



Information Systems Frontiers

CALL FOR PAPERS

Special Issue on:

Digital transformation for a sustainable society in the 21st century

The digitalization process and its outcomes in the 21st century accelerate transformation and the creation of sustainable societies. Our decisions, actions and even existence in the digital world generate data, which offer tremendous opportunities for revising current business methods and practices, thus there is a critical need for novel theories embracing big data analytics ecosystems. The value of digital transformations that emerges through big data analytics ecosystems is an area that is receiving increased attention. The multiple actors of such ecosystems (e.g., academia, private and public organizations, civil society, and individuals) need to cooperate or collaborate in order to develop the necessary capabilities that will lead to the creation of value, as well as to business and societal change.

We need digital business models that will not just be more accurate or efficient, but they will also go beyond economic value, and address societal challenges generating shared value that impacts the society as a whole and its relevant actors individually. Thus, it is important to recognize that value can emerge through different means and can be captured through different measures. Creating shared value or co-creating value can lead to increased benefits for all actors taking part in digital transformation. Information systems have a critical role in this transformation and this special issue seeks theoretical driven research that will make a step towards this direction with an impact on how we can create a sustainable society.

This Special Issue aims to bring together contributions from a variety of perspectives, disciplines and communities for the advancement of knowledge regarding *Digital transformation for a sustainable society in the 21st century*. Some organizations or entrepreneurs focus on driving business value and keeping ahead of competitors, while at the

same time others can have a view of facilitating societal change, therefore generating value that impacts both them and the society overall. We call for research from different contexts that will contribute to the improvement of big data analytics ecosystems that emerge as drivers of digital transformation and sustainability. We seek to answer questions around the role of data actors, define data capacities and data availability, examine adoption at leadership and management level, and improve current approaches of data-driven sustainable development.

We seek interdisciplinary papers that can bridge some the domains of information systems, organizational science, strategic management, information science, marketing, and computer science. Big data and their analytics are very popular and are receiving increased attention, however their value and benefits to business and society as a whole still remain largely unexplored, with many questions being unanswered regarding their role in the digital transformation for sustainable societies in the 21st century. This special issue aims to add in this direction and therefore welcomes quantitative, qualitative, and mixed methods papers, as well as reviews, conceptual papers, and theory development papers.

Topics of submission include, but are not limited to:

- Big data and analytics for business and societal transformation
- Data analytics and management
- The role of IS in digital transformation
- Digital business models for shared value
- ICTs for enabling smart cities
- Internet of Things (IoT) as a tool for reaching sustainability
- Artificial Intelligence (AI) for big data analytics ecosystems
- Digital marketing for a sustainable society
- Electronic, Mobile, and Social commerce as a tool for generating shared value
- Social media and analytics for digital business
- Value co-creation in big data analytics ecosystems
- Organizational learning and innovation from big data analytics

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 18th IFIP I3E Conference on e-Business, e-Services and e-Society (I3E2019) (www.i3e2019.com) Trondheim, Norway. In the latter case, 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 <http://www.editorialmanager.com/isfi/> and the authors need to select "Special Issue: **Digital Transformation for a sustainable society**" during the submission process. Paper submissions must conform to the format guidelines of Information Systems Frontiers available at <http://www.springer.com/business/business+information+systems/journal/10796>. Submissions should be approximately 32 pages double spaced including references.

Important dates

Submission deadline: 30 November 2019

Notification of first round reviews: 30 January 2020

Revised Manuscripts due: 19 April 2020

Notification of second round reviews: 30 May 2020

Final Version Due: 15 July 2020

Guest Editors

Ilias O. Pappas, University of Agder & Norwegian University of Science and Technology (NTNU), Norway

Patrick Mikalef, SINTEF & Norwegian University of Science and Technology (NTNU), Norway

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John Krogstie, Norwegian University of Science and Technology (NTNU), Norway

