

Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA)



Editorial

Digital Transitions, Socioeconomic Empowerment, and Knowledge Systems in the Contemporary Technological Landscape

BACKGROUND

The inaugural issue of the Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA) brings together a diverse yet interconnected body of research that reflects Nigeria's ongoing transformation at the intersection of digital innovation, institutional reform, and socio-economic development. It cannot overemphasized that digital transformation and technology adoption remain pivotal drivers of socioeconomic development in emerging economies, influencing productivity, innovation diffusion, and institutional capacity across diverse sectors (Wang & Shao, 2024). To this end, this volume addresses a critical gap in scholarly literature by focusing on the ways in which digital transformation, technology spillovers, organizational learning are shaping performance outcomes across sectors ranging from SMEs and education to hospitality, construction, and human capital management. As Nigeria faces imperative to modernize amid global shifts, these studies provide empirical insights into the drivers and barriers of technological advancement and how they interact with culture, policy, infrastructure, and human development.

OVERVIEW OF THIS INAUGURAL ISSUE

This section summarised the contributions that make up this inaugural issue:

Digital Transformation on Business Performance of SMEs in Ibadan, Oyo State, Nigeria by Ayeni, Erwat, and Oladeji (2025)

In today's competitive business climate, digital transformation is no longer optional for small and medium-sized enterprises (SMEs); it is a strategic

necessity for enhancing efficiency, revenue growth, and customer retention. This study, involving 381 SME managers in Ibadan, Oyo State, assessed the impact of process automation, digital skills and training, and online engagement. Results from hypothesis testing revealed that automation level and digital competencies explained 22.7% of revenue variance (F = 56.943, p < 0.05) and 22.1%of operational efficiency variance (F = 11.156, p =0.031), both statistically significant. Furthermore, online presence and engagement accounted for 41.1% of customer retention variance (F = 9.122, p < 0.001), with a strong positive effect size. These findings confirm that SMEs with automated workflows, digitally skilled staff, and active online communication achieve superior performance The study recommends targeted outcomes. investment in automation tools, structured digital training programs, and sustained online engagement through social media and e-commerce platforms. Strategic adoption of these measures positions SMEs to compete effectively in the digital economy.

Analysis of Technology Spillovers from Multinational Building Construction Firms to Local Artisans: Evidence from Lagos State, Nigeria by Ayeniyo, Oluwale and Olanipekun (2025)

The building construction sector is not merely an industry; it is the backbone of national development, a driver of GDP growth, and a catalyst for cross-sectoral productivity gains in agriculture, manufacturing, and services. In rapidly urbanizing economies such as Nigeria's, and particularly in Lagos State, the dominance of multinational building construction firms

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(MNCCs) in large-scale projects presents a strategic opportunity for accelerating domestic capacity through technology spillovers to local artisans. Yet, without deliberate policy and institutional frameworks, these opportunities risk remaining incidental and unevenly distributed. This study grounded in a survey of 303 artisans across seven purposively selected MNCCs identifies training as the most prevalent transfer mechanism (90.1%), complemented by technical workshops, supervisory engagement, supplier interventions, and financial facilitation for local suppliers. Through factor analysis, five determinants emerged policy, institutional, technical, organizational, and foreign firm presence accounting for 75.4% of observed variance, highlighting the systemic levers that can amplify spillover impact. The evidence makes clear that harnessing MNCC-led skills and technology diffusion is not simply a development option; it is an economic imperative for strengthening Nigeria's human capital base, enhancing industrial competitiveness, and securing long-term construction sector resilience.

Beyond Likes and Shares: The Impact of Social Media on Consumer Behavior, Audience Engagement, and Reputation Management in Hotel Selection and Booking Decisions by Ogoina, Raimi, and Jonathan (2025)

Social media's transformative role in hotel marketing and branding has redefined consumer decision-making, with platforms now serving as primary channels for shaping perceptions, driving engagement, and influencing booking choices. In this Lagos-based study, authors employed a mixedmethod approach, structured questionnaires and interviews with 100 hotel staff, travelers, and marketing professionals across 15 hotels to examine how promotional offers, user reviews, and visual content affect selection and booking decisions. Findings reveal promotional offers exert a 100% influence, underscoring the power of financial incentives, while user reviews (90%) and visual content (80%) highlight the weight of social proof and high-quality imagery in attracting Strategies such customers. as influencer collaborations, user-generated content, live video, and targeted advertising proved universally effective in audience engagement and brand building. A pre- and post-social media comparison showed a shift toward discreet reputation management via direct messaging. The study concludes that hotels must integrate robust, adaptive social media strategies rooted in compelling content, active engagement, and agile conflict resolution to sustain competitiveness and enhance booking rates in a crowded hospitality market.

