OPEN IS: THE IS DISCIPLINE AS AN OPEN COMMUNITY ECOSYSTEM

Panel Statement

Matt Germonprez  
University of Nebraska at Omaha  
Omaha, Nebraska, USA  
germonprez@gmail.com

Kevin Crowston  
US National Science Foundation  
and  
Syracuse University School of Information Studies  
Syracuse, NY  
crowston@syr.edu

Michel Avital  
Copenhagen Business School  
Copenhagen, Denmark  
michel@avital.net

Joseph Feller  
University College Cork  
Cork, Ireland  
jfeller@afis.ucc.ie

Abstract

The collective intelligence and collective action of “open” communities have produced a variety of complex knowledge goods and radical social change. The Information Systems (IS) community has invested significant effort into researching open communities and the ecosystems in which they operate, seeking to better understand these emerging forms of organization, production, innovation, knowledge, and value creation. Ironically, the IS discipline itself has, on the whole, failed to embrace the principles that its own research has repeatedly identified as generative and powerful. This panel therefore seeks to stimulate a thoughtful and dynamic discussion around the proposition that becoming a more open community will enhance the IS discipline’s scholarly inquiry and global impact.

Keywords: Openness, Open Communities, Open Scholarship, Open Pedagogy, Open Data, Open Design, Open Access, Information Systems
Panel Summary

“Open” communities leverage freely shared information and technological, social, and legal systems to collaboratively produce a variety of complex knowledge goods and to affect radical social change. The products of these communities – open source software, open content, citizen journalism, citizen science, agile disaster response, and political transformations – capture the global imagination. In response, firms, governments and organizations have increasingly sought to engage with open communities, developing sophisticated, interdependent, and mutually beneficial ecosystems.

The Information Systems (IS) community has invested significant effort into researching both open communities and the ecosystems in which they operate, seeking to better understand these emerging forms of organization, production, innovation, knowledge, and value creation. Indeed, the IS community has, in many instances, been at the forefront of scholarly inquiry in this space (c.f. Aksulu and Wade, 2010; Crowston et al., 2009).

Ironically, the IS discipline itself has, on the whole, failed to embrace the principles that its own research has repeatedly identified as disruptive and powerful. Rather, open approaches to software development, knowledge management, and new product development remain marginalized in our curricula; open sharing of courseware, research data and research tools is the exception rather than the rule; and open access to research, particularly in our most highly ranked journals, is a rarity.

The proposed panel is predicated on the simple argument that this irony cannot go unchallenged. We contend that current academic endeavors are not only candidates for benefiting from open community engagement, but that academic endeavors run with open community engagement could provide global impact, benefiting an array of constituents well beyond the boundaries of the IS community. Thus, we would seek to engage the IS community around the proposition that:

**Becoming a more open community will enhance the IS discipline’s scholarly inquiry and global impact.**

The panel will investigate a variety of related questions:

- What is the source of inertia keeping the IS discipline so closed? Are we simply slow starters? Do we not wish to participate? Are our current institutional forms too rigid to accept such change?
- How does an open community ecosystem run itself? How can IS as a discipline emulate this?
- What would Open IS look like? For example, what would be the impact of radical peer production and review (a la open source and Wikipedia), or default openness for all of our data, research tools/methods, and results?
- Is there value in this vision? Is it achievable/sustainable at all?
- How can Open IS provide global impact, sharing knowledge beyond the scope of the IS discipline?

To explore these questions, the panel will focus on a handful of key, concrete issues, including:

- Openness in the IS curriculum
- Open pedagogical approaches
- Open data and tools
- Openness and the research/publishing lifecycle
- Citizen and collaborative science
- Open access publications
- Career progression in an open ecosystem
Panelist Positions

The panelists will each take responsibility for certain areas of concern (open pedagogy, open data, open access publishing, open scholarship) offering the arguments for openness in those areas as well as discussing the challenges and disadvantages entailed.

- **Matt Germonprez** will discuss open pedagogy, arguing that IS educators are failing to consistently educate university students on practices of openness. Matt will provide examples of including practices of openness to university students, including concentration on specific areas of curriculum where discussion and engagement with “openness” would benefit the IS student learning experience.

- **Kevin Crowston** will discuss open data, arguing that IS researchers are missing an opportunity to increase the impact of their research by keeping data entirely private. Making data open has several important benefits, including avoiding wasteful duplication of effort collecting the same data repeatedly, and enables checking and replication of findings, which are basic steps in the validation of research results. Furthermore, open data support comparative research and synthesis across multiple studies. In many fields, data themselves are increasingly seen as valuable and to be shared as a research product, e.g., through an increasing variety of data repositories (Avital et al, 2007). Funding agencies increasingly require projects to share data, which increases the value of the data and the agency’s return on investment (Jacoby, 2010). Some journals similarly require that data supporting a published paper be made available. However, the practice of sharing of data is still very unevenly distributed, well established in some fields and practically absent in others.

- **Michel Avital** will discuss open access publishing in the context of multiple phenomena at the forefront of technology, from open innovation to open education and open design. Building on the principles of generative design, Michel will argue that the shift in the communications infrastructure and subsequently the prevailing communication patterns, accentuates permeable boundaries and transparency that promote cross-fertilization and exchange of any kind. It provides fertile ground for the development of new forms of organizing, new business models, new designs of supply chains, and new varieties of products and services. Although the threat to the dominant institutions and practices may seem unreal, open platforms present a clear alternative that may grow strong once it reaches a critical mass in the right socio-economic conditions.

- **Joseph Feller** will discuss open scholarship, building on the other panelist’s contributions to push the concept of “Open IS” to its extremes, in an effort both to stimulate innovative thinking about the nature of IS scholarship and to reveal the fundamental challenges and disruptive effects of such a vision. Against the backdrop of day-to-day academic life and career progression, he will pose such questions as “What would it mean if research papers carried with them their review, revision and discussion histories like a Wikipedia article does?” “What would it mean to ‘fork’ or ‘port,’ rather than cite, a piece of research?” “Should research papers – or whole research areas – have bug trackers?” “Could we deal with massively public non-blind peer review (and would we want to)”? among others.

Panelist Biographies

**Matt Germonprez** is currently a faculty member at the University of Nebraska at Omaha. Prior to joining UNO, he was a faculty member at UW-Eau Claire, Case Western Reserve University and a Ph.D. student at the University of Colorado-Boulder. His research focuses on theory and method development and investigation with particular focus on open source, communal, emerging and tailorable technologies. In particular, he explores how these new, user-centered technologies are designed and used in practice from the individual to the enterprise level. His work has been funded by the National Science Foundation and accepted in MIS Quarterly, The Journal of the Association for Information Systems, Information Systems Journal, Information & Organization, and The Communications of the Association for Information Systems.

**Kevin Crowston** is a Distinguished Professor of Information Science in the School of Information Studies at Syracuse University. He is currently on secondment to the US National Science Foundation as a Program Director for the Cyber-Human Systems program in the Directorate for Computer and Information Systems and Engineering. His research examines new ways of organizing made possible by the extensive use of information and communications technology. Specific research topics include the
Panels

development practices of Free/Libre Open Source Software teams and work practices and technology support for citizen science research projects, both with NSF support. He is currently a co-Editor-in-Chief for the journal Information, Technology & People, vice-chair of the International Federation for Information Processing (IFIP) Working Group 8.2 on Information Systems and Organizations and Division Chair for Academy of Management Organizational Communications and Information Systems Division.

Michel Avital is Microsoft Chair and Professor of IT Management in Copenhagen Business School. Design and innovation are the leitmotif of Michel’s work. Building on alternative genres and especially positive modalities of inquiry, his research focuses on information and organization with an emphasis on the social aspects of information technologies. He has published articles on topics such as generative systems design, creativity, innovation, collaboration and competition, green IT and sustainable value. He is an editorial board member of seven leading IS journals and serves in various organizing capacities in ICIS, ECIS and other topical conferences. Michel is an advocate of openness and an avid proponent of cross-boundaries exchange and collaboration. Further information at http://avital.net

Joseph Feller is Senior Lecturer (Business Information Systems) at the University College Cork, Ireland, and currently director of the Technology-Enabled Organizational Transparency and Openness (TOTO) research project, which seeks to support the international community researching organizational transparency and openness through the production of freely available web resources and the organization of collaboration and deliberation events. He has published widely on open source software and related phenomena, and his work has appeared in Information Systems Research, European Journal of Information Systems, Journal of Strategic Information Systems, and Information Systems Journal and other peer-reviewed international journals and conferences, as well as in numerous practitioner outlets. He chaired the Workshop Series on Open Source Software Engineering (co-located with ICSE 2001-2005), and co-chaired The Third International Conference on Open Source Systems (IFIP 2.13 WG 2007), the “Innovation and Open Source Software” track at ECIS 2008 and the “Open Data, Models, Platforms and Sources” track at ECIS 2013. He has guest edited special issues on open source software for Information Systems Journal, IEE Proceedings - Software, Systèmes d'Information et Ennetment, and Software Process Improvement and Practice, and has served as a panelist at several prior ECIS and IFIP conferences.

Acknowledgements

Kevin Crowston is supported by the US National Science Foundation. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

References


