AIS SIGPRAG 8th Virtual Workshop "Pragmatist Research on Sustainability in Information Systems"

Workshop Focus

The AIS Special Interest group in Pragmatist Information Systems (IS) Research (SIGPRAG) wants to stimulate and promote pragmatist IS research in ways that address relevant and timely areas, questions, and phenomena in the IS field. In the 2022 workshop this will be done through the following two themes: "Pragmatism and Sustainability in Information Systems" and "Foundations and Application of Pragmatist IS Research".

Main Theme - Pragmatism and Sustainability in Information Systems

The main theme, "Pragmatism and Sustainability in Information Systems", stimulates IS research in sustainability to apply views and methods that are founded in pragmatism. In the field of IS, IS researchers need to cultivate inter-disciplinary and engaging research that is targeted towards today's major societal challenges, such as achievement of the Sustainable Development Goals (SDGs) of the United Nations (UN). Information Technologies (IT) are central in addressing the SDGs over time, and several of the SDGs have objectives and indicators that relate directly to the access of IT in organizations and society. IT can thus play a central role to support the crucial dimensions of social sustainability, economic sustainability, and environmental sustainability, providing provision of social goods such as healthcare, education, and economic income. However, digital transformation of organizations and society can also undermine our understanding of what the aim of sustainability is or not, or how the normative imperatives of sustainability should be addressed in pragmatic ways. On the one hand, the design, development, use and discharge of state-of-the-art IT have detrimental environmental impacts, the digital economy can worsen inequalities, and the digital social space may have harmful consequences for individuals' well-being. Hence, in order to study, understand, and address crucial challenges of sustainability through pragmatic IS research, the main theme of this virtual workshop acknowledges the following topics that correspond to the overarching workshop theme:

- Sustainable practices in IS that have a foundation in pragmatism
- Foundations and applications of pragmatist IS research to wicked problems and sustainability
- Pragmatist ways to conceptualize and describe sustainability in IS research
- Pragmatist ways to critically problematize the sustainability imperative in IS research
- Pragmatic accounts on how innovation helps organizations tackle sustainability problems
- Pragmatic approaches for designing and evaluating immersive technologies' (e.g., Virtual Reality, Augmented Reality, Mixed Reality) potential for supporting the imperative
- The philosophy of pragmatism and its implications for development, use, and management of artifact solutions that address sustainability problems in IS
- Approaches to addressing concepts, values, and theories of sustainability in IS
- Co-creation of knowledge for sustainability
- Philosophically grounded and practice-oriented papers addressing environmental sustainability, social sustainability, intersectionality, or other ethically oriented challenges that are prevalent in contemporary sustainability discourse
- Case descriptions including descriptions of and reflections on sustainability conundrums and value trade-offs
- Pragmatic-driven design of digital artifacts that aim to tackle wicked sustainability problems in organizations
- Evaluation of digital artifacts focusing values, ethics, and consequences for different stakeholders' sustainability awareness

Complementary Theme - Foundations and Application of Pragmatist IS Research

Following the tradition of SIGPRAG workshops we also include a complementary sub-theme "Foundations and Application of Pragmatist IS Research". We accept papers from a broad array of topics within this scope:

- Pragmatic ways to research design and use of digital artifacts. As for example:
 - Practice research
 - Action research
 - Design science research
 - Action design research
 - Case study research

- Evaluation research
- Pragmatic ways to conceptualize and describe digital artifacts. As for example:
 - Ensemble view
 - Socio-technical view
 - Contextual view
 - o Functional tool view
 - Affordance view
 - o Communicative action view
- Pragmatic ways to conceptualize and describe practices. As for example:
 - o Symbolic interaction
 - Language action
 - o Socio-materiality
 - Institutionalism
 - Actor-networks
- Pragmatic views of the design process. As for example:
 - Openness in innovation
 - Design thinking
 - Collaborative design
 - Stakeholder inclusion
 - How to tackle wicked problems
 - Design conversations
 - Values and goals articulation
 - Creativity in design
 - Design and evaluation strategies