Organizational Culture and Learning: Fostering Learning in Modern Libraries by Akinola, Omotade, and Okafor (2025)

This study analyzes the relationship between organizational culture and learning in modern libraries, focusing on their impact on innovation performance. The research synthesizes findings from ten key studies (2012-2025) across multiple regions, including Nigeria, China, and the U.S. It identifies cultural factors such as shared values, leadership, and psychological safety as key drivers of effective learning processes. Results indicate that collaborative and innovative cultures improve knowledge acquisition, application, and staff engagement, while hierarchical cultures often hinder adaptability by resisting change. A dynamic systems framework explains how feedback loops between culture and learning produce adaptive outcomes (e.g., agile learning environments) or resistance (e.g., bureaucratic stagnation). Empirical data show that learning-supportive cultures, such as clan and adhocracy models in Sri Lankan and Nigerian libraries, enhance performance metrics like service innovation and operational efficiency. The study recommends actionable strategies for management, including open communication. recognition of learning contributions, and alignment of culture with strategic objectives. The findings demonstrate that a learning-oriented culture is critical for libraries to maintain competitiveness in knowledge-driven environments.

Empowering Women through TVET: Socioeconomic Impact of Female Technical and Vocational Education in Nigeria by Ogidan, Akinfiresoye and Adenekan (2025)

Women are the driving force behind socioeconomic progress, with their multifaceted roles ranging from household management to community leadership holding the key to societal advancement when empowered effectively. Unlocking these potential hinges on providing access to meaningful, skills-oriented education, particularly in the realm of technical and vocational training. Such programs cultivate practical technological expertise, proficiency, professional competence, equipping women to thrive as innovators, entrepreneurs, and active contributors to the modern economy. This study succinctly examines the socio-economic impact of female TVET graduates in Nigeria, drawing on survey data from 118 women across 90 institutions. Findings reveal that 62.7% demonstrated high Practical Skill Acumen (PSA), affirming TVET's role in producing technically competent, job-ready graduates. However, only 38% reported financial empowerment, and negative correlations between PSA and income (-0.18) and academic grades and income (-0.14) highlight persistent structural and market barriers. While **TVET** fosters employability, entrepreneurship, and community impact, systemic challenges limited access to higher-paying roles, weak industry linkages, and insufficient entrepreneurial support hinder full economic realization. This study advocates entrepreneurship embedding in curricula. strengthening industry partnerships, implementing gender-responsive policies, and establishing centres of excellence to bridge education with economic participation.

Digital Literacy and Out-of-School Children in Nigeria by Oloyede (2025)

The persistent challenge of out-of-school children in Nigeria, currently numbering over 18 million, represents a critical threat to the nation's socioeconomic and human capital development. This study delves into the transformative potential of digital literacy in addressing this crisis, with a focus on Egbeda Local Government Area. Surveying 110 respondents, the research identified poverty, parental neglect, gender discrimination, insecurity, and inadequate access to free education as the primary drivers of school dropout. Importantly, 91.8% of participants recognized mobile learning as an effective pathway to improving educational access. The findings highlight the multifaceted benefits of digital literacy, including flexible learning schedules, interactive multimedia content, personalized while and instruction, acknowledging challenges such as infrastructure gaps. The study proposes a dual approach that integrates digital platforms with traditional schooling, emphasizing the scalability of mobile technologies like WhatsApp for education delivery. Strategic investments in digital infrastructure, coupled with coordinated policy reforms, community engagement, and educator training, are recommended to ensure universal access, enhance literacy outcomes, and meaningfully reduce Nigeria's out-of-school population, bridging socioeconomic and educational disparities.

Digital Human Resource Management Transformation in Nigeria: Impacts on Talent, Performance, and Workforce Well-being by Adias (2025)

Digital technologies are revolutionizing human resource management (HRM) globally, offering unprecedented opportunities to enhance talent acquisition, workforce performance, and employee well-being. In Nigeria, however, adoption of digital HR tools remains limited despite growing internet penetration and supportive policies, creating a gap between potential and actual impact. This work demonstrates the transformative benefits of digital HR systems, including artificial intelligence-driven recruitment, HR information systems, e-learning platforms, digital performance management, and HR analytics dashboards. Key findings indicate that AI-enabled recruitment reduced hiring time by 42% and improved hire quality, e-learning tools increased training participation by 25 percentage points while cutting costs by 40%, digital performance management explained 47% performance variance, and HR analytics enhanced employee engagement and reduced absenteeism by 36%. Despite these gains, adoption is hindered by infrastructure gaps, digital illiteracy, and policy inertia. The study underscores the need for immediate digital HR audits, mid-term policy reforms, and long-term investment in analytics infrastructure. Ultimately, integrating digital HRM offers a roadmap for improving organizational efficiency, workforce satisfaction, inclusivity, and resilience.

