

(ir)responsible exponential technologies in organizations: managerial issues and organizational dilemmas

Advances in technologies like Artificial Intelligence (AI), Intelligent robots, the Internet of Things, Cloud Computing, Blockchain, Augmented and Virtual Reality are continuing to influence business processes. Sometimes described as ‘exponential technologies’ referring to their growth along and beyond the lines of Moore’s Law, these digital and data-driven approaches are reconfiguring the practical, analytical and spatial dimensions of organizations and shaping new societal and organizational futures.

While it is unsurprising and, to some extent encouraging, that organizations are keeping up with new technologies and seeking to improve their effectiveness and resilience, such innovations also expose employees and organizations to new risks and threats. For employees, they have implications for privacy, autonomy, opportunities, income and well-being, as well as freedom from bias or discrimination. For organizations, they have operational, financial and legal implications, especially as the European Union and other global regions seek to better regulate the uses of data and AI, which can cascade into reputational damage.

Another obstacle to managing these changes is the difficulty that stakeholders can face in understanding how these technologies actually work, with algorithms and data flows often being opaque. As such, it is unclear what the long-term impacts of exponential technologies will be, and organizations face managerial and organizational dilemmas as they seek to embrace innovation whilst also avoiding harms and penalties. Much learning has emerged during the Covid-19 pandemic, in parallel with which many governments are investing heavily in the promise of AI for their digital economies.

A key question underlying these technologies is how ‘human-centered’ they are. On the one hand, they are sometimes portrayed as empowering, enabling and beneficial to employees, yet on the other hand provide more power for management to quantify, track, incentivize and discipline their staff (among others). More knowledge and understanding of how these technologies are evolving and being used, and their soft and hard impacts, is therefore needed for the goal of ‘human-centeredness’ in organizations is to be achieved.

We invite submissions from multi-disciplinary practitioners and researchers critically reflecting on and analyzing ethical and trust issues around exponential technologies in organizations and their implications for stakeholders, society, and the economy. We welcome conceptual and empirical contributions, reviews, case studies and debate papers inspired by interdisciplinary, multi-level, multi-stakeholder, multi-method, and culture-sensitive approaches that could address existing and future challenges and uncertainties, define an agenda for future research, and provide good practice recommendations and instruments for designing and evaluating human-centered, trustworthy technologies in organizations.

A non-exhaustive list of relevant research topics includes:

- Latest insights into the state-of-the-art and responsible, explainable, and human-centered exponential technologies
- Trust issues in relation to exponential technologies
- Potential and perils of exponential technologies for diversity and inclusion (e.g., discrimination, bias or inequalities) in organizations

- Organizational and managerial dilemmas related to the development, implementation and use of human-centered and responsible exponential technologies and approaches to address them
- Employee dilemmas for recognizing/using exponential technologies at/for work
- Approaches to understand and measure the impact of implementing or using exponential technologies
- Cases on transparent (and not) uses of AI at/for work in organizations of different types (e.g., SMEs or multinationals) and coming from different sectors (e.g., healthcare, public or private sector companies)
- Conceptualizing responsible adoption and use of exponential technologies for employees, groups, and organizations
- Who owns the responsibility (technology, developers, managers, employees, or organizations)?
- Human versus algorithmic decision making
- Spatial, temporal and behavioral work boundaries affected by exponential technologies
- Critical stakeholders in the responsible and human-centered application of exponential technologies at/for work
- Digital sovereignty at work
- Democratization of AI (and other exponential technologies)
- Algorithmic silence and decomputerization
- Ethics washing in AI
- Existing and new theories, models, frameworks for studying exponential technologies
- Critical approaches to study exponential technologies in organizations
- Methodologies and tools to understand, design and evaluate responsible and human-centered exponential technologies for organizations
- Sustainability of exponential technologies and organizations adopting them
- The regulatory and its implications for organizations deploying these technologies
- Guidelines and approaches for developing, implementing or using responsible, explainable, ethical and human-centered exponential technologies for organizations

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Dr. Aizhan Tursunbayeva is an Assistant Professor at the University of Naples Parthenope (Italy). Her previous professional roles include Assistant Professor at the University of Twente (Netherlands), Management Consultant at KPMG Advisory (Italy), and Manager at HSBC Bank (Canada, UK, Poland, Kazakhstan). She teaches Organizational Design, Human Resource Management (HRM), and People Analytics. Her research lies at the intersection of HRM, technology, innovation, and healthcare. Results of her research were published in Personnel Review, Journal of American Medical Informatics Association, Information Technology & People, and International Journal of Information Management. In 2018 and 2021 she has co-organized relevant to this track PDWs at the British Academy of Management Conferences.

Dr. Luigi Moschera is Full Professor of Organization Studies and Pro-Rector (3rd mission) at the University of Naples Parthenope (Italy). He teaches Business Organization, Inter-firm Network Design and Human Resource Management. His most recent research focuses on contingent/alternative employment arrangements and their implications for employees' attitudes, well-being, and behavior. He authored several international publications on organizational change in the temporary work agency sector in Italy and Europe and chaired a number of international conferences. In 2016 he was a co-chair of the 32nd EGOS Colloquium.

Dr. Claudia Pagliari is an interdisciplinary expert from the University of Edinburgh (UK), where she leads the Global eHealth research group. In addition to her research in digital health and data science, she has converging research and teaching profiles in workforce informatics and digital ethics and has published widely in a diverse range of academic and professional literatures. She also holds several external advisory roles and consultancies with global and UK-based organizations. She is a co-founder of the NHS Digital

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Dr. Vicenc Fernandez is a director in the UNESCO Chair of Higher Education Management at Universitat Politècnica de Catalunya (Spain), and an Associate Professor of the Department of Management at the same University. He received a PhD in innovation management in the pharmaceutical industry, but in the last years, he has focused on talent management and analytics. His teaching responsibilities are 'Tools for Decision Making' (MSc), 'Entrepreneurship' (MSc.) and 'Business Analytics' (MSc), together with the supervision of master students. He has been visiting fellow at Newcastle University (UK). His research interests include organizational behaviour and decision-making. He has published in several international journals, such as Journal of Organizational Change Management, Cities, International Journal of Simulation Modeling, Sustainability, Technological Forecasting and Social Change and Team Performance Management.

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