Workshop Purpose and Procedure

This workshop is for the first time arranged virtually in the same spirit and a continuation of earlier successful SIGPRAG workshops. The workshop will thus be executed in Zoom to bring scholars and practitioners together for knowledge exchange and development on pragmatic research foundations and practical contributions to the sustainability imperative in IS. The workshop will take different time zones of participants into sufficient consideration in order to organize and conduct a rewarding workshop. The workshop is a developmental arena with thoughtful and constructive feedback from reviews and comments from other scholars in IS. The workshop should be a place where you can present ideas in papers and get fruitful feedback for further development of the papers.

Dates and Submission Details

Submit Extended Abstract: October 3, 2022

Notification of Acceptance for Extended Abstracts: October 14, 2022

Submit Full Manuscripts: November 21, 2022

Workshop: December 5, 2022

The workshop will follow an ordinary scientific procedure with a submission of extended abstracts on 2 pages. The selection of extended abstracts is conducted through peer-review pursued by the SIGPRAG committee. After the selection, the authors are invited to send their full paper submissions which are expected to be between 5–16 pages. We welcome full research papers, conceptual papers, as well work-in-progress/position papers. For submissions, we use the EasyChair system (https://easychair.org/conferences/?conf=aissigprag8thvirtual). A format template can be found here. Workshop proceedings will be digitally published and distributed if permitted by the author(s).

Workshop Co-Chairs and Program Committee

- Amir Haj-Bolouri, University West, Sweden (amir.haj-bolouri@hv.se)
- Göran Goldkuhl, Linköping University & Uppsala University, Sweden (<u>goran.goldkuhl@liu.se</u>)
- Markus Helfert, Maynooth University, Ireland (Markus.Helfert@mu.ie)
- Leona Chandra Kruse, University of Liechtenstein, Liechtenstein (leona.chandra@uni.li)
- Hans Weigand, Tilburg University, Netherlands (<u>h.weigand@tilburguniversity.edu</u>)
- John Stouby Persson, Aalborg University, Denmark (john@cs.aau.dk)
- Kieran Conboy, National University of Ireland Galway, Ireland (kieran.conboy@nuigalway.ie)

Pragmatist Information Systems Research

There have been many calls in the information systems (IS) community for a stronger pragmatic focus. This can be seen in a growing interest for research approaches and methods in IS that emphasize contribution to practice and collaboration between the practice and academia. Action research, which aims for knowledge development through collaboration and intervention in real settings, is achieving more and more academic credibility (Baskerville & Myers, 2004; Davison et al, 2004). This can also be said about design science research that aims for the generation of new and useful artifacts (Hevner et al, 2004; Gregor & Jones, 2007). Research through evaluation has had a long and venerable place in IS research (Ward et, 1996; Serafeimidis & Smithson, 2003). Several approaches and frameworks that combine or integrate elements from the above-mentioned approaches have also emerged, e.g., practice research (Goldkuhl, 2011), collaborative practice research (Mathiassen, 2002), practical science (Gregor, 2008), engaged scholarship (Mathiassen & Nielsen, 2008), action design research (Sein et al, 2011) and technical action research (Wieringa & Morali, 2012). Underlying these different approaches is a quest for practical relevance of the conducted research (Benbasat & Zmud, 1999; Van de Ven, 2007; Wieringa, 2010). It is not enough to only "mirror" the world through descriptions and explanations, but a pragmatic orientation recognizes intervention and design as a way of knowing and a means for building knowledge about social and institutional phenomena (Aakhus, 2007). There is a need for knowledge of other epistemic kinds that contributes more clearly to the improvement of IS practices.