Evaluation of Facilities Management Competencies and Practices in Public Primary School Buildings, Ondo State, Nigeria by Omojola, Adepoju, and Ojo (2025)

This study examines the impact of facilities management (FM) competencies on FM practices in public primary schools in Ondo State, Nigeria. Using a quantitative design, 484 valid responses from end-users (teachers, administrators) and professionals (facility managers, architects, etc.) were analyzed via Partial Least Squares Structural

Equation Modelling (PLS-SEM). The results showed a significant and positive relationship between FM competencies and practices, with Human Resource Management (HRM) and Work Environment Management (WEM) emerging as the influential factors. HRM, particularly adequate staffing ($\beta = 0.372$), strongly impacted asset management, maintenance, and budget allocation, while WEM ($\beta = 0.361$) significantly enhanced maintenance practices and operational efficiency. Leadership and Organizational Management showed limited direct effects, underscoring the need for context-specific competency frameworks in resource-constrained settings. The study underscores the critical role of personnel and supportive skilled work environments in improving school infrastructure. Recommendations include targeted recruitment. training programs for FM staff, and better tools and safety provisions. Policymakers are urged to integrate FM into broader educational planning to ensure sustainable infrastructure. The findings contribute to the adaptation of global FM local realities, frameworks to emphasizing operational readiness over abstract strategies. Future research should explore longitudinal impacts and expand the model to other regions. This study provides actionable insights for enhancing FM practices in Nigeria's public primary schools, aligning with SDG 4 (Quality Education) and SDG 11 (Sustainable Cities).

Bridging the Digital Divide: Nigeria's Post-Pandemic Shift to Remote and Hybrid Work Models by Adias and Raimi (2025)

Nigeria's post-pandemic shift to remote and hybrid work has revealed both the promise and the limits of digital labour transformation. Hence, this study investigates Nigeria's readiness for remote and hybrid work models post-COVID-19, analyzing trends from 2000-2025. Using a quantitative design, the research synthesizes data from peerreviewed publications, government reports, and organizational datasets to evaluate productivity, digital infrastructure, HRM adaptations, and employee well-being. Key findings indicates that remote work adoption drives measurable productivity gains up to 35% in manufacturing and 20% in service sectors when supported by robust digital infrastructure and managerial oversight. Yet of firms operate fully remotely, only 14% constrained by poor internet connectivity affecting

80% of organizations, low broadband penetration (~55%), and a workforce where 65% lack essential digital skills. Human resource management (HRM) adaptations, including flexible schedules and communication policies, improved project completion (+30%) and retention (+15%), but only 22% firms have formal remote-work of frameworks, leaving many employees under-Employee well-being supported. shows improvement, particularly in work-life balance, yet career progression remains a stronger retention driver than remote flexibility. To scale remote work effectively, policymakers should prioritize broadband expansion, national digital skills formal initiatives. and telework standards. Organizations must integrate remote strategies into HR policies, provide technology and managerial hvbrid-readv support. and foster Coordinated action across government, private sector, and education systems is essential to institutionalize remote work as a vehicle for inclusive economic growth.

CONCLUSION

The findings in this inaugural issue hold practical and policy significance for a wide spectrum of stakeholders navigating Nigeria's development landscape. For policymakers and government agencies, the research underscores the urgent need to align national digital transformation strategies with inclusive socioeconomic policies that promote skills development, workforce well-being, and institutional capacity. Civil society actors and development partners can leverage these insights to design context-specific interventions that address digital exclusion and empower vulnerable populations, particularly women and out-of-school children. For academia and research institutions. issue offers a foundation for further interdisciplinary inquiry that links technological innovation with local realities. stakeholders, including SMEs and multinational firms, will find value in understanding how digital tools, organizational culture, and knowledge systems influence productivity, innovation adoption, and competitive advantage. Collectively, the contributions reinforce the central theme of Digital Transitions, Socioeconomic Empowerment, and Knowledge Systems, offering an integrated view of how technology-driven change can serve as both a catalyst for development and a framework for sustainable, inclusive growth in Nigeria.

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We also gratefully acknowledge the support of our distinguished editorial board, whose guidance has been instrumental throughout the editorial process. Special thanks go to our dedicated reviewers for their thoughtful, timely, and constructive feedback, which ensured the academic quality and integrity of this publication. Your collective efforts have laid a strong foundation for the future of SJTIA.

