Preface

This volume contains the papers presented at STPIS'18: 4th International Workshop on Socio-Technical Perspective in IS Development to be held on June 12, 2018 in Tallinn, Estonia.

Importance of socio-technical perspective in research and practice

A socio-technical perspective sees an organization as an emergent whole of multiple systems view – in this perspective a multiplicity of emergent combinations of what may appear as two systems is a key feature – a social system and a technical system as one indivisible whole. The real pattern of behaviour in the organization is determined by the interaction of two. While analysing management problems of getting things done by people, 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 IS discourse today. 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 high time the social-technical perspective took its proper place in IS research, practice and teaching.

The fourth STPIS workshop

The main purpose of the workshop is to arrange discussions on using a socio-technical perspective in IS development, the long term goal being to make this workshop a meeting place for the community of IS researchers and practitioners interested in the socio-technical approach. These workshop proceedings are a continuation from last year's attempt to set a broad platform for discussion and debate on the benefits and problems of viewing information systems as socio-technical artefacts.

STPIS'18 presentations sessions include 11 papers on various aspects of applying socio-technical approaches to practice.

We have three experience reports this year. The first one covers our own exercise during STPIS'17, and what came after it (Nolte, et.al). The second experience report is on using maps in management consulting practice (Mauri). The third report is on exploiting the concept of structural coupling for modeling and maintaining organizational identity (Bider & Perjons)

Four research-oriented papers cover a wide range of topics. The first paper compares plan driven and agile implementation of ERP (Gren, et al.). The second one contains critique of the traditional socio-technical approach and suggests a new approach to deal with the highly dynamic business world of today (Alter). The third paper is devoted to applying a socio-technical approach to assessing security risks

(McEvoy & Kowalski). The fourth paper suggests a new way of modeling business processes based on the idea that each process is aimed at maintaining a homeostasis, and demonstrates practical usefulness of the approach (Rychkova & Regev).

We have two position papers this year. The first paper discusses transferring principles of interactive systems design to design of socio-technical systems (Herrmann, et al.). The second paper discusses the concept of change of a business process ecosystem (Dimitre & Kirikova).

Two poster will also be presented at the workshop. The first one discusses interoperability from the socio-technical perspective (Ashra, et al.). The second poster suggests using a socio-technical perspective in cyber security education (Zoto, et al.).

The STPIS workshop has a tradition to devote half time to papers presentation and half time to collaborative work. Collaborative sessions at STPIS'18 will be devoted to work in groups on a business case, each group producing a solution based on a socio-technical systems approach of their choice. A short presentation of the business case that will be used is presented in Appendix 1.

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