Guest Editors' Biography

Ilias O. Pappas is an Associate Professor in Information Systems at the Department of Information Systems, University of Agder, Norway, and a Marie Skłodowska-Curie fellow at Department of Computer Science, Norwegian University of Science and Technology (NTNU), Norway. His teaching and research activities focus on issues related to the role of Information Systems in digital transformation and sustainability, social innovation and entrepreneurship, as well as e-services, digital marketing, and information technology adoption. Pappas has served as a Guest Editor for the journals *Information & Management*, *Information Systems and e-Business Management* and *Technological Forecasting and Social Change*, and as a track chair in several international conferences. He has published articles in peer reviewed journals and conferences including *Journal of Business Research*, *European Journal of Marketing*,

Computers in Human Behavior, Information & Management, Psychology & Marketing. Pappas is a recipient of an ERCIM fellowship.

Patrick Mikalef is a Marie Skłodowska-Curie research fellow at the Department of Computer Science, Norwegian University of Science and Technology (NTNU), Norway, and a Research Scientist at SINTEF Digital Norway. He received his B.Sc. in Informatics from the Ionian University, his M.Sc. in Business Informatics for Utrecht University, and his Ph.D. in IT Strategy from the Ionian University. His research interests are on strategic use of information systems, big data analytics capabilities and IT-business value in turbulent environments. He has published work in international conferences and peer-reviewed journal including the *Journal of Business Research, Information and Management, Industrial Management & Data Systems, Journal of Theoretical and Applied Electronic Commerce Research,* and *Health Information and Libraries Journal.* He serves as the ECIS co-track chair on Business Analytics and Big Data and has served a Guest Editor for the journals *Information & Management* and *Information Systems and e-Business Management.*

Yogesh K. Dwivedi is a Professor of Digital Marketing and Innovation, Dean of Academic Leadership (REF Research Environment and Interdisciplinary Research), and Director of the Emerging Markets Research Centre (EMaRC) in the School of Management at Swansea University, Wales, UK. His research interests are at the interface of Information Systems (IS) and Marketing, focusing on issues related to consumer adoption and diffusion of emerging ICT-based applications, electronic/digital government, and digital marketing particularly in the context of emerging markets. He has published more than 250 articles in a range of leading academic journals and conferences. He has co-edited/co-authored more than 20 books on technology adoption, e-government, IS theory, eWOM and social media which have been published by international publishers. He has acted as co-editor of 19 journal special issues; organised tracks, mini-tracks and panels in leading conferences; and served as Programme Co-Chair of the 2013 IFIP WG 8.6 Conference and as Conference Chair of the IFIP WG 6.11 I3E2016 Conference. He is an Associate Editor of the *European Journal of Marketing* and *Government Information Quarterly* and Senior Editor of the *Journal of Electronic Commerce Research.* Professor Dwivedi is the founding editor of the recently established Springer Book Series on *Advances in Theory and Practice of Emerging Markets* (<http://www.springer.com/series/15802>).

Letizia Jaccheri (Ph.D. from Politecnico di Torino, Italy) is Professor at the Department of Computer Science. Jaccheri's research is on: software engineering; entertainment computing; computational creativity; ICT-enabled social innovation. Jaccheri is the Norwegian

representative and Vice President of IFIP TC14 on Entertainment Computing since 2012. She has published more than 100 papers in International conferences and journals. She has been teaching courses in software engineering at various levels since 1994. She has supervised PhD students, Postdoctoral students and acted as opponent for national and international defences. From 2015 to April 2018 she acted as an independent director of [Reply S.p.A.](#)

John Krogstie holds a PhD (1995) and a MSc (1991) in information systems from the Norwegian University of Science and Technology (NTNU), where he is currently a full professor in information systems at the Department of Computer Science (IDI). At IDI he is Department Head. John Krogstie is the Norwegian representative and Vice-Chair for IFIP TC8 and was chair of IFIP WG 8.1 on information system design and evaluations (2010-2015). His research interests are information systems modelling, quality of models and modelling languages, eGovernment and mobile information systems. He has published around 250 refereed papers in journals, books and archival proceedings since 1991. H-index as of July 2018 is 40, G-index 62 according to Google Scholar.