Notes

Unveiling Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA)

The Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA) proudly launched its maiden edition, marking a significant milestone in the advancement of scholarship and innovation. This journal emerged at a pivotal time when the convergence of technology, information systems, and artificial intelligence is redefining global industries and reshaping academic discourse.

This maiden edition of SJTIA have showcased a rich array of peer-reviewed articles that reflect the journal's commitment to promoting cutting-edge research, theoretical advancements, and practical applications. Contributions from diverse scholars and practitioners delve into pressing topics such as digital transformation in organizations, strategic information management, AI-driven decision-making and the ethical implications of emerging technologies.

This inaugural issue sets the tone for SJTIA's vision to serve as a reputable platform for disseminating knowledge and stimulating dialogue among researchers, technologists, policymakers, and industry leaders. It underscores the journal's goal of fostering a cross-disciplinary approach that

bridges gaps between theory and practice, especially in areas critical to the digital economy.

The editorial board, composed of seasoned academics and industry experts, extends gratitude to all contributors and reviewers who made this edition possible. As SJTIA continues to evolve, it remains dedicated to excellence, innovation, and academic integrity.

The maiden edition of SJTIA is not just a publication it is a launchpad for scholarly engagement and a catalyst for transformative ideas in technology management, information science, and artificial intelligence.

REFERENCE

Adias, L. T. (2025). Digital human resource management transformation in Nigeria: Impacts on talent, performance, and workforce well-being. Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA), 1(1), 75–95. https://doi.org/10.69798/76859601

Adias, L. T. & Raimi, A. G. (2025). Bridging the Digital Divide: Nigeria's Post-Pandemic Shift to Remote and Hybrid Work Models. *Scientific Journal for Technology Management, Information & Artificial Intelligence* (SJTIA), 1(1), 113–134. https://doi.org/10.69798/78110259

Akinola, A. A., Omotade, A. M., & Okafor, D-F. C. (2025). Organizational culture and learning: Fostering learning in modern libraries. *Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA)*, *I*(1), 44–53. https://doi.org/10.69798/76528414

Ayeni, D. O., Erwat, E. A., & Oladeji, T. N. (2025). Digital transformation on business performance of SMEs in Ibadan, Oyo State, Nigeria. Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA), 1(1), 1–14. https://doi.org/10.69798/75450083

Ayeniyo, O., Oluwale, B., & Olanipekun, E. (2025). An analysis of technology spillover from the multinational building construction firms to local artisans: Evidence from Lagos State, Nigeria. *Scientific Journal for Technology Management, Information & Artificial Intelligence* (SJTIA), 1(1), 15–26. https://doi.org/10.69798/75520915

Ogidan, J. A., Akinfiresoye, W. A., & Adenekan, O. A. (2025). Empowering women through TVET: Socioeconomic impact of female technical and vocational education in Nigeria. *Scientific Journal for Technology Management, Information & Artificial Intelligence* (SJTIA), 1(1), 54–60. https://doi.org/10.69798/76730658

Ogoina, H. P., Raimi, A. G., & Jonathan, S. O. (2025). Beyond likes and shares: The impact of social media on consumer behavior, audience engagement, and reputation management in hotel selection and booking decisions. *Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA)*, *I*(1), 27–43. https://doi.org/10.69798/75961823

Oloyede, T. O. (2025). Digital literacy and out-of-school children in Nigeria. *Scientific Journal for Technology*

Management, Information & Artificial Intelligence (SJTIA), 1(1), 61–74. https://doi.org/10.69798/76780466
Omojola, B. G., Adepoju, A. O., & Ojo, O. J. (2025). Evaluation of facilities management competencies and practices in public primary school buildings, Ondo State, Nigeria. Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA), 1(1), 96–112. https://doi.org/10.69798/77504999

Wang, D., & Shao, X. (2024). Research on the impact of digital transformation on the production efficiency of manufacturing enterprises: Institution-based analysis of the threshold effect. *International Review of Economics & Finance*, *91*, 883–897.

About Founding Editor

Dr. Adeyemi Akinola is the founding Editor of the Scientific Journal for Technology Management, Information & Artificial Intelligence (SJTIA). He serves as a Senior Lecturer and Librarian at Mountain Top University, Ogun State, Nigeria, and is also the Director of Operations at Koozakar Curiosity Lab in Norcross, Georgia, United States. Dr. Akinola holds a PhD in Information Resources Management from Babcock University, Nigeria, where he also earned his master's degree in information resources management and library and information science. His academic foundation began with a Bachelor of Library and Information Science (BLIS) from Tai Solarin University of Education. With expertise in Information Management, Knowledge Management, and Online Open Access publishing, Dr. Akinola is deeply passionate about promoting ethical publishing practices. He actively contributes to advancing scholarly communication and innovation within the fields of technology and information sciences.

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