

EDITORIAL

Greening the Future: Digitalisation and Sustainability in Arab Nations

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ABSTRACT

PURPOSE: This special issue explored how digital transformation and emerging technologies, particularly artificial intelligence (AI), can contribute to sustainable development in the Arab world. It aimed to advance understanding of the opportunities, challenges, and policy implications associated with building sustainable and digitally enabled societies.

DESIGN/METHODOLOGY/APPROACH: The special issue brought together five rigorously peer-reviewed studies employing diverse methodological approaches, including quantitative analysis, qualitative investigation, mixed-methods research, and conceptual applications. The selected papers examined sustainability challenges and digital innovations across entrepreneurship, finance, marketing, environmental behaviour, and healthcare.

FINDINGS: The contributions demonstrated that digital technologies and AI can enhance organisational sustainability, improve financial transparency, promote responsible consumption, encourage sustainable behavioural change, and strengthen healthcare systems. The findings also highlighted the importance of effective governance, innovation, and stakeholder engagement in achieving sustainable development outcomes.

CITATION: Ahmed, A. and Naim, A. (2026): Greening the Future: Digitalisation and Sustainability in Arab Nations. *World Journal of Science, Technology and Sustainable Development (WJSTSD)*, Vol. 21, No. 5, pp.377-382.

RECEIVED: 20 May 2026 / **REVISED:** 28 May 2026 / **ACCEPTED:** 4 June 2026 / **PUBLISHED:** 5 June 2026

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ORIGINALITY/VALUE: This special issue provided a timely and interdisciplinary examination of the intersection between digital transformation and sustainability within the Arab context. It offered novel insights, practical recommendations, and evidence-based perspectives for researchers, policymakers, and practitioners seeking to accelerate progress towards sustainable and inclusive development in the region.

KEYWORDS: *Artificial Intelligence; Digital Technologies; Sustainability; Arab World.*

INTRODUCTION

The Arab world is undergoing rapid transformation fueled by ambitious national visions (e.g., Saudi Vision 2030, UAE Vision 2050), increased investments in digital infrastructure, and a growing commitment to sustainability and climate resilience. In an era marked by climate urgency, digital technologies such as AI, IoT, blockchain, big data, and cloud computing are emerging as vital tools for achieving sustainable development goals (SDGs) across the region.

However, the dual transition toward digitalisation and sustainability presents unique challenges and opportunities for Arab nations, including digital divides, institutional capacity gaps, socio-political complexities, and environmental vulnerabilities. This special issue examined how the intersection of digital transformation and sustainable development reshaped economic, social, and environmental outcomes throughout the Arab world.

Aim of the Special Issue

This special issue sought to advance theoretical, empirical, and practical understanding of the ways in which digital transformation contributed to sustainable development in the Arab region. It invited contributions that provided insights into innovative policies, business models, technologies, governance frameworks, and entrepreneurial initiatives that either accelerated or hindered progress towards a green, inclusive, and digitally enabled future.

Alignment with the Sustainable Development Goals

The special issue was closely aligned with the United Nations 2030 Agenda for Sustainable Development, particularly with Sustainable Development Goal (SDG) 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action). By focusing on digital transformation as a catalyst for sustainable development, the issue explored how emerging technologies and digital ecosystems

could support progress towards these goals across Arab nations. It also reflected the objectives of SDG 17 (Partnerships for the Goals) by highlighting the importance of collaboration among governments, academia, industry, and civil society. Collectively, the contributions provided valuable insights into the pathways through which Arab countries could leverage digital solutions to address local development priorities while contributing to global sustainability targets.

This special issue offered several distinctive strengths. It provided a regionally focused yet globally relevant examination of the relationship between digital transformation and sustainability in Arab countries, generating insights of significance both within and beyond the region. Its timely and strategic orientation reflected contemporary national and international policy priorities, including the SDGs, climate commitments arising from successive COP conferences, and emerging Arab digital economy strategies. Furthermore, the issue adopted an interdisciplinary perspective that bridged entrepreneurship, management, sustainability, information and communication technology (ICT), and development studies. Importantly, it also demonstrated strong policy relevance by presenting evidence-based findings and practical recommendations for governments, international organisations, and private-sector stakeholders seeking to shape a sustainable digital future for the Arab world.

Submission and Selection Process

The call for papers for this special issue was widely disseminated through the journal's website and various social media platforms, attracting submissions from scholars and practitioners across different disciplines. Following a rigorous peer-review process, five high-quality papers were selected for publication. Collectively, these contributions provide valuable insights into the role of digital transformation, artificial intelligence (AI), sustainability, entrepreneurship, marketing, finance, and healthcare in advancing sustainable development within the Arab region.

1. The Influence of Green Entrepreneurial Orientation (GEO) on Organizational Sustainable Practices (OSP)

Hadeel Al-Hyari, Firas Alotoum, Nasser Jaradat

This paper examined how environmentally oriented entrepreneurial strategies influenced the adoption of sustainable organisational practices. The study highlighted the importance of green innovation, environmental commitment, and strategic orientation in enhancing organisational sustainability performance and long-term benefits.

