

EDITORIAL PREFACE

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Issue 3 of Volume 4 of IJANTTI contains some quite different articles from around the world. The first article: “Assessment of Risk on Information Technology Projects Through Moments of Translation” is by Petronnell Sehlola and Tiko Iyamu from the Department of Informatics, Tshwane University of Technology, Pretoria, South Africa. In the article they note that many IT solutions in organisations are employed through IT projects and this has increased tremendously in the last two decades. This increase is informed and triggered by the premise that IT will help the organisation to yield solutions that will fulfill or exceed their expectations, thereby make them realise the required return on investment. ANT would see projects as a means to yield solutions through technological artefacts such as infrastructure (networks included), applications, databases or a combination of these. Unfortunately, project risks are never easy to identify or manage. Using one case, the study employed actor-network theory in the analysis of the data to understand the factors that manifest themselves into risks during the deployment of IT projects in the organisation.

Following is an article by Fernando Abreu Gonçalves from CEG-IST and José Figueiredo

from CEG-IST /DEG and the Technical University of Lisbon examining: “Engineering Innovative Practice in Managing Design Projects.” The authors begin by noting that most references to innovation relate to the development of new products, but that in this article they do not address innovation in these terms, but as changes in practices an engineer creatively adopts during engineering design projects. They adopt Actor-Network Theory as a way to understand these change processes (translations) and design a perturbation index inspired in Earned Value management to measure translation effort having in mind the management of scope. Next they assess changes of regime in resource allocation of tasks and conclude some changes can lead to innovative results, meaning that a wider view about scope, and scope management is gained so making it possible to observe and change good practices, something crucial in engineering design projects where requirements and goals drift.

Nilmini Wickramasinghe (Epworth Chair Health Information Management and RMIT University, Australia), Rajeev K. Bali (Coventry University, UK), and Arthur Tatnall (Victoria University, Australia) next provide: “A Manifesto for E-Health Success: The Key Role for

ANT.” They begin by noting that healthcare is the biggest service industry in the world but that it has yet to realise the full potential of e-health. This is in contrast to other e-business initiatives such as e-government and e-education, e-finance or e-commerce. As all OECD countries are grappling with key challenges which are impacting the delivery of cost-effective quality healthcare, e-health may hold the key making successful adoption of e-health more important than ever. In this paper the authors contend that to be e-health prepared is necessary but not sufficient for successful e-health solutions to be realised and that it is only by embracing a rich theoretical lens of analysis that the full potential of e-health can be harnessed. They argue that ANT provides such a lens.

The next article: “Empirically Examined the Disjoint in Software Deployment: A Case of Telecommunication” has been written by Tefo Sekgweleo and Tiko Iyamu from the Department of Informatics, Tshwane University of Technology, Pretoria. In the article they begin by stating that software deployment is vital as software is intended to enable and support organisations to function effectively and efficiently. They go on to point out that software deployment involve two primary components, technology and non-technology actors, both of which offer vital contribution to software deployment. It is unfortunate that more focus has been put on the technological actors over the years at the expense of the human actors. The study holistically examined the roles of non-technology actors in the deployment of software in organisations using actor-network theory as a lens to consider the empirical data.

The final article is by Noel Carroll and Ita Richardson from Lero: – the Irish Software Engineering Research Centre, Department of Computer Science & Information Systems, University of Limerick, Ireland, and Eoin Whelan from Cairnes School of Business and Economics, National University of Ireland Galway, Ireland. They have written on “Service Science: An Actor-Network Theory Approach.” The article notes that ‘service’ comprises socio-technical (human and technological) factors which exchange various resources and competencies and that service networks are used to transfer resources and competencies, yet they remain an underexplored and ‘invisible’ infrastructure. Their paper presents a literature review of ANT and discusses how it may be employed to examine the socio-technical nature of service networks as ANT offers a rich vocabulary to describe the interplay of socio-technical dynamics which influence the service system reconfiguration. The authors point out that although the emerging paradigm of ‘Service Science’ calls for a more theoretical focus on understanding complex service systems, few efforts have surfaced which apply a new theoretical lens on understanding the underlying trajectories of socio-technical dynamics within a service system. The paper offers a discussion on how ANT may be employed to examine the complexity of service systems and service innovation

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Arthur Tatnall is an Associate Professor in