

## Track n. 4 - Socio-Technical perspectives in the Digital Economy

Contemporary Socio-Technical perspectives can be seen as a cornerstone in discussions about the Digital Economy. The term digital economy is easily misinterpreted by giving a meaning predominantly technological to the adjective “digital”. Such a mistake occurs in the stages of economic development when technological innovation is the predominant driver. Now, in the context of the so-called fourth industrial revolution, phenomena such as big data, Internet of Things, Social Networking, are those that allow major changes in organizations and in society. These changes, however, must be designed - if not by focusing on individuals, according to the philosophy of human centered design (Shin et al. 2014) – by taking into account the systemic effects between people and technology.

IS research could be described having two different (system) agendas in mind. Technical: represented by artifact focus. Human: represented by work design focus. Socio-technical approaches can be used within both these areas of interest and paradigms and indeed allow to break down barriers between too narrowly focalized researches by acknowledging the entangled nature of the technical and the social components in human activity systems (Trist, 1981). Since technical systems have been recognized to be intrinsically if not intentionally incomplete and perpetually in the making (Kallinikos, Aaltonen, & Marton, 2013), the design and re-design of socio-technical systems should be conceived as a continuous process involving innovators and recipients dealing with complex and evolving artifacts (Mumford, 2006) which cannot be decoupled from the soft, social, cultural and even psychological components (Silver & Markus, 2013). Socio-technical approaches are historically grounded on a combination of humanistic principles. Part of the key contemporary agenda however, is looking on the ability to recognize the editable, interactive, open, and semiotic nature of digital artifacts. This in turn requires attention to be put on the intentionally pursued revision of contextually relevant action of the social environment. Designing as part of the digital economy, digital enterprises, digital services and products, implies therefore a multidisciplinary effort (Barrett et al. 2015, Lyytinen et al. 2016), that is embedded into the sociotechnical system perspective/model (King et al. 1999, Luna-Reyes et al. 2005). Through this perspective, IS field research can provide a relevant contribution to innovation technology management, moving the focus towards to socio-materiality of digital artifacts (Yoo et al. 2015).

In this track, we focus on IS research inspired by socio-technical principles (Baskerville, Pries-Heje, & Venable, 2009), the materiality of digital artifacts (Leonardi, 2011, 2013) and their capability to enable pragmatic significance in situated material configurations (Beynon-Davies, 2011, Mattozzi, 2015). This would include IS oriented discussions on innovation and purposeful problem solving, characterized by the design and implementation of digital artifacts, with a particular attention to individual and / or organizational contexts. Appropriate methodologies can include re-interpreted and re-contextualized components from engineering, computer science, information system, management, social sciences including behavioral sciences. Examples of relevant research include not only empirically grounded research but also theoretically grounded discussions on problem analyses, systems theories, models, and methods. Also welcome is meta-research that proposes either methodological or epistemological advancements.

### References

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### **Type of contributions invited:**

We invite full research papers, research-in-progress papers, experience-in-the-field reports and case reports. Both empirically and/or theoretically grounded.

## Track Co-Chairs

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Short Biography	Peter Bednar is a Senior Lecturer and Chair of the Systems and Information Systems Research Group in the School of Computing at the University of Portsmouth, UK. He is an affiliated Researcher at the Department of Informatics, Lund University, Sweden. His research areas include Systems Thinking, Socio-Technical Approaches, Critically Informed IS Practices, Complex Systems, Study of Ambiguous and Uncertain Problem Spaces. He is a visiting Professor at several European Universities. Originally an Engineer with years of industrial experience he also holds a Master Degree and a PhD at the Dept of Informatics at Lund University, Sweden. He is a member of the ItAIS for the last ten years, UKAIS, UKSS and more. He has published more than 100 academic peer reviewed papers in journals, books and conferences. He is currently chairing the ST Track at ECIS 2017, The STPIS 2017 Workshop and also conference co-chair of ECIS 2018.
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## Short Biography

Moufida Sadok is an assistant-professor at the Higher Institute of Technological Studies in Communications in Tunis (Iset'Com), and a member of the research laboratory LARIME, University of Tunis. She holds a Doctoral degree in Management (main area Information Systems Management) from the University Pierre Mendès France in Grenoble, France. Her main areas of research interest include socio-technical approaches to Information Systems Security and business systems analysis. She is currently a Visiting Research Fellow at the School of Computing, University of Portsmouth. She is a member of the AIS chairing the Pre-ECIS 2017 workshop "Socio-Technical Perspectives on Information Systems Security". She served as Associate Editor in the program committee of several international conferences.

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## Submission

Submissions will be evaluated through a standard blind review process. Track chairs will ensure anonymity of the review process.

Authors are highly encouraged to seek guidance from Track Chairs prior submitting the paper. We highly encourage authors to formalize this process by sending an abstract to the Track Chairs to receive feedback and guidance. Formal submission must specify the track that they are intended for. The page limit for contributions submitted in English is equal to 12 pages (maximum). Formatting rules (LNCS Springer format) are available at this link:

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Deadline for encouraged abstract submission: May 14, 2017

**Deadline for full paper submission: June 11, 2017**