

Selected Topics on Socio-technical Perspective in Information Systems: Editorial Introduction to Issue 22 of CSIMQ

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This thematic issue of the Complex Systems Informatics and Modeling Quarterly (CSIMQ) journal is dedicated to fostering a socio-technical perspective in the Information Systems (IS) field. The contemporary perspective has developed a lot over the years and the socio-technical agenda continues to be relevant as recognized by Berniker [1] in his discussion on the future of socio-technical systems theory and practice and in the discussions by Sarker et al. [2], Pasmore et al. [3], and Ceschin and Gaziulusoy [4].

This issue contains a selection of extended papers presented at STPIS'19 – 5th International Workshop on Socio-Technical Perspective in IS Development held on June 10, 2019 in Stockholm, Sweden in conjunction with the 27th European Conference on Information Systems (ECIS) [5]–[9]. The workshop featured presentations of 13 papers and 3 posters and was attended by more than 30 participants from 8 different countries (Sweden, Norway, Finland, UK, Germany, Italy, Switzerland, and US). Four of the presented papers were extended for publication in this thematic issue. The articles presented in this thematic issue contain at least 30% new material compared to the papers initially submitted for the workshop. The last included article was submitted as a regular contribution to the CSIMQ journal and was selected to be included into this thematic issue because of its close connection to the topic of socio-technical systems. All articles went through two rounds of reviews to ensure the quality of the articles published in this issue. STPIS articles cover both theoretical and practical aspects of using a socio-technical perspective in IS, which is reflected in the current issue that contains both theoretically and practically oriented articles.

The first article “Ethnographically Derived Socio-technical Analysis for Information System Support in Intensive Home Care” co-authored by Markus Jelonek, Thomas Herrmann, Nina Altmann, and Michael Ksoll takes a practical perspective. In this article the authors report on results from an empirical study of caregivers in a intensive care home thus contributing to the health care information system literature from a socio-technical perspective.

The second and third article take a more theoretically focused perspective on socio-technical systems. The authors of second article “Using Enterprise Models to Explain and Discuss

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Autopoiesis and Homeostasis in Socio-technical Systems” Ilia Bider, Gil Regev, and Erik Perjons apply two theoretical concepts from biology – namely autopoiesis and homeostasis – to socio-technical systems by proposing an expansion to the Fractal Enterprise Model (FEM). The third article “Reviving the Individual in Socio-technical Systems Thinking” authored by Lars Taxén illustrates an approach for socio-technical systems thinking which is centered on the perspective of individuals. This approach is different to common socio-technical approaches which typically focus on the interconnection between technical and social systems.

The fourth and fifth article propose methodological additions to the common canon of socio-technical design approaches. In the fourth article “Usability as Speculum Mundi: A Core Concept in Socio-technical Systems Development” the authors Mikko Rajanen and Dorina Rajanen propose a concept to use usability as lens for analyzing socio-technical systems. The fifth and final article in this issue entitled “Just Finished a Cycle of a Design Science Research Project: What’s Next?” was co-authored by Ilia Bider, Erik Perjons and Paul Johannesson. In this article the authors propose a classification for design science (DS) cycles and provide guidelines for how to choose the next cycle based on a study of two design science projects.

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