A pragmatic orientation can also be seen in the increasing interest in the conceptualization of practices, activities, agency, and actions. Practice theorizing has gained an increased attention in IS studies (Orlikowski, 2008; Leonardi, 2011). There has been an interest in agency and action-oriented theories in IS for quite some time, e.g., activity theory (Nardi, 1996), structuration theory (Orlikowski, 1992), social action theorizing (Hirschheim et al, 1996), human agency theorizing (Boudreau & Robey, 2005), language action perspective (Winograd & Flores, 1986) and work systems theory (Alter, 2013). From this also follows an interest for social and pragmatic views of the IT artifact (Aakhus & Jackson, 2005). This includes views of the IT artifact as contextually embedded and carriers of those social contexts (Orlikowski & Iacono, 2001) and such artifacts being tools for action and communication (Ågerfalk, 2003; Markus & Silver, 2008). Design research practice and the contributions to practice through appropriation of knowledge and methods and the contributions to academia through knowledge artifacts has been discussed (Sjöström, Donnellan & Helfert, 2012).

This enhanced practice and action orientation follows a growing awareness within IS scholars towards pragmatism as a research foundation (e.g., Goles & Hirschheim, 2000; Ågerfalk, 2010; Goldkuhl, 2012). It is not the case that IS scholars suddenly become pragmatists in their research orientation. It is rather the case that there is a move from an implicit pragmatism to an explicit one (Goldkuhl, 2012). For a long time IS scholars have addressed practical problems with an interest in improvement. That interest has led to the extensive development of methods, models, and constructive frameworks for not only the design of IT artifacts, but also related to several other IS/IT phenomena like e.g., innovation management, business process management, project management, IT service management just to mention a few. These methods reveal an on-going search for knowledge of other epistemic kinds for advancing understanding of information technology, information systems, and practice. Pragmatism – and its inherent view of inquiry as a theory of knowledge (Dewey, 1938) – is a philosophical foundation for intervention-based research (Baskerville & Myers, 2004; Sjöström, 2010). Indeed, Constantinides et al (2012, p. 1) propose "practical questions for all IS researchers to consider in making choices about relevant topics, design and execution, and representation of findings in their research." The pragmatist foundations are also reflected in the evolving design science research discourse (Hevner et al, 2004; Sein et al, 2011; Gregor & Hevner, 2013; Iivari, 2014; Venable et al, 2016).

References

Aakhus M (2007) Communication as Design. Communication Monographs, Vol 74 (1), pp 112–117
 Aakhus M, Jackson S (2005) Technology, Interaction and Design. In K. Fitch & B. Sanders (Eds.), Handbook of Language and Social Interaction (pp. 411–433). Lawrence Erlbaum, Mahwah, NJ