2. Motives and Techniques of Earnings Management in Jordanian Companies and Their Implications for Corporate Sustainability: Toward Integrating Artificial Intelligence in Financial Transparency

Ahmad Dbies, Mohammed Idris, Sodfa Eltaher

This paper investigated the drivers and mechanisms of earnings management within Jordanian firms. The authors explored how AI-enabled financial monitoring and transparency tools could strengthen corporate governance, reduce opportunistic reporting behaviour, and support sustainable business practices.

3. Influence of AI-Driven Sustainable Marketing Strategies on Consumer Acceptance of Responsible Consumption

Tareq Hashem, Arshi Naim, Abdalah Abualkanam, Mohammad Isied, Saed Mustafa

This research analysed the growing role of artificial intelligence in promoting sustainable consumer behaviour. The findings demonstrated how AI-powered marketing strategies could enhance consumer awareness, trust, and engagement, thereby encouraging responsible consumption and supporting broader sustainability objectives.

4. From Environmental Awareness to Sustainable Action and Social Impact in the age of AI: A Mixed-Methods Study in Abu Dhabi

Rakan Alhrahshesh, Ganka Ivanova, Mostafa Mohamad

This paper explored the relationship between environmental awareness, behavioural change, and social impact within an AI-enabled context. Using a mixed-methods approach, the study provided evidence on how digital technologies and AI applications can facilitate the transition from environmental knowledge to tangible sustainable actions among individuals and communities.

5. A Novel Implementation on Intelligent Digital Transformation Toward Smart and Sustainable Healthcare

Mohammed Alojail

This research paper examined innovative approaches to digital transformation in healthcare systems. The study demonstrated how intelligent technologies, including AI-driven solutions, can improve healthcare efficiency, accessibility, and sustainability while contributing to the development of resilient and patient-centred healthcare ecosystems.

These five papers reflect the diversity and interdisciplinary nature of research at the intersection of digital transformation and sustainable development. They offer important theoretical, empirical, and practical contributions while providing actionable insights for policymakers, business leaders, researchers, and practitioners seeking to accelerate the transition towards a more sustainable and digitally enabled future in the Arab world.

CONCLUSIONS

This special issue highlighted the growing importance of digital transformation and artificial intelligence in advancing sustainable development across the Arab world. The five selected papers provided valuable insights into green entrepreneurship, financial transparency, sustainable marketing, environmental behaviour, and smart healthcare, demonstrating how digital technologies can support economic, social, and environmental sustainability. Collectively, the contributions enriched the emerging body of knowledge in this field and offered practical implications for policymakers, business leaders, and researchers seeking to foster a more sustainable, innovative, and resilient future for the region.

BIOGRAPHY



Professor Allam Ahmed is a Professor of Knowledge Management and Sustainable Development; Founding President World Association for Sustainable Development; Founding Director SDGs Universities Initiatives and SDGs Tracker Initiative; and Honorary Professor

Faculty of Medicine and Dentistry and Senior Policy Fellow Global Policy Institute, Queen Mary University of London. He is a Fellow (FCIM) and Chartered Marketer of the *Chartered Institute of Marketing (CIM)*, UK; *Fellow (FFPH) Faculty of Public Health*, UK; PhD in Economics in two years at *Edinburgh Napier University*, UK; awarded the *Royal Agricultural University (RAU)* Scholarship and Prestigious Book Prize for Best MSc/MBA Dissertation; Listed in the *Who's Who in the World 2009-2021 and 2021 Who's Who in the World Lifetime Achievement Award*, *Who's Who in Finance and Business 2009/2010* and *Who's Who in America 2012-2014* published by Marquis Who's Who, USA.



Prof. Dr Arshi Naim is a distinguished academic and Top 2% Scientist (Stanford and Elsevier, 2024, 2025) with over 23 years of experience in business management, digital marketing, and higher education. She holds a Ph.D. in Business Management, an MBA in Marketing, and an Honors degree in Economics from Aligarh Muslim University, India. She has authored 140+ Scopus-indexed publications in Q1 and Q2 journals and contributed to books with leading international publishers. She has held key academic and leadership roles globally, including 14 years as Quality Programme Head at King Khalid University, Saudi Arabia. She is a Professor in Business Management at Ibn Rushd College of Management Sciences (KSA), Academic Dean and Professor at the London Institute of Sustainable Development (UK), and Guest Professor at Al-Quds University (Palestine). She also serves in professorial and research supervision roles across institutions in the US, UK, Malta, Malaysia, and Switzerland. She is a certified Quality Matters Master Reviewer (US) and holds international certifications in project management (UK), entrepreneurship (Harvard Business School), and digital marketing (Cambridge). She actively collaborates worldwide and contributes to advancing sustainable development through her work with the World Association for Sustainable Development (WASD), UK.