

EDITORIAL- The Requisite Variety of IS Research

In the very first editorial of the iSCHANNEL in 2006, the founders and editors-in-chief Omer Tariq and Kabir Sehgal came to the conclusion that finding a theme for the first volume was a futile endeavour. The published articles did not revolve around a few centres of gravity but rather showcased a broad intellectual variety in terms of the conceptual viewpoints and topics discussed. Now, in its fifth year, this conclusion is more valid than ever. One of the reasons for such variety can be traced back to the field of information systems research itself that has been drawing on reference disciplines such as philosophy, sociology, economics, computer science and engineering as well as business, management and organization studies from its early days. Against the backdrop of these diverse ways of observing the human condition, information systems research has emerged into an inter- and multi-disciplinary but also multi-paradigmatic endeavour of understanding the role of information and communication technologies (ICT) in contemporary society and its organization.

On the other hand, the main research phenomenon - ICT - has gone through a remarkable process of development leaving the boundaries of the formal organization behind in order to be weaved into the very fabric of social interaction. Web 2.0, smart grid technologies and cloud computing are just a few of the recent examples for the informatization of human existence rendered ubiquitous and, perhaps more importantly, nearly invisible through information technologies. As a consequence, IS research is in a phase of transition as information systems become interconnected, interoperable and interdependent. In this sense, variety is not a symptom of a crisis or of a lack of cohesion and discipline within the field but rather a necessary increase of internal complexity in the face of immense and even volatile changes in the fabric of society. The phenomenon of study changes and becomes more complex and so must IS research.

We are reminded of Ashby's famous law of requisite variety and the limitations of scientific research in terms of attempting to "understand" a complex system; "for if "understanding" a system means having available a model that is isomorphic with it, perhaps in one's head, then when the complexity of the system exceeds the finite capacity of the scientist, the scientist can no longer understand the system - not in the sense in which he understands, say, the plumbing of his house, or some of the simple models that used to be described in elementary economics" (Ashby 1958:12). On the same token, information technology and the environment of seamlessly interwoven

information systems it affords cannot be understood like an advanced version of Charles Babbage's Difference Engine No. 2 – a picture of which is on the cover of this issue. Designed in the 1840s and built in the 1980s to be exhibited in the Science Museum of London, it was the first mechanical computer – its wheels and bolts directly accessible to human intervention and understanding. With today's ICT that is not the case. Access to and, consequently, control of ICT is mediated through symbols processed and presented by information technology making the phenomenon of interest increasingly complex (Marton 2009; Kallinikos, Aaltonen and Marton 2010). In light of this observation, it is not only futile to find a centre of gravity for IS research but it has become a sheer necessity to increase the variety in the concepts we use, the themes we discuss and the models we build. By now, one concept, one theme or one model, as elaborate as it may be, will never capture the whole complexity of what we came to call information and communication technologies.

This issue of the iSCHANNEL follows the tradition of offering a platform for variety and difference not only in terms of the topics of the papers but also in terms of the type of papers. The papers range from joining the classical and fundamental discourse on knowledge, the role of data in strategic alignment or e-business to rather contemporary issues on open source, cloud computing and virtuality drawing on diverse traditions and schools of thought in philosophy, social theory, psychology, legal theory, organization studies, innovation studies as well as business and management studies. The contributions involve reviews of academic literature, discussions of theoretical concepts, suggestions for practitioners, an elaboration of a hypothetical model for testing as well as a final research report. Given the variety of the articles, the selected authors reflect the intellectual diversity not only of the students at the Information Systems and Innovation Group at the LSE but also of information systems research at large. In this spirit, we hope for an enjoyable and interesting reading.

Attila Márton
Editor-In-Chief

References

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