Human-Centric digital technology: Socio-Technical lenses for a new era of Artificial Intelligence

Over the last decade, there was a rapid diffusion and adoption of innovative digital technologies. Beyond the traditional information systems (IS) (such as ERP and CRM), organizations adopt Industry 4.0 technologies – the Internet of Things and robotics –, remote working technologies, digital platforms and Generative artificial intelligence [1,2,3]. Analogously, public sector organizations have digitalized their procedures, especially hospitals with e-heath ISs or municipalities with digital technologies for smart city [4,5].Although various studies explored the expected benefits of such digital technologies, it is unclear how this digitalization efforts are coherent with the increasingly urgent call to include sustainable actions in the strategic plans of organizations. The increasing digitalization and automation of decision-making activities may improve organizational efficacy while reducing repitions and manual labour [2]. In line with this, the European Commission launched Industry 5.0 as a policy for encouraging human-centric digital technologies and socio-technical alignments within organizations, i.e. "industry needs to consider societal constraints, aiming not to leave anyone behind" [6, pg. 15].

Against this backdrop, the socio-technical theory (STS) is vital to explore human-centric digital technologies. STS considers an organization composed of technical systems (digital technologies and automated tasks) and social systems (individuals, their competencies and the organisational structure) [7,12]. The design, development and subsequent use of human-centric digital technologies occurs when both systems are conjointly optimized [8]. STS has been used to explore organisational change triggered by digital technologies in the organisational structure and work organisation [4] as well as at city level [9].

In this track, we invite researchers to submit articles reflecting on the development, planning, implementation and usage of human-centric digital technologies both by directly applying the socio-technical theory [4] or following its perspective for seeking socio-technical alignments [10. 11]. Moreover, we welcome papers on human-centric digital technologies from within the public sector as well as the private sector. Finally, we look for articles using core-IS frame coherent with the socio-technical tradition, such as TOE (Technology-Organization-Environment) or TAM (Technology Acceptance Model), UTAUT (Unified theory of acceptance and use of technology), DOI (diffusion of innovation), and TPB (theory of planned behavior) alongside a range of theoretical framing, that may be of interest for the broader scope of human-centric digital technologies.

Track main topics

- Socio-Techinical perspectives on the future of work
- Impact of artificial intelligence (and Generative Artificial Intelligence in particular) on organizational design and redesign
- Impact of Industry 4.0/5.0 technologies on organizational design and redesign
- Socio-technical critical success factors for the adoption of digital technology
- Socio-technical barriers to the adoption of digital technology
- Studies on digital technologies using TOE,TAM, UTAUT, TPB and DOI
- Socio-technical analysis of smart city implementations
- Sustainable value creation of digital technologies
- Digital platforms and the socio-technical arrangements and alignments surrounding them
- Data-driven decision-making and artificial intelligence for enhanced decision-support and its socio-technical implications

Alongside other similar topics on the broad spectrum of the socio-technical arrangements surrounding the design, development and use of human-centric digital technologies

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