and the organization's overall values. The operative system is where the organization's work gets done, which includes the structures, processes, and people that carry out the organization's activities. The last proposition concept is E-HRM, which uses digital technologies in HR functions and is implemented within this operative system. E-HRM can transform how HR manages recruitment, training, performance, communication, employee engagement, etc. So, it can be integrated into behavior, operational performance, and self-organization as a behavioral operationalization reflecting activities and potentials for behaviors in the operative system of the strategic sustainable organization to determine 'its efficacy' for its capability. E-HRM plays a crucial role in enabling e-innovation strategies (Alqarni, K., Agina, M. F., Khairy, H. A., Al-Romeedy, B. S., Farrag, D. A., & Abdallah, R. M., 2023) developed in the strategic system e.g. the e-innovation strategy involves new ways of working (e.g., agile teams, remote work), e-HRM can provide the tools and policies to support those changes. E-HRM can drive employee adoption and engagement with e-innovation initiatives by communicating the benefits of e-innovation and providing opportunities for employees to contribute. It can also foster a positive attitude towards change. In addition, e-HRM tools facilitate collaboration and knowledge sharing, which is essential for successful innovation (Aldhaen, E. S., 2024). Surprisingly, it can help measure the effectiveness of e-innovation by tracking key metrics such as employee productivity and service quality, innovation output, employee satisfaction, organizational performance, partners, and customers' loyalties. This is why and how

e-innovation in the strategic system connects with e-HRM in the operative system within the context of CAT.

In return, its feedback processes create imperatives for adjustment issues, e.g., its performance feedback, and potential imperatives of these three attributes have arisen from the environment when dealing with its operative system that delivers behavioral potential, power through decisions, empowerment to perform certain types of operative behaviors within the strategic organization and meaningful theme communications. These are disseminated into the strategic system for revising and making it into its new previous ideology, ethics, strategies, goals, imagery, and self-schema on e-business innovation for being connected to new knowledge adjustment of sustainability integrated into values, norms, beliefs, and additional meaning connected to knowledge in "the cultural system" of the strategically sustainable organization. In summary, this framework illustrates how the three testable proposition concepts: sustainability, e-business innovation, and e-HRM, can be effectively and efficiently leveraged to promote sustainability within organizations grounded in the Cultural Agency Theory, operating in a disruptive and digitally globalized market environment.

4. Discussion and Conclusion

This paper synthesizes insights to address a central question: "How do testable propositions: sustainability, e-business innovation, and e-HRM from broad literature and empirical studies applied in CAT-grounded conceptual framework work?" The findings emphasize the robust conceptual foundation, synthesized by CAT principles, current empirical research findings from 2024 to 2025, and case examples on sustainability, e-business innovation, and e-HRM across diverse organizational contexts to validate the proposed framework. This highlights the gap in the literature where more empirical studies are needed to directly test the complex relationships between sustainability, e-business innovation, and e-HRM. It is important to note that while this gap exists, there are supportive empirical studies worldwide that contribute to our understanding of these individual concepts: e-innovation is making a positive impact on sustainability (economic, social, and environmental development) and creating added value for social, environmental and economic aspects, which is determined by an innovative approach enhancing environmental security, responding to societal expectations, aiming to maximize the economic impact on activities (Chomać-Pierzecka, E., 2025). E-business innovation powerfully drives e-commerce growth, a key factor in sustainable economic growth across many EU nations (Roszko-Wójtowicz et al., 2024). Companies with strong organizational skills and processes (dynamic capabilities) are better at creating eco-friendly innovations (Zaluski et al., 2024); aligning with E-HRM plays a vital role in encouraging green initiatives within organizations, boosting their dedication to sustainable results (Sharma et al., 2025). The strategic conceptual foundation is a continuous adaptation, self-reflection, and self-development process. Success for any organization hinges on its ability to cultivate cultural adaptability, maintain strategic coherence, and ensure operational agility in response to disruptively dynamic environments (U-tantada, S. 2018; U-tantada et al., 2020; U-tantada et al., 2019a; U-tantada et al., 2019b, U-tantada et al., 2019c; Yolles, M., 1999; 2006; 2017).

The Cultural Agency Theory-grounded conceptual framework offers valuable insights applicable across diverse global contexts. Organizations that thrive in disruptive environments cultivate a culture embracing adaptability, characterized by cultural resilience, strong leadership vision, and a commitment to organizational learning, which enhances strategic responsiveness. Strategic foresight and scenario planning are crucial for anticipating and responding to market shifts, demanding alignment of strategic intent with digital capabilities and agile methodologies. Effective strategies include contextual scenario planning, balanced digital integration, and adaptive strategic frameworks accommodating different cultural contexts. Operationally, flexibility, technological integration, and process optimization are essential for effective strategy execution, with automation, data-driven decision-making, and workforce adaptation defining operational excellence.

