

Socio-Technical perspectives for a sustainable future of work and society

Contemporary Socio-Technical perspectives can be seen as a cornerstone in discussions about the human agency in the pursuit of organizational excellence. Now, the so-called “future of work” (OECD 2018, WEF 2019) will be characterized by economical and societal discontinuities implied by the spread of the adoption of digital technology (such as AI, IoT and 5G). In such a context, sociotechnical phenomena such as collaborative robots (cobots), where pro-active support for human use and engagement with big data, everyday interactions with Internet of Things, Social Networking as intertwined aspect of mainstream cultural behavior, will allow and interfere with 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, 2014) – by taking into account the systemic effects between people and technology. The agenda moves from technology developed to replace human activities, or to be used by human agent – towards sociotechnical agendas **where technology supports human activities as technical partners and collaborative agents** – not simply as tools (Bednar and Welch 2019). Flexible working practices need flexible technological solutions Leonardi 2011).

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 (Trist 1981, Mumford, 2006) which cannot be decoupled from the soft, social, cultural and even psychological components (Silver & Markus, 2013). This in turn requires attention to be put on the intentionally pursued revision of contextually relevant action of the social environment (Bednar, 2016). 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).

In this track, we are interested in Sustainability from a sociotechnical perspective (for example the triple bottom line, the quadruple bottom line and systemic sustainability). Another growing contemporary sociotechnical issue is industrial espionage as a threat to all kind of organizations (i.e. Sadok, Welch and Bednar, 2019). Of course we invite any other contemporary sociotechnical practices. This includes Knowledge management as sociotechnical practice, interaction and communicative action in organizational settings etc. We welcome research discussing - through the lens of the socio-technical approach - initiatives based on AI or Machine Learning. Smart working, industry 5.0, society 6.0 are also relevant and future oriented contemporary sociotechnical agendas and topics (i.e. Bednar and Welch, 2019).

All kind of methods, approaches, philosophies etc. are welcome to be discussed in papers if related to the sociotechnical agenda. This would include data ethnography field studies and 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 (Bednar, 2000, 2016).

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.

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Track Co-Chairs

Name – Surname (primary contact)	Peter Bednar
Title	Senior Lecturer
E-mail	peter.bednar@port.ac.uk
Affiliation	University of Portsmouth, UK & Lund University, Sweden

Name – Surname	Angela Locoro
Title	Assistant Professor
E-mail	alocoro@liuc.it
Affiliation	Università C. Cattaneo – LIUC, Castellanza, Italy

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Name – Surname	Aurelio Ravarini
Title	Assistant Professor
E-mail	aravarini@liuc.it
Affiliation	Università C. Cattaneo – LIUC, Castellanza, Italy

Name – Surname	Moufida Sadok
Title	Senior Lecturer
E-mail	moufida.sadok@port.ac.uk
Affiliation	University of Portsmouth, UK

Bio of Track Co-Chairs

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 a Visiting Researcher at the Department of Informatics, Lund University, Sweden and Visiting Professor in the Department of Systems Engineering at the University of Life Sciences in Prague, Czech Republic. His research areas include Systems Thinking, Socio-Technical Approaches, Critically Informed IS Practices, Complex Systems, Study of Ambiguous and Uncertain Problem Spaces. 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, IFIP WG 8.6, IFIP WG 8.2, UKAIS, UKSS and more. He has published more than 120 academic peer reviewed papers in journals, books and conferences. He is chairing the STPIS 2020 Workshop, the Sociotechnical Track at the ECIS 2020 conference and was chairing the ECIS 2018, conference.

Angela Locoro holds an MA in Modern Literatures, a BSc in Computer Science and a PhD in Informatics Engineering. She is currently assistant professor at Università Carlo Cattaneo in the School of Management Engineering. Her researches fields are Computer Supported Cooperative Work, Human-Computer Interaction, Knowledge Management Systems and Data Visualization. She was in the organization committee of the EUSSET Summer School on Computer Supported Cooperative Work and co-chaired the ECIS 2018 and 2019 editions of this track. She is co-chairing the Sociotechnical Track in ECIS 2020. Her recent works focused on human-data interaction, artifacts de-design, and digital business transformation. She has more than 50 publications among peer-reviewed journals, book chapters and international conferences. She is currently teaching statistics and her teaching experience includes Web Design, Human-Computer Interaction, Knowledge Management, Digital Business Management, ERPs for business application.

Aurelio Ravarini is Senior Assistant Professor of Information Systems for the School of Engineering at the Università C. Cattaneo – LIUC (Italy). At LIUC he has been director of CETIC, Research Center on Information Systems for ten years. His research expertise is in Strategic Information Systems, Knowledge Management systems, and Information Systems development, the latter of which is focused on small and medium-sized companies. He has been visiting professor in several universities in Europe and USA. Dr. Ravarini holds a

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Master degree in Management Engineering from Politecnico di Milano (Italy) and a PhD at the School of Computer and Security at ECU (Australia). He is a member of the AIS. He has published more than 80 papers for international journals, book chapters and conferences proceedings. He served as Associate Editor for the EJIS and in the editorial committee of several international conferences.

Moufida Sadok is currently a senior lecturer at the Institute of Criminal Justice Studies, University of Portsmouth, UK. She is a member of the Systems and Information Systems Research Group and a member of Peace, Security and Conflict Research Group at the University of Portsmouth. She holds a Doctoral degree in 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 cybersecurity governance. She is a member of the AIS and was chairing the ECIS 2018 Track on "Socio-Technical Perspectives on Information Systems Security". She served as Associate Editor in the program committee of several international conferences. She has published more than 40 academic peer reviewed papers in journals, books and conferences.

Track programme committee members

Luca Cremona, Università C. Cattaneo, Italy
Eliana Minelli, Università C. Cattaneo, Italy
Christine Welch, University of Portsmouth, UK
Peter Imrie, University of Portsmouth, UK
Alexander Nolte, University of Tartu, Estonia & Carnegie Mellon University, USA
Penny Hart, University of Portsmouth, UK
Alex Bennet, University of Portsmouth, UK
Vasilena Shiderova, Independent, Sofia, Bulgaria
Umberto Fiaccadori, Lund University, Sweden
Paolo Spagnoletti, LUISS, Rome, Italy
Andrea Resca, LUISS, Rome, Italy
Carla Simone, University of Siegen, Germany
Gianluigi Viscusi, Lausanne, Switzerland
Laura Tarantino, University of L'Aquila, Italy
Tania Di Mascio, University of L'Aquila, Italy
Tommaso Federici, University of Tuscia
Lucia Pascarella, Università C. Cattaneo, Italy
Michele Cipriano, University of Chieti-Pescara, Italy
Fatema Zaghloul, University of Portsmouth, UK
Federico Cabitza, Università degli Studi di Milano-Bicocca, Italy
Ijeoma Ojukwu, University of Portsmouth, UK