

Preface for the 10th International conference on sociotechnical perspectives in Information Systems (STPIS 2024)

August 16-17 2024, Jönköping, Sweden

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1. Introduction

The 10th International Conference on Socio-Technical Perspectives in Information Systems (STPIS 2024), was held as a hybrid workshop-style conference both online and in Jönköping, Sweden, August 16-17th 2024. The local organizers were Joakim Kävrestad and Erik Bergström. The workshop was sponsored by the Cybersecurity and Privacy research group at Jönköping School of Engineering. This year there were approximately 50 participants combined in total, on campus and online.

The main purpose of this workshop-style conference is to arrange discussions on using a socio-technical perspective in organizational system development, the long-term goal being to make this workshop a meeting place for the community of researchers and practitioners interested in the socio-technical approach. The workshop took place over two days. We focus on engaging academics, researchers and practitioners through keynote presentations and special discussion papers, paper presentations, and panel discussion. Real world problem scenario and case study is presented by industry representatives and professionals. Which is explored and discussed by participants during the workshop. There was time to network with scholars using socio-technical approaches in information systems research and stimulate discourse to build collaboration.

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The workshop provides an international forum for professionals, academics, and researchers to present latest developments in sociotechnical perspectives and applications, involving design and problem solving in work systems, cybersecurity, physical security, AI applications, systems practice, high performance team working, etc. It particularly welcomes those emerging methodologies and techniques which aim to integrate theory in practice while taking into consideration a sociotechnical perspective. In 2024, the STPIS Workshop was chaired by Joakim Kävrestad, Jönköping School of Engineering, Sweden.

A socio-technical perspective sees an organization as a combination of two components – a social and a technical one. The pattern of behaviour in the organization is determined by how well these parts fit each other. While analyzing system problems of getting things done, adequate consideration should be given to technology as well as informal and formal interactions of people.

Despite that a socio-technical perspective has been around for over a half century, it is often forgotten in the information systems (IS) discourse. Consequently, many “new approaches” appear to reflect on IS systems problems, such as modern IT systems poorly adjusted to the external or/and internal environment (e.g., market, organizational culture) of organizations in which they are (to be) deployed. We strongly believe that it is time the social-technical perspective took its proper place in IS research, practice, and teaching.

2. Proceedings Overview

We invited papers on the following five themes, related to socio-technical perspective in IS development:

- AI, ChatBots and Smart Working
- Digitalization and Digital Transformation
- Cybersecurity
- Diversity, equity, and inclusion (DE&I)
- Sustainability

Topics of interest within those themes could include, but were not limited to:

- Contemporary socio-technical approaches, in practice (case studies) and theory
- Industry 5.0 / Society 6.0 as part of socio-technical practice and agenda
- Methodological aspects of using socio-technical approaches in practice
- Socio-technical approach in education and training
- Information system design using socio-technical approaches
- Diversity, equity and inclusion of all things related to IS

- Societal Security from a socio-technical perspective
- Information Systems Security from a socio-technical perspective
- Ethnographic and Anthropological aspects of IS design and adoption
- Philosophical aspects of socio-technical practices
- Socio-technical human computer interaction
- Digitalization and digital transformation from a socio-technical perspective

For our STPIS'24 workshop we received overall 26 submissions (including both short and long papers, as well as industry white papers), and after a thorough review process where every submission got double blind reviews as well as an editorial review. All double-blind reviews were quality reviews by members of the Program Committee and the editorial reviews were by members of the organizing committee.

Out of the 26 submissions 18 were selected for presentation at the workshop. After the workshop the presented papers were revised based on the peer-reviews and comments during the workshop, and every paper had a final review before publication in the proceedings.

Among the papers in this STPIS'24 proceedings are regular research papers, three papers based on keynotes, one position paper, one invited paper and one industrial case study:

Keynote talks:

1. Ulf Seigerroth (Jönköping University, Sweden): Digital Transformation – Handling socio-technical complexity through enterprise modeling as well as interactive discussions.
2. Louise Harder Fisher (Copenhagen Business School, Denmark): Meaningful adoption and use of Generative Artificial Intelligence within the Communication Department of a Danish Municipality.
3. Steven Alter (University of San Francisco, USA): Applications of AI in Sociotechnical Work Systems: Fundamental Change or just a Type of Partial Automation?

Position paper (Industry White Paper):

William Lee (Singapore). The Future of Collaborative Robotics AI in Industry 5.0: An Academic Perspective with a Practice Approach.

Invited Paper:

David Ing (Creative Systemic Research Platform Institute, Canada). Reifying Socio-Technical and Socio-Ecological Perspectives for Systems Changes: From rearranging objects to repacing rhythms.

Industry case study:

Petra Jonsson, (Secify, Jönköping): Cybercrime targeting the elderly in Sweden.

The case this year was presented by Petra Jonsson at Secify. The case topic was on a socio-technical approach to securing the elderly from online crime where a core issue is that it is hard to develop a sustainable solution since it is unclear who should fund such a solution. The workshop took an open approach and discussed several different directions related to the case topic. Three main discussion streams are accounted for below and highlight both the multitude of levels the problems concerns and the difficulty of addressing the problem.

1. Socio technical prevention by targeting both social and technical attack vectors. This could, in the specific case mean that the victim population can be empowered through knowledge or awareness increasing efforts. It can also mean to limit the technical opportunity for online crime.
2. Review the security value chain to identify where a service is needed to help the problem. One could ask if it is feasible to spend efforts into protecting the victim group or maybe another approach would be to deter the criminals from committing the criminal actions in the first place.
3. Review the need for service development. The core of the discussion was on a tendency to develop new solutions in spaces where solutions may already exist. As such, continued development of existing solutions should be reviewed and such an analysis could result in insights as to whether new solutions are needed or if the problem is rather that solutions are not used.

3. STPIS 2024 Organizing Committee:

Local Organizer: Joakim Kävrestad and Erik Bergström, Jönköping School of Engineering, Sweden

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Additional Participants

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Online Resources – Links to STPIS and previous proceedings etc

Since 2016 editions of STPIS, are available on-line via CEUR services, and index the volume in DBLP, Google Scholar, Scopus, CiteSeer/CiteSeerX, etc. For Scandinavian researchers, the publisher is in the Norska systemet rated as level 1 (which is the highest level for the conferences and workshops), as well as in Finnish JuFo system as level 1. Proceedings for the previous editions of STPIS 2016 - 2023 can be found here:

STPIS 2016 – <http://ceur-ws.org/Vol-1604/>

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