

The Techno-Sustainable Alliance: A Call for Solutions

Dr. Sonali Bhattacharya

Sonalib.scmhrd@gmail.com sonali bhattacharya@scmhrd.edu

Symbiosis Centre for Management and Human Resource Development, Symbiosis International (Deemed) University, Pune, India

Dr. Dipasha Sharma

dipashasharma20@gmail.com, dipashashasharma@scmhrd.edu

Symbiosis Centre for Management and Human Resource Development, Symbiosis International (Deemed) University, Pune, India

We are navigating a turbulent, uncertain, novel, and ambiguous (TUNA) business environment. The evolving geopolitical landscape, the severe consequences of climate change, and rapid technological advancements are contributing to diverse socio-economic conditions across the globe. As a result, the field of management must continually reinvent itself to keep pace with these dynamic changes. It has transitioned from being merely multidisciplinary and interdisciplinary to embracing a transdisciplinary approach. Today's managers must collaborate not only with internal stakeholders such as employees, customers, and shareholders but also with external actors like gender specialists, scientists, activists, reformers, and others.

Management as a discipline has also shifted from being solution-oriented to becoming an impact-driven field, acting as a catalyst for innovative, safer, and more meaningful societal practices. This evolving paradigm of management was extensively discussed at the Annual Virtual International Research Conference, the S-TEAM, hosted by the Symbiosis Centre for Management and Human Resource Development (SCMHRD), Pune, India, in collaboration with EM Normandie Business School, France, from September 26th to 29th, 2024. This special issue comprises a selection of twelve articles from the conference.

Integrating digital technologies like Artificial Intelligence and Blockchain into sustainable production, consumption, and waste management has become a key priority on the global agenda. These technologies play a crucial role in waste management processes, including tracking, collection, processing, and disposal within a closed-loop system. The nine Rs framework (Reike et al., 2022) provides a structured approach for creating a circular waste management system: refuse (R0), reduce (R1), resell/reuse (R2), repair (R3), refurbish (R4), remanufacture (R5), repurpose (R6), recycle (R7), recover energy (R8), and re-mine (R9). Among these, R1 to R3 form the shortest loops, managed predominantly by end-users; R4 to R6 represent intermediate loops involving consumer interaction; and R7 to R9 engage a wide range of stakeholders, from producers to consumers. For instance, the rapid growth of the automotive industry generates approximately

17 million tons of rubber waste annually worldwide (Sienkiewicz et al., 2012). Phadnis et al. (2025) applied a deep learning approach to detect and classify tire quality in the automotive sector with high precision, facilitating preventive maintenance, tire recycling, and sustainable waste management.

Sustainable finance, which includes the antecedents and outcomes of Environmental, Social, and Governance (ESG) reporting, performance, controversies, as well as financial technology, has drawn the interest of researchers across various disciplines globally. Fintech solution cannot bring transparency and accountability in ESG disclosure process (Macchiavello & Siri, 2022). Makhija et al. (2025), explore how industry-level ESG performance—analysed at both aggregate and disaggregate levels—affects dividend policy through panel analysis. In a subsequent article, Panda et al. (2025) examine the effects of fintech company mergers on financial performance indicators, including return on assets (ROA), net profit margin (NPM), average share price (ASP), current ratio (CR), and financial leverage (FL), employing fixed-effect panel regression with the generalised method of moments. Further, Dutt et al. (2025) investigate the influence of industry-wide ESG disclosures and ESG controversies on financial performance indicators.

The effective and ethical utilisation of Artificial Intelligence (AI)-generated content, including Generative AI tools like ChatGPT, has garnered significant interest among industries, educators, researchers, technologists, and behavioral scientists (Cao et al., 2023; Fui-Hoon Nah et al., 2023). Suryavanshi et al. (2025) presents a survey-based study analysing the factors influencing the acceptance of ChatGPT by Indian software engineers, using the 'Unified Theory of Acceptance and Use of Technology Extension-2' (UTAUT-2) framework. Further, Artificial intelligence and other Industry 4.0 technologies such as Big Data Analytics and Blockchain, have been widely applied in the marketing domain to enhance customer insights, product promotions, and pricing strategies through predictive analytics, comparative analytics, and sentiment analysis (Verma et al., 2022; Chintalapati & Pandey, 2022; Mariani et al., 2022). Walke et al. (2025) utilise web scraping to extract pricing data from the e-commerce platform, Amazon, as well as data available through Keepa.com, comparing pre-sales, during-sales, and post-sales product pricing across various categories. They found statistically no significant differences between the pricings at the three phases across product categories, thereby raising ethical concerns. In healthcare, the application of AI is evident in pharmaceutical research, clinical trials, and patient care (Shaheen, 2021). AI facilitates efficient data monitoring, high-precision analysis of big data from clinical trials, and improved patient insights by analysing medical records, ultimately enhancing patient support and quality of life. In mental healthcare, AI and machine learning algorithms offer potential in diagnostic and preventive care, though they face ethical and regulatory challenges. Some of these issues are explored by Chavan et al. (2025).

Digital transformation has significantly reshaped various Human Resource (HR) functions and outcomes, including recruitment and selection, learning and development, employee retention strategies, performance appraisal, compensation planning, employee benefits, and productivity improvement. Choudhari et al. (2025) explored the adoption and effectiveness of AI in talent acquisition, highlighting its role in enhancing recruitment outcomes and meeting diversity objectives. Verma et al. (2025) emphasised the prevalence of age-specific and gender-specific micro-aggressions in organisations, adversely affecting employee productivity. Bindra et al. (2025) identified a strong inverse relationship between leader-member exchanges (LMX) in supervisor-subordinate dynamics and feelings of envy among subordinates. The study also found that envy

has a statistically significant direct correlation with workplace incivility, and the inverse relationship between LMX and envy is further strengthened by heightened sensitivity to equity. Additionally, Kunte et al. (2025) conducted a survey-based study on remote workers, revealing that perceived e-work-life is positively associated with work-related flow but negatively correlated with employee well-being. The findings further indicate a positive relationship between employee well-being and work-related flow, suggesting that while satisfaction with work-life may enhance productivity, it does not necessarily ensure employee well-being.

In conclusion, the articles in this special issue highlight the critical role of advanced technology in achieving the United Nations' Sustainable Development Goals, including alleviating global hunger, ensuring quality education, promoting good health and well-being, fostering decent work and economic growth, driving industrial innovation, reducing inequality, encouraging sustainable consumption and production, building sustainable cities and communities, enhancing energy efficiency, and creating a cleaner environment. However, the studies underscore the need for the prudent use of technology, considering ethical, legal, and humanitarian considerations.

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