Introduction to the Socio-Technical Issues in Organizational Information Technologies Minitrack Organizational Systems and Technology Track HICSS-58

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The Socio-Technical Issues in Organizational Information Technologies minitrack focuses on information systems research areas positioned at the intersection of humans and technology in an organizational context. Central to this research agenda is exploring and understanding the role of digital technology and information in the constitution of organizational life.

The evolving context of organizational information technologies (IT) presents a particularly rich area for research, as newer technologies and emergent forms of organizing introduce increasingly complex challenges. These shifts emphasize the growing importance of socio-technical issues, which lie at the heart of how organizations adapt and evolve. As these technologies and organizational models evolve, they raise new questions and phenomena requiring further empirical investigation and fresh conceptual perspectives. Understanding the dynamic interplay between socio-technical issues and organizational processes is vital, as it has significant implications for both research and practice. In a world of constant flux, these insights are also important for considering the broader societal implications and the ethical challenges that arise, ensuring organizations responsibly navigate technological and structural changes.

Recent scholarly endeavors have explored topics such as artificial intelligence, digital innovation, dynamic capabilities, digital business models, organizational ambidexterity, platform ecosystems, organizational culture, leadership, and strategic approaches to digital transformation, all of which reflect the ongoing need for both empirical and theoretical advancements.

For HICSS-58, the minitrack had accepted six manuscripts for presentation. The six papers share commonalities in their focus on digital transformation and organizational change yet diverge significantly in their methodological approaches and theoretical underpinnings. From the methodological viewpoint, four papers present qualitative research methods, focusing on case studies to explore the complexities of digital transformation. In the other two papers, the authors engage in theoretical developments.

From a theoretical perspective, all six papers draw on theories of digital transformation and organizational change but with different theoretical emphases, such as sociomateriality, platform theory and automation, dynamic capabilities, knowledge boundary-crossing mechanisms, or organizational ambidexterity. This diversity of theoretical frameworks reflects the varied contexts and focal points of each study, with overlapping themes of digital transformation, organizational learning, and the role of information technology.

Paper # 8484: *Paper was never the problem: The paperless idea as a persistent symbol for organizational digitalization and sustainability.* This article examines the transition towards a paperless environment in the Swedish public healthcare sector. The study explores the challenges and benefits of this transition, mainly focusing on how digitalization initiatives like "Digital Referrals and E-invoicing" impact workflow efficiency. Interviews with IT professionals and healthcare administrators reveal technical and organizational hurdles in implementing digital systems while emphasizing the importance of aligning digital strategies with healthcare needs. The case study shows that paperless initiatives can improve processes but require significant cultural and organizational changes.

Paper # 8994: *When blue meets digital: Exploring the digital journey of district heating workers*. The

URI: https://hdl.handle.net/10125/109602
978-0-9981331-8-8
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authors' work delves into the digital transformation of blue-collar industries, using district heating workers in Denmark as a case study. The article highlights how digital technologies, such as remote sensing and thermographic cameras, reshape traditional manual jobs by blending white-collar and blue-collar skills. It argues that digital mediation increases the need for hybrid expertise in skilled work, blurring the boundaries between manual labor and knowledge work. The study emphasizes the socio-material entanglements and challenges workers face as they integrate digital tools into their daily routines.

Paper #7666: *A Multilevel Mechanism-Based Model of Human Agents, Machine Agents, and Offerings' Collective Outcomes on Digital Platforms*. This paper explores how digital platforms influence customer behavior and product outcomes in e-commerce. It emphasizes offering representations (e.g., price, reviews, and social signals) in shaping customer perceptions and actions. The article introduces the concept of "machine agents" (algorithms, bots) that autonomously modify platform information, affecting other users and products. By examining the interaction between human and machine agents, the study provides insights into the evolving dynamics of digital platforms and the complex role of automation in shaping market behaviors.

Paper # 7837: *The Role of FCEs in Facilitating Digital Capability Development*. This paper investigates the role of dynamic capabilities in transforming multi-organizational settings, focusing on the retail sector in Finland. The article discusses how competitive advantage shifts due to digitization and organizational learning, particularly in cooperative settings. It highlights how external pressures, such as annual rankings and award ceremonies, drive innovation and digital adoption within organizations. By analyzing the impact of social and competitive dynamics, the study offers a detailed account of how digital capabilities are developed and sustained in a competitive environment.

Paper # 8201: *Creating an Encouraging Context: A Systematic Literature Review of Contextual Factors to Manage Technical Debt*. The author explores the management of technical debt in software development through the lens of contextual ambidexterity. The systematic literature review identifies critical contextual factors—such as culture, leadership, and systems—that enable organizations to manage technical debt effectively. The paper discusses how IT managers play a critical role in fostering an environment that balances speed and quality, ultimately reducing unintentional technical debt. The study provides a framework for small and medium-sized software companies to create a supportive culture for proactive technical debt management.

Paper #7707: *Overcoming the AI opacity in ESG reporting: A Digital Platform-based Knowledge Boundary-Spanning Perspective*. This article focuses on designing and implementing digital platforms for ESG (Environmental, Social, and Governance) reporting. Drawing on four effective knowledge boundary-spanning (EKBS) mechanisms, it analyzes collaboration practices between platform owners, complementors, and users to create architectures and calculation models that support ESG features. The study emphasizes the importance of boundary objects (e.g., digital dashboards, materiality matrices) in facilitating communication and collaboration among diverse stakeholders. Through an agile, sprint-based development process, the team aligns various knowledge disciplines to meet the evolving requirements of ESG reporting, illustrating the complexity of digital platform development.

The collection of six papers delves into the contemporary and pertinent socio-technical issues within the organizational information technology landscape. Through a comprehensive analysis, these papers introduce a spectrum of perspectives that contribute significantly to the field's knowledge repository, ultimately enhancing our comprehension of the intricate interdependence of social and technical dynamics. By examining how these dynamics influence practices at both organizational and individual levels, the contributions offer indispensable insights for effectively navigating the digital era in professional and personal spheres.