

EDITORIAL PREFACE

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The *Journal of Actor-Network Theory and Technological Innovation* is beginning its third year with the four interesting articles in this issue.

The first article: *Is a Stock Exchange a Computer Solution? Explicitness, Algorithms and the Arizona Stock Exchange* is by Fabian Muniesa from Mines ParisTech in France. This article examines how computerisation challenged the definition of the stock exchange in the context of North American financial markets in the 1990s. Muniesa makes use of a case study on the Arizona Stock Exchange (an electronic call auction) and analyses exchange automation in terms of trials of explicitness. The article notes that the computational formulation of what an exchange is calls for a detailed explication of processes and properties of price formation and asks what kind of revolution is the ‘explicitness revolution’ in the design of allocation mechanisms? The article focuses in particular on the argument of the concentration of liquidity in one single point, which was central to the development of the Arizona Stock Exchange.

In the second article, a version of which was presented at a conference: *On Sociality, Materiality and Sociomateriality of IS and Organisations*, held in Sydney, Australia, in early 2010, Jim Underwood and Edin Tabak from the University of Technology, Sydney discuss the topic: *Making Information Systems Material through Blackboxing: Allies, Translation and Due Process*. This article presents a case study of the evolution of an organisational intranet to compare the concepts of “materiality” with actor-network theory’s “black-boxing”. Underwood and Tabak argue that informa-

tion systems need to become material through “due process”, and that questions arise as to what types of material allies are useful in this process, and whether these allies can co-evolve (or “co-materialise”) with the system.

The next article, by Tiko Iyamu from the Tshwane University of Technology in South Africa is titled: *Institutionalisation of the Enterprise Architecture: the Actor-Network Perspective*. In the article Iyamu points out that despite impressive technical advances in tools and methodologies and the organizational insights provided by many years of academic and business research, the underperformance of Information Technology (IT) remains and that organisations experience difficulty in managing technology, changing from system to system, implementing new technology, maintaining compatibility with existing technologies and changing from one business process to another. He notes that these challenges significantly impact business performance, continuing to do so if not addressed, and that as a result, many organizations have deployed Enterprise Architecture (EA) in an attempt to address these challenges. Unfortunately though, the design and development of EA has proven to be easier than its institutionalisation. The article reports on a study that explored the development and implementation of EA to determine which factors influence the institutionalisation and used Actor-Network Theory (ANT) to analyse two case studies.

The final article: *Actor-Network-Theory in Medical E-Communication – The Role of Websites in Creating and Maintaining Healthcare*

Corporate Online Identity is by Magdalena Bielenia-Grajewska from the University of Gdansk in Poland. The article used ANT to discuss how websites create and maintain the online identity of medical care providers. Bielenia-Grajewska notes that she has chosen Actor-Network-Theory as an ANT approach makes it possible to study the role of living and nonliving entities in shaping the online identity of healthcare suppliers and to concentrate on the networks and systems within e-healthcare as well as the flows and interrelations constituting it. The primary aim of this research was to show the communicative aspect of healthcare corporate websites by using the selected notions of ANT methodology and their potential implications for corporate identity creation and maintenance.

In addition to actor-network theory, this journal accepts articles that investigate other approaches to socio-technical research. Wholly theoretical articles as well as those that involve

a comparison of two or more different approaches through the use of case studies are quite acceptable. The journal also welcomes articles dealing with comparisons of Innovation Translation with other approaches to theorising technological innovation – especially Innovation Diffusion and the Technology Acceptance Model, and articles dealing with a description, comparison, or application of any of these other approaches.

It would be good also to see articles comparing other socio-technical frameworks and approaches, such as Structuration Theory, the Theory of Connections, or Soft Systems Methodology with Actor-Network Theory. This would make an interesting special issue if there is some interest in pursuing this topic.

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Arthur Tatnall (BSc, BEd, DipCompSc, MA, PhD, FACS) is an associate professor in the Graduate School of Business at Victoria University in Melbourne (Australia). He holds bachelor's degrees in science and education, a graduate diploma in computer science, and a research MA in which he explored the origins of business computing education in Australian universities. His PhD involved a study in curriculum innovation in which he investigated the manner in which Visual Basic entered the curriculum of an Australian university. He is a member of three IFIP working groups (WG3.4, WG3.7 and WG9.7) and is also a fellow of the Australian Computer Society. His research interests include technological innovation, information technology in educational management, information systems curriculum, project management, electronic commerce, and Web portals. He has written several books relating to information systems and has published numerous book chapters, journal articles and conference papers. He recently edited Encyclopedia of Portal Technology and Applications for IGI Global.