



## **CALL FOR PAPERS**

**Special Issue on:**

### ***Sustainable Development Through Technological Innovations and Data Analytics***

Sustainable development builds on the premise that development meets the needs of the present without compromising the ability of future generations to meet their own needs (United Nations). The Sustainable Development Goals (SDGs) are global, grand challenges that are inherently complex, multi-faceted and socially embedded (Henriksen et al., 2021). The SDGs inevitably encounter tensions between their design and implementation, representing design-reality gaps (Pradhan et al., 2022; Heeks, 2020a; Dennehy et al., 2014). While optimism is relatively high about the role of technology and analytics in supporting sustainable global development (Smidt & Jokonya, 2022), significant learning remains about how best to use them as 'platforms that mediate development' (Heeks, 2020b).

There is increasing awareness and expectation that the academic community has an active role in achieving sustainable development that includes three interconnected elements, namely, economic wellbeing and social inclusion (Baghdadi, et al. 2020; Johnson et al., 2021), and environmental protection (Dennehy et al., 2021; Dwivedi et al., 2022). Despite the efforts made by scholars to advance the understanding of applying technology and analytics to encourage sustainable development and energy conservation (e.g., Albizri, 2020; Khene & Masiero, 2022; Masiero & Arvidsson, 2021), a concerted effort by academic disciplines, policy-makers, practitioners, and the intended beneficiaries of the SDGs is required to discover and create better ways to build an inclusive, sustainable and resilient future for people and planet (Harfouche et al., 2019; Harfouche et al., 2022).

This Special Issue brings together contributions from various perspectives, disciplines, and communities to advance knowledge of how to apply technological innovations and data analytics for sustainable development to make the world a better place for all (Walsham, 2012). Some organizations focus on driving business value and keeping ahead of competitors (Gerow et al., 2014). At the same time, others focus on facilitating societal change by generating both business value and social value (Veit & Thatcher, 2023). For this reason, organizations are investing more in responsible technological innovations, including responsible AI (Fosso Wamba & Queiroz, 2021; Harfouche et al., 2023; Johnson et al., 2021; Kumar et al., 2021; Merhi, 2022; Tutun et al., 2022;) for an ethical and inclusive digitized society. To further understand how to apply technology innovation and analytics to encourage sustainable social and economic development, we seek interdisciplinary papers that bridge domains including information systems, organizational science, strategic management, and information science.

### Topics of submission include, but are not limited to:

- Critical thoughts about the impact of technology and analytics to achieve sustainable development
- Strategies (e.g., best practices, policies, and governance mechanisms) for addressing global grand challenges
- Methods, approaches, and frameworks that foster indigenous knowledge and facilitate collaborations between local communities and external actors.
- AI, Data analytics, and Big Data for Smart Cities and Smart Homes
- The role of IS and AI in green supply chain management
- Environment Big Data Processing and Analysis
- Green initiatives through the latest technologies (e.g., AI, blockchain, etc.)
- Energy-Consumption-Aware Ubiquitous Computing
- Energy resource management and energy informatics applications
- Sustainable business process management
- Government and sustainable approach
- Green service/marketing using technologies
- The sustainability of green IT/IS initiatives
- IS solutions for a more sustainable society
- AI-enabled analytics for economic wellbeing and social inclusion
- Success factors, best practices, and case studies in Data analytics and AI for sustainable development

### Forms of Submission

This Special Issue will consist of: (1) the best submissions from an open Call for Papers, selected on a competitive basis; and (2) invited papers that are extended or modified versions of selected papers accepted at the MENACIS 2022 conference (<https://menacis2022.com>), Dhahran Saudi Arabia, and the *IEEE International Symposium on Technology and Society 2023* (<https://attend.ieee.org/istas-2023/>), Swansea, Wales. In the latter cases, the submission will be a substantial revision of the conference publication, and the authors will be required to submit a letter detailing the difference between their conference paper and the new version. All submitted papers and invited papers will go through peer review; if an invited conference paper does not receive a satisfactory review, the paper will not be considered for the Special Issue.

### Submission Instruction

Manuscripts must be submitted in PDF format to the ISF-Springer online submission system at <https://www.editorialmanager.com/isfi> and the authors need to select "Special Issue: **TBC**" during the submission process. Paper submissions must conform to the format guidelines of Information Systems Frontiers available at <https://www.springer.com/journal/10796/submission-guidelines>.

