PANEL: The relationship between IS research and industry. What do they learn from one another?

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1 Industry Panel

The industry panel brought together five people from academia and practice, some working in both worlds:

Eric Dubois, CRP Henri Tudor, Luxembourg Christophe Joubert, PRODEVELOP, Spain Andreas Eberhardt, Orange Switzerland Ilia Bider, Stockholm University and IbisSoft, Sweden Gil Regev, Ecole Polytechnique Fédérale de Lausanne and Itecor, Switzerland

The objective of the panel was to explore the relationship between IS research and industry, analyze what they can learn from one another and try to formulate ideas for more knowledge transfer between them.

The discussion first targeted the gap between research and industry. The panelists mostly agreed that researchers attend research oriented conferences, such as CAiSE, RE, ECIS, ICEIS, that very few practitioners attend. They produce frameworks that few practitioners are aware of and use a vocabulary that few practitioners understand. Practitioners, likewise, have their own practice oriented conferences, frameworks and vocabulary. Hence it is unlikely that practitioners and researchers can meet often enough for much information to flow from one to the other. However, the real problems to be solved by research are to be found in industry, not in academia. Researchers should do more than providing often quite simple motivating examples, as can be seen in many CAiSE papers. Researchers therefore need to go out of academia to immerse themselves in industry in order to be more relevant to industry problems. Design science can be used for that purpose.

Christophe and Eric gave examples of research and industry collaboration. Christophe showed how his company, which is active in geographical information systems, reaps much benefit from actively participating in research projects attending research conferences and collaborating with open source communities. In order to foster relationships with research teams, R&D projects are carried out at different scope level: R&D Department Regional (IMPIVA, FEDER), National (Avanza/Competitividad, INNPACTO, CENIT, CDTI) and Europeans (FP7-ICT,

FP7-SME, ITEA2, ARTEMIS). Christophe also described the active participation of several members of his team in OGC (Open Geospatial Consortium) standards, in particular for sensor web interfaces for IoT (Internet of Things), as a good forum where IS researchers and practitioners meet.

Eric described the model of CRP Henri Tudor which is part of a Research Transfer Organization (RTO) and functions much like a consulting company, but with scientifically grounded knowledge. Eric showed how this worked with the example of a project where they extracted requirements to be used in ISO 154000 from ITIL (a framework probably unknown to most IS researchers) with the help of i* and KAOS (which are probably unknown to most IS practitioners). Eric also has a member of his team who is active in the ISO 20000 standard, which a formal subset of ITIL.

Andreas expressed the industry point of view by noting that industry does its own research and moves faster than academic research. Industry is interested in the proverbial 80% of the solution, which can be produced much more quickly than the 100% targeted by academic research. Industry, therefore, employs consultants rather than researchers because the resulting services must be sold in the market. The cost of these tools makes them unattractive to universities. Eric agreed that the timeline between research and practice are quite different. The theory for the steam machine was created some 30 years after the machine was invented. Likewise, UML was invented in industry and only later standardized by the OMG. Academia needs to understand these standards and scientifically ground them.

Ilia proposed that researchers meet local companies in local social events, noting that global events have little value for small and medium companies. He also proposed that universities encourage students and researchers to work in companies.

The debate then turned into the question of attracting industry people into research conferences such as CAiSE. Oscar Pastor noted that few industry partners show up at the industry track. About 40 industry people came to the industry track keynote but most of them left immediately afterward. Andreas asked how is it that only about 10 people attended the industry paper session.

There was a widespread opinion among the panelists that the paper session and panel format of industry tracks as often organized in research conferences have little value for practitioners. The academic paper formats, e.g. LNCS, LNBIP, are immediately understandable by researchers but are completely obscure for practitioners. Andreas reported that it took him some 30 hours to address the reviewers comments and format his paper, which is beyond what most practitioners can invest.

A different format for industry tracks is clearly needed. The barrier level for presenting an industry work must be lowered and the event must be made more appealing to practitioners. Ilia suggested a social event with industry speakers and posters. He ventured the idea of making the industry track into an industry event, managed by industry with researchers are guests. Andreas proposed to organize the events as marketplaces and invite speakers from companies such as Apple and Amazon. He said that a recent SAP conference in Barcelona drew some 500 participants despite the high fees. Eric proposed to invite speakers from standardization bodies, which are known to industry.

It is our hope that these ideas will lead to a successful industry track at CAiSE 2014.