itAIS & MCIS 2019
Digital transformation and social innovation in the current era:
organizing, managing and controlling

Track n. 6 - Designing Smart Organizations. Novel theories, methods, and applications

A smart organization is knowledge-driven, networked, and dynamically adaptive to new organizational forms and practices, as well as ready to create and exploit the opportunities offered by the digital age (Matheson & Matheson, 2001). However, smart organizations likely involve more than the capability of setting up and exploiting a digital infrastructure, or entering into a virtual collaboration with other partner organizations. Actually, the characteristics of such new organizational forms are not well defined. What does it really mean being a "smart organization"?

From one side, the relationship between technology and organizations has been widely explored in organization studies (OS), e.g. by investigating how technology affects organizational structures, processes, and behavior; as well as how organizational practices and relations can influence technology (i.e. Orlikowski, 1992). On the other side, Design Science (DS) created and evaluated IT artifacts intended to solve identified organizational problems (Hevner et al., 2004), and more in general aimed at designing organizations in a broad sense (Richter et al., 2018). Theoretical reflections and design guidelines attempted to account for organizational technology impacts, while empirical studies focused especially on how technology may support group work. Such attention for organizational and working processes was mirrored by the evolution of design methodologies, such as participatory design techniques.

However, recent changes in the technology landscape give the opportunity to deepen, explore, and even rethink how organizations are conceptualized within and across OS, DS, Information System (IS) research as well as to define novel methodological tools to design and account for new organizational forms and new technologies that are more pervasive, invisible and intelligent. The increasing availability of personal data, for example, triggered by the widespread adoption of wearable devices and ubiquitous technologies, opens new research questions. Be either threats or opportunities, such changes deeply interact with organizational structures and processes, reconfiguring hierarchies, redistributing knowledge and redesigning boundaries. As another example, the growing use of robots in industrial organizations is affecting organizational dynamics in ways that are still scarcely explored (Lacity & Willcocks, 2016; Van der Aalst et al., 2018). These dynamics may modify organizational roles and processes while forcing the organization to reinvent their innovation approaches. Lastly, even the methodological tools available to OS, DS, and IS designers show the need of redefinition due to a scarcity of methods to assess the potential long-term implications of technology within organizations.

This track aims to explore how the emergence of new forms of "smart organizations", enabled by the recent advancements in ubiquitous, wearable and robotic technologies, can be accounted from a "design perspective". According to Sein et al. (2011) that call for a cross-fertilization in design research, we welcome contributions from different fields in a fruitful dialogue across disciplines. The track concerns any kind of organization, both public or private, profit and nonprofit. Some research questions are: how can we design smart organizations and technologies that support them? How can (and should) we rethink theories and concepts to account for contemporary organizations, in the light of the recent technological progresses? How do new technologies interact with organizational structures, roles, dynamics, hierarchies, communication and innovation processes? How can we envision the design of organizational innovation in the long term?

Main topics of interest include, but are not limited to:

- Knowledge management and innovation approaches and methods for creating Smart Organizations
- Critical perspective on Smart Organizations
- Gender perspective on Smart Organizations
- Design and evaluations of interactive systems to improve organizations
- Methodological tools to design, study and evaluate organizational technologies and how they impact on organizations

- Definition of new organizational structures and processes enabled by ubiquitous, wearable and robotic technologies
- Theoretical reflections and empirical studies on how technology affects organizational behaviour, structures, and processes

References

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Lacity, M. C., & Willcocks, L. P. (2016). A new approach to automating services. MIT Sloan Management Review, 58(1), 41.

Matheson, D., & Matheson, J. E. (2001). Smart organizations perform better. Research-Technology Management, 44(4), 49-54.

Orlikowski, W. J. (1992). The duality of technology: Rethinking the concept of technology in organizations. Organization science, 3(3), 398-427.

Richter, A., Heinrich, P., Stocker, A., & Schwabe, G. (2018). Digital work design. Business & Information Systems Engineering, 60(3), 259-264.

Sein, M. K., Henfridsson, O., Purao, S., Rossi, M., & Lindgren, R. (2011). Action design research. MIS quarterly, 37-56.