Integrating sustainability, e-business innovation, and e-HRM is pivotal for global organizations seeking competitive advantage and enhanced reputation while contributing to global sustainable development goals. E-business innovation, driven by technological advancements and consumer digital expectations, necessitates data-based agile strategies, robust data protection, and innovation-friendly frameworks. E-HRM, leveraging AI-driven HRIS, enhances HR functions, drives firm performance, and fosters employee engagement, requiring a clear implementation strategy with employee involvement, support, and training.

This study offers a pragmatic guide for leaders and policymakers globally to cultivate adaptive cultures, enhance strategic decision-making, and optimize operational agility, enabling organizations to achieve sustained competitive advantage in volatile markets. Leaders and policymakers can navigate the complexities of digital disruption and sustainability to foster resilience and drive long-term performance (Huang, J., & Zhou, P., 2025). Cultural Agency Theory's framework and actionable insights are globally applicable for (1) modeling complex adaptive systems, (2) understanding sociocultural dimensions, (3) diagnosing and problem-solving, (4) enhancing viability and adaptation, and (5) informing strategic development across diverse organizations and market conditions (U-tantada, S. 2018; Yolles, M., 1999; 2006; 2016).

In conclusion, this paper contributes to strategic management literature by linking Cultural Agency Theory with organizational alignment, emphasizing culture, strategic and employee empowerment in organizational behavior by empowering employees as cultural agents to drive e-innovation as additional strategy and sustainability added into its values and norms to shape e-HRM implementation in providing a novel perspective on navigating competitive, disruptive, and digital environments. While this study provides a robust conceptual foundation, future research should empirically validate the framework across broader global contexts and explore the role of specific cultural dimensions in shaping e-business innovation and e-HRM adoption effectiveness. Ultimately, this paper offers a valuable framework for organizations worldwide seeking to thrive in the digital age and achieve sustainable success by integrating the Cultural Agency Theory with sustainability, e-business innovation, and e-HRM. Discover how empowering human agency within the culture can redefine digital transformation, build an adaptive workforce, and unlock lasting sustainable growth. It's more than strategy it's the blueprint for revolutionary resilience. In addition,

aligning digital transformation with sustainable goals, fostering green knowledge acquisition, and driving innovation performance are critical, particularly under strong digital transformational leadership. Including, AI can boost managerial efficiency and be advocated for interdisciplinary collaboration, ethical AI frameworks, and empirical validation of AI's strategic value (Er-Rays, Y., El Mir, I., Ait-Lemqeddem, H., El Moutaqi, B., & Ezzahir, M., 2025). This paper acts as a unique conceptual framework for navigating complex ecological and economic challenges, offering a duality of academic advancement and practical implementation strategies (Asbeetah, Z.; Alzubi, A.; Khadem, A.; Iyiola, K. (2025) for understanding and advancing sustainable organizations globally, bridging theoretical insights with practical strategies for thriving in today's dynamic environment worldwide.

References

- Abdallaoui, I., & Elkharraz, A. (2025). E-HRM adoption in Moroccan companies: Determinants, challenges, and perspectives. *Journal of Economics, Finance and Management (JEFM)*, 4(2), 158-167.
- Alcayaga, A., & Hansen, E. G. (2025). Smart circular economy as a service business model: An activity system framework and research agenda. *R&D Management*, 55(2), 508-530.
- Aldhaen, E. S. (2024). *Business Sustainability with Artificial Intelligence (AI): Challenges and Opportunities: Volume 2*. Cham: Springer
- Alqarni, K., Agina, M. F., Khairy, H. A., Al-Romeedy, B. S., Farrag, D. A., & Abdallah, R. M. (2023). The effect of electronic human resource management systems on sustainable competitive advantages: The roles of sustainable innovation and organizational agility. *Sustainability*, 15(23), 1-20.
- Amour, A., & Benyoucef, A. (2025). The impact of the e-HRM on job satisfaction-the case of some organizations of WEST ALGERIA. 394-379 , (1)11 , *الريادة لاقتصاديات الأعمال*.
- Asbeetah, Z., Alzubi, A., Khadem, A., Iyiola, K. (2025). Harnessing digital transformation for sustainable performance: exploring the mediating roles of green knowledge acquisition and innovation performance under digital transformational leadership. *Sustainability*, 17(5), 1-32.
- Athreya, S., Ramya, G., & Azhar, M. (2025). Business transformation in the era of digital disruption: Potential challenges and disruptive trends. In *Business Transformation in the Era of Digital Disruption* (pp. 1-28). IGI Global.
- Awadh Aljuaid, A. (2025). Achieving logistics firm performance through high-performance work system (HPWS) and e-HRM capabilities: The moderating role of digital talent acquisition. *SAGE Open*, 15(1), 1-13.
- Benabou, A., & Touhami, F. (2025). Empowering human resource management through artificial intelligence: A systematic literature review and bibliometric analysis. *International Journal of Production Management and Engineering*, 13(1), 59-76.
- Changalima, I. A., Ismail, I. J., & Amani, D. (2025). Driving SME performance through technological absorptive capacity and e-business innovation. *Sustainable Technology and Entrepreneurship*, 4(1), 1-10.
- Chomać-Pierzecka, E. (2025). Innovation as an attribute of the sustainable development of pharmaceutical companies. *Sustainability*, 17(6), 1-20.

- De Silva, C. S. B., & Taherdoost, H. (2025). E-Business: Strategic approaches to e-business transformation. In *Mastering Innovation in Business* (pp. 1-20). IGI Global.
- El Saeed, M., Maarouf, H. M., & Younis, R. A. A. (2025). The role of HRM-service quality in the relationship between electronic human resource management and perceived performance. *Future Business Journal*, 11(1), 1-13.
- Er-Rays, Y., El Mir, I., Ait-Lemqeddem, H., El Moutaqi, B., & Ezzahir, M. (2025). Artificial intelligence in top management: A bibliometric performance analysis. *Revue Française d'Economie et de Gestion*, 6(6), 1-28.
- Hardjono, R. K. (2025). The role of artificial Intelligence in enhancing business innovation and creativity in the cosmetics industry of Dubai. *Journal Business Administration: Entrepreneurship and Creative Industry*, 4(1), 1-21.
- Huang, J., & Zhou, P. (2025). Open innovation and entrepreneurship: A review from the perspective of sustainable business models. *Sustainability*, 17(3), 1-11.
- Machucho, R., & Ortiz, D. (2025). The impact of artificial intelligence on business innovation: A review. *Preprints.org*, 1-30, doi: 10.20944/preprints202502.1465.v1
- Martin, A., Balvanera, P., Raymond, C. M., Gómez-Baggethun, E., Eser, U., Gould, R. K., Guibrunet, L., Harmáčková, Z. V., Horcea-Milcu, A. I., Koessler, A., Kumar, Ritesh, L., Dominic, M., Juliana, N., Agatha, O., Patrick J., Pascual, U., Rode, J., Yoshida, Y. & Zafra-Calvo, N. (2024). Sustainability-aligned values: Exploring the concept, evidence, and practice. *Ecology and Society*, 29(4). 1-18
- Mortensen, P. S., Bloch, C. W., & Core group on the revision (2005). *Oslo Manual - Guidelines for Collecting and Interpreting Innovation Data*, 3rd edition: Proposed Guidelines for Collecting and Interpreting Innovation Data. Organization for Economic Cooperation and Development, OECD, 1-163.
- Naaman, D. W., Ahmed, B. T., & Zeebaree, S. R. (2025). E-business and digital marketing strategies: Innovations, challenges, and emerging trends. *Asian Journal of Research in Computer Science*, 18 (4), 136-153.
- Park, Y. W., & Hong, P. (2024). Beauty reloaded: Top cosmetic trends shaping the digital age and beyond. In P. Hong (Ed.), *Cosmetics marketing strategy in the era of the digital ecosystem: Revolutionizing beauty in the new market frontier* (pp. 207-224). Springer Nature Singapore. https://doi.org/10.1007/978-981-97-3674-4_12
- Rautakivi, T., & Yolles, M. (2024). Diagnosing complex organizations with diverse cultures-part 2: Application to ASEAN. *Systems*, 12(3), 1-50.
- Roszek-Wójtowicz, E., Deep Sharma, G., Dańska-Borsiak, B., & Grzelak, M. M. (2024). Innovation-driven e-commerce growth in the EU: An empirical study of the propensity for online purchases and sustainable consumption. *Sustainability*, 16(4), 1-25.
- Sentoso, A., Junestin, J., & Nelson, A. (2024). The role of labour productivity in the influence of e-HRM on sustainability performance with organizational agility as a moderating variable in MSMEs. *Almana: Jurnal Manajemen dan Bisnis*, 8(2), 318-332.

- Shahreki, J., Chin, A. L. L., Ghanad, A., Gowindasamy, M., & E-Vahdati, S. (2024). E-HRM delivers better HRM services. *International Journal of Services and Operations Management*, 49(4), 478-500.
- Sharma, C., Ahmad, S., Kumar, S., Kumari, N., & Ahmad, R. (2025). Antecedents of environmental sustainability based on E-HRM approach: An empirical investigation. *Green Technologies and Sustainability*, 3(3), 1-11.
- Sheikholeslami Kandelousi, N. (2025). Examining the impact of electronic human resource management (e-HRM) tools on employee productivity and satisfaction: A systematic approach to identifying challenges and opportunities. Available at SSRN: <http://dx.doi.org/10.2139/ssrn.5098039>.
- Shi, X., & Shi, D. (2025). Impact of green finance on renewable energy technology innovation: Empirical evidence from China. *Sustainability*, 17(5), 1-19.
- Supramono, S., Damayanti, T. W., & Adhitya, D. (2025). Dynamic capabilities and financial behavior to accelerate MSME performance recovery and its impacts on business sustainability. *Journal of Innovation and Entrepreneurship*, 14(1), 1-10.
- Taherdoost, H., Drazenovic, G., Madanchian, M., Khan, I. U., & Arshi, O. (Eds.). (2024). *Business Transformation in the Era of Digital Disruption*. IGI Global.
- UN-DESA (United Nations-Department of Economic and Social Affairs). (2015). Transforming our world: The 2030 agenda for sustainable development. Retrieved from <https://sustainabledevelopment.un.org/post2015>.
- U-tantada, S., Yolles, M., & Mujtaba, B. G. (2019). Strategic SMEs as influential drivers for the market economy: modeling SMEs using Cultural Agency theory. *International Review of Research in Emerging Markets & the Global Economy*, 5(1), 10-28.
- U-tantada, S., Yolles, M., Shoosanuk, A., & Mujtaba, B. G. (2020). Green market orientation and market capability influence on competitiveness and performance of green SME cultural agency. *International Review of Research in Emerging Markets & the Global Economy*, 6(1), 1453-1475.
- U-tantada, S. (2018). Influential driving factors for corporate performance: A case of small and medium enterprises in Thailand. (Doctor of Philosophy in Business Administration, Dissertation). Bangkok: Ramkhamhaeng University (Institute of International Studies).
- U-tantada, S., Mujtaba, B., Yolles, M., & Shoosanuk, A. (2016). Sufficiency economy and sustainability. Proceedings of the 2nd multidisciplinary research and innovation for globally sustainable development (MRIGSD)-Valaya Alongkorn Rajabhat University. *Journal of Thai Interdisciplinary Research*, 2559, 84-94.
- U-tantada, S., Yolles, M., & Mujtaba, B. G. (2019). Strategic SMEs as influential drivers for the market economy: Modeling SMEs using cultural agency theory. *International Review of Research in Emerging Markets & the Global Economy*, 5(1), 1435-1452.
- U-tantada, S., Yolles, M., Mujtaba, B. G., & Shoosanuk, A. (2019). Influential driving factors for corporate performance: a case of small and medium enterprises in Thailand. *Kasem Bundit Journal*, 20 (February), 157-172.

- U-tantada, S., Yolles, M., Mujtaba, B. G., Shoosanuk, A., & Rautakivi, T. (2019). Greenmarket economy and emerging market environment: sustainable adaptive complex systems. *International Review of Research in Emerging Markets and the Global Economy (IRREM)*, 5(1), 1296-1319.
- VK, R. K., Saunila, M., Rantala, T., & Ukko, J. (2025). The interplay between smart technologies, business sustainability, and environmental sustainability: An empirical analysis of SMEs. *Corporate Social Responsibility and Environmental Management*, 32(1), 60–78.
- Waseem, S. N., Amsaal, W., & Shaikh, O. A. (2025). Bridging traditional and digital human resource practices to review the influence of EHRM and organizational performance in the luxury fashion apparel industry in Pakistan. *The Critical Review of Social Sciences Studies*, 3(1), 2923-2942.
- WCED, S. W. S. (1987). World commission on environment and development. *Our Common Future*, 17(1), 1-91.
- Yolles, M. (1999). *Management systems: a viable approach*. London: Financial Times Pitman.
- Yolles, M. (2016). Linking business and financial systems in the market economy: The case of China. *International Journal of Markets and Business Systems*, 2(3), 171-205.
- Yolles, M. (Ed.). (2006). *Organizations as complex systems: An introduction to knowledge cybernetics*. IAP.
- Yolles, M. I. (2025). *Informational Realism: The Fisher Information Field Theory (1.2)*. Zenodo. <https://doi.org/10.5281/zenodo.15502504>
- Yolles, M., & Di Fatta, D. (2017). Antecedents of cultural agency theory: in the footsteps of Schwarz living systems. *Kybernetes*, 46(2), 210-222.
- Zaluski, F. C., Welter, C. V. D. N., Turcato, J. C., Gomes, C. M., Moura, G. L., Bichueti, R. S., & Damke, L. I. (2024). The development of sustainable innovation capability in Brazilian industrial companies. *International Journal of Innovation and Sustainable Development*, 18(4), 404-419.