Open digital services and platforms

Juho Lindman  
Applied IT  
University of Gothenburg/Chalmers  
juho.lindman@ait.gu.se

Matti Rossi  
Information Systems Science  
Aalto University School of Business  
matti.rossi@aalto.fi

Virpi Kristiina Tuunainen  
Information Systems Science  
Aalto University School of Business  
virpi.tuunainen@aalto.fi

The first Open Data Services Mini-track was organized in HICSS-46, followed by a workshop discussing Open Data service research agenda in HICSS-47, a minitrack focusing on different aspects of open data services in HICSS-48, and on digital service innovations based on "open" phenomena and practices in HICSS-49. In HICSS-50, we extend the discussion to the different digital services and platforms.

Can the value provided by open digital services disrupt markets and advance digitalization? Open digital services and platforms are no longer a novelty, and their importance for individuals, organizations as well as societies is expected to grow fast. As the available service stack grows, we can see the proliferation of innovations in many areas (e.g. traffic, news, environmental monitoring etc.).

Seeking novel research describing open services, service systems or service platforms, our focus this year is on new platforms and platform technologies (such as, blockchain and Bitnation.co to name a few) that offer new open source-based opportunities for developing radically new digital services. In the case of blockchain it can replace private trust services with an open mode. Bitnation has the somewhat ambitious goal of creating a virtual “country” as a future legislative entity. Also for example sharing economy services (such as, Airbnb, Uber and TaskRabbit) build on “open” phenomena and practices, including technology (open source platforms, such as Docker) and markets (open participation and access).

The three papers in this minitrack deal with digital services and service innovations based on or building on open practices from different perspectives.

The first paper, “Pervasive Decentralisation of Digital Infrastructures: A Framework for Blockchain enabled System and Use Case Analysis” by Florian Glaser (Goethe University Frankfurt, Germany) is related to one of the most discussed and allegedly disruptive innovations of the distributed database technology referred to as blockchain. In this paper, the author develops an ontology that delineates common terminology, core concepts and components, their relationships as well as innovative features of blockchain technology. These insights are further connected with implications for relevant types of digital market models.

The second paper, “Openness and Legitimacy Building in the Sharing Economy: An Exploratory Case Study about CouchSurfing” by Attila Marton, Ioanna Constantiou and Georgios Lagoudakos (Copenhagen Business School, Denmark) looks at the case of CouchSurfing to investigate how openness, which has been part of the organization’s raison-d’être, contributed in the legitimacy building efforts and why it was replaced by notions of profitability and revenue generation.

The third paper is titled “Opportunities and risks of Blockchain Technologies in payments – a research agenda” and authored by Juho Lindman (University of Gothenburg/Chalmers, Sweden) and Matti Rossi and Virpi Kristiina Tuunainen (Aalto University, Finland). The paper focuses on blockchain technology based services and platforms and builds on earlier literature on payments and payment platforms proposing a research agenda divided into three focal areas of 1) organizational issues; 2) issues related to the competitive environment; and 3) technology design issues. The authors discuss several salient themes within each of these areas, and derive a set of research question for each theme, highlighting the need to address both risks and opportunities for users, as well as different types of stakeholder organizations.

Together, these three papers provide examples of issues relevant for continuing the much-needed work in the field. Furthermore, this minitrack provides a venue for presenting findings, creating future research collaborations and, debating the future of digital service innovations based on different open platforms and services.