Submissions should be approximately 32 pages double spaced including references.

### Important dates

- Submission deadline: 30<sup>th</sup> September 2023
- Notification of first round reviews: 15<sup>th</sup> December 2023
- Revised Manuscripts due: 15<sup>th</sup> February 2024
- Notification of second round reviews: 30<sup>th</sup> April 2024
- Final Version Due: 30<sup>th</sup> June 2024

## Guest Editors

- Antoine Harfouche, University Paris Nanterre, France
- Mohammad I. Merhi, Indiana University South Bend, USA
- Abdullah Albizri, Montclair State University, USA
- Denis Dennehy, Swansea University, Wales
- Jason Thatcher, Temple University, USA

## Guest Editors' Biography

**Antoine Harfouche** is an Associate Professor of IS and AI at University Paris Nanterre where he teaches undergraduate and graduate courses in various areas, including IS, AI, Big Data, and Quantitative Methods. Dr. Harfouche has contributed to the IS & AI community through his integrative teaching, cutting-edge research, and outstanding service. He was awarded the AIS Sandra Slaughter Outstanding Service Award in 2020. Dr. Harfouche completed his M.Sc. and Ph.D. in Management Information Systems at Paris Dauphine University (FR) / PhD done in collaboration with Georgia State University. Dr. Harfouche's research primarily examines how IS and AI impact individuals, organizations, countries, and societies in general. His research has been published in top ranked journals (e.g., Information Systems Frontiers, International Journal of Production Research, IT and People, International Journal of Information Management, Industrial Management & Data Systems, Annals of Operation Research, Trends in Plant Science, Trends in Biotechnology, Journal of Global Information Management, Journal of Organizational and End User Computing, Informatics, Recherche et Applications en Marketing) and premier conferences (e.g., ICIS, AMCIS, and ICTO). He is a member of the editorial advisory board of the Journal of Enterprise Information Management.

**Mohammad I. Merhi** is an Associate Professor and Department Chair at the Judd Leighton School of Business & Economics at Indiana University South Bend. His research interests include behavioral aspects of information security and privacy, the adoption and implementation of information and analytics systems in organizations, the impact of digital transformation, and cross-cultural studies. Dr. Merhi has published his research in several leading journals including Information Systems Frontiers, International Journal of Information Management, International Journal of Production Research, Journal of Global Information Management, Computers in Human Behavior, Computers and Education, and Technological Forecasting and Social Change. He has also presented his research at leading international and national conference meetings and workshops.

**Abdullah Albizri** is an Associate Professor of Information Management and Business Analytics at the Feliciano School of Business, Montclair State University. He received his Ph.D. in Management Information Systems from Sheldon B. Lubar School of Business, University of Wisconsin-Milwaukee, in August 2014. Dr. Albizri's research focuses on using AI solutions and machine learning techniques for financial fraud detection, blockchain applications, and the role of Information Systems in sustainability. Before joining academia, Dr. Albizri worked as an IT business consultant in the banking industry. Dr. Albizri has published articles in the International Journal of Information Management, Journal of Information Systems, Communications of the Association for Information Systems, Annals of Operations research, Journal of Enterprise Information Management, and others.

**Denis Dennehy** is Associate Professor of Business Analytics and School Research Lead at the School of Management, Swansea University, Wales. His research primarily focuses on the mediating role of emerging technologies and analytics, and its implications for people, organisations, and society. This research has been published in leading journals including International Journal of Operations & Production Management, European Journal of Operational Research, Information Systems Frontiers, Information & Management, IT & People, International Journal of Production Research, Government Information Quarterly,

Journal of Systems & Software, and IEEE. He is a Senior Editor of Information Technology & People, and he has edited many special issues related to his field.

**Jason Thatcher** is the Stauffer Professor in the Department of Management Information Systems. Thatcher earned both his PhD in business administration and MPA from Florida State University. He also received his BA in political science and BA in history from the University of Utah. Thatcher studies individual decision-making, strategic alignment and workforce issues as they relate to the effective application of information technologies in organizations. His more recent projects focused on cyber security and social media. Thatcher has been published in journals such as MIS Quarterly, Information Systems Research, Journal of Applied Psychology, Harvard Business Review, Journal of Management Information Systems as well as has published in Financial Times 50 journals roughly once a year since earning his Ph.D. He served as a senior editor at MIS Quarterly and is currently a senior editor at Information Systems Research and at the Journal of the Association of Information Systems.

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