- Ågerfalk P J (2003) Information Systems Actability: Understanding Information Technology as a Tool for Business Action and Communication, Ph D diss, Department of Computer and Information Science, Linköping University
- Ågerfalk P J (2010) Getting Pragmatic, European Journal of Information Systems, Vol 19 (3), pp 251-256
- Alter S (2013) Is Work System Theory a Practical Theory of Practice?, Systems, Signs & Actions, Vol. 7 (1), pp. 22–48
- Baskerville R, Myers M (2004) Special issue on action research in information systems: making IS research relevant to practice foreword, *MIS Quarterly*, Vol 28 (3), p 329-335
- Benbasat I, Zmud R W (1999) Empirical research in information system research: The practice of relevance, MIS Quarterly, Vol 23 (1), p 3-16
- Boudreau M-C, Robey D (2005) Enacting Integrated Information Technology: A Human Agency Perspective, *Organization Science*, Vol 16 (1), p 3–18
- Constantinides P, Chiasson M, Introna L (2012) The ends of information systems research: a pragmatic framework. *MIS Quarterly, Vol* 36(1), p 1–10.
- Davison R M, Martinsons M G, Kock N (2004) Principles of canonical action research, *Information Systems Journal*, Vol 14, p 65–86
- Dewey J (1938) Logic: The theory of inquiry, Henry Holt, New York
- Goles T, Hirschheim R (2000) The paradigm is dead, the paradigm is dead ... long live the paradigm: the legacy of Burell and Morgan, *Omega*, Vol 28, p 249-268
- Goldkuhl G (2011) The research practice of practice research: theorizing and situational inquiry, *Systems, Signs & Actions*, Vol 5 (1), p 7-29
- Goldkuhl G (2012) Pragmatism vs. interpretivism in qualitative information systems research, *European Journal of Information Systems*, Vol 21 (2), p 135-146
- Gregor S (2008) Building theory in a practical science, in Hart D, Gregor S (Eds, 2008) *Information Systems Foundations: The role of design science*, ANU E Press, Canberra
- Gregor S, Hevner A R (2013) Positioning and presenting design science research for maximum impact, *MIS quarterly*, Vol 37 (2), p 337–355
- Gregor S, Jones D (2007) The Anatomy of a Design Theory, Journal of AIS, Vol 8 (5), p 312-335
- Hevner A R, March S T, Park J, Ram S (2004) Design science in information systems research, MIS Quarterly, Vol 28 (1), p 75-115
- Hirschheim R, Klein H, Lyytinen K (1996) Exploring the intellectual structures of information systems development: a social action theoretic analysis, *Accounting, Management & Information Technology*, Vol 6 (1/2), pp. 1-64
- Iivari J (2014) Distinguishing and contrasting two strategies for design science research, *European Journal of Information Systems*, Vol 24 (1), p 107–115
- Leonardi P (2011) When flexible routines meet flexible technologies: affordance, constraint, and the imbrication of human and material agencies, *MIS Quarterly*, Vol 35 (1), pp. 147-167
- Markus L, Silver M (2008) A foundation for the study of IT effects: A new look at DeSanctis and Poole's concepts of structural features and spirit, *Journal of the AIS*, Vol. 9 (10/11), pp 609-632
- Mathiassen L (2002) Collaborative practice research, Information Technology & People, Vol 15 (4), p 321-345
- Mathiassen L, Nielsen P A (2008) Engaged Scholarship in IS Research. The Scandinavian Case, *Scandinavian Journal of Information Systems*, Vol 20 (2), p 3–20

- Nardi B A (Ed, 1996) Context and consciousness. Activity theory and human-computer interaction, MIT Press, Cambridge
- Orlikowski W J (1992) The Duality of Technology: Rethinking the Concept of Technology in Organizations, Organization Science, Vol 3 (3), p 398-429
- Orlikowski W J (2008) Sociomaterial Practices: Exploring Technology at Work, *Organization Studies*, Vol 28 (9), p 1435–1448
- Orlikowski W J, Iacono C S (2001) Desperately seeking the "IT" in IT research a call to theorizing the IT artifact, *Information Systems Research*, Vol 12 (2), pp 121-134
- Sein M, Henfridsson O, Purao S, Rossi M, Lindgren R (2011) Action design research, MIS Quarterly, Vol 35 (1), p 37-56
- Serafeimidis V, Smithson S (2003) Information systems evaluation as an organizational institution experience from a case study, *Information Systems Journal*, Vol 13, pp 251–274
- Sjöström J (2010) Designing Information Systems a pragmatic account. PhD thesis, Uppsala University.
- Van de Ven A (2007) Engaged scholarship: A guide for organizational and social research, Oxford University Press, Oxford
- Venable J, Pries-Heje J, Baskerville R (2016) FEDS: a framework for evaluation in design science research. *European Journal of Information Systems*, Vol 25(1), p 77–89
- Ward J, Taylor P, Bond P (1996) Evaluation and realisation of IS/IT benefits: an empirical study of current practice, *European Journal of Information Systems*, Vol 4, p 214–225
- Wieringa R (2010) Relevance and problem choice in design science, in Winter R, Zhao J L, Aier S (Eds. 2010) *Proceedings DESRIST 2010*, LNCS 6105, Springer, Berlin
- Wieringa R, Morali A (2012) Technical action research as a validation method in information systems design science, *Proceedings DESRIST 2012*, LNCS 7286, Springer, Berlin
- Winograd T, Flores F (1986) *Understanding computers and cognition: A new foundation for design*, Ablex, Norwood