Van der Aalst, W.M., Bichler, M. & Heinzl, A. (2018). Robotic Process Automation. Business and Information Systems Engineering (forthcoming)

Type of contributions invited:

This track accepts theoretical or empirical full research papers, research-in-progress papers, experience-in-the-field reports, or case reports.

Track Co-Chairs	
Name – Surname	Lia Tirabeni
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Short bio	Lia Tirabeni, PhD, is research fellow in Organization Studies (CPS Department), adjunct professor of 'Business Organization' (Department of Management) and 'Smart Factory and Organizational Dynamics' (Department of Psychology) at the University of Torino. She has been Visiting Research Fellow at the Department of Management Science & Technology, AUEB (Athens). Before joining university, she worked as a consultant in the manufacturing sector. She is member of the scientific committee of the regional project 'HOME' focused on applying the Industry 4.0 technologies in SME's. She co-chairs a track on Industry 4.0 and Innovation within the forthcoming R&D Management Conference 2019. Her research concerns innovation processes; the ways technology affects work practices and organizations and the individual interaction with technological artifacts, qualitative research methods. Her works as been published in both international and national journals (i.e. TOCHI, International Journal of Innovation and Technology Management, Studi Organizzativi).
Name – Surname	Amon Rapp
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Short bio	Amon Rapp received the Ph.D. in Sciences of language and communication in 2015. At present, he is a visiting scholar at Sheffield Hallam University, Cultural Communication and Computing Research Institute and a research fellow at Computer Science Department of the University of Torino, where he leads the Smart Personal Technology Lab at ICxT research center. He authored more than 80 articles in international journals (e.g., TOCHI, Human-Computer Interaction, IJHCS,) and peer-reviewed conference (e.g., CHI, ISWC/UbiComp). He organized a variety of workshops at top-tier conferences such as UbiComp, UMAP, CHI Play, and he is part of the Program Committee of ACM IUI and CSCW. His scientific research is situated within the area of human-computer interaction. It focuses on the investigation of the effects of interactive and intelligent technologies on people's everyday lives. Before joining the University of Torino, he researched interactive TV systems and ubiquitous technologies for Telecom Italia S.p.A. Research & Trends.
Name – Surname	Raffaele Fabio Ciriello
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Short bio	Raffaele Fabio Ciriello serves as an Assistant Professor of Information Systems in the Business IT Department of the IT University of Copenhagen (Denmark) since April 2017. He holds a PhD (2017) and M.Sc. (2014) in Informatics from the University of Zurich (Switzerland) and a B.Sc. (2011) in Information Systems from the University of Stuttgart (Germany). Raffaele's current research focuses on digital innovation practices and blockchain social networks. He has collaborated with a number of different companies from the software, IT, and financial services sector. His works have been published in European Journal of Information Systems (EJIS), Business and Information Systems Engineering (BISE), International Conference on Information Systems (ICIS), International Conference on Software Engineering (ICSE), European Conference on Information Systems (ECIS), and Hawaii International Conference on System Sciences (HICSS).
Name – Surname	Federico Butera
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Short bio	Federico Butera, Emeritus Professor of Organization Sciences, is the President of IRSO Foundation and Visiting Scholar at Sloan School of MIT (2000). He has been working at Olivetti (1962-1974) as manager and Director of the Center for Organization Studies and founded two consulting companies. As an organization designer he has contributed to some of the innovative integrated designs of organization, technology and professional systems: i.e. "assembly islands", "semi autonomous groups", "human controlled automated plant", "skill-based process manufacturing organizations", etc. These projects were conducted in Olivetti, Dalmine, Montedison, Fiat, Vodafone, GSK, Telecom, Enel, Eni, Finmeccanica, Boheringer Ingelheim, Mondadori, Ministry of Public Education, INPS, ISTAT, etc. He was a founding member of the "International Council for the Quality of Working Life" and chairman of the IFAC (Social Effects of Automation); board member of the Confindustria IXI Program on

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Innovation; past president of the Italian Association of Management Consulting Firms. He has published 34 books and more than 200 articles.

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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:
http://www.springer.com/it/computer-science/lncs/conference-proceedings-guidelines

Deadline for encouraged abstract submission: April 21, 2019
Deadline for full paper submission: **May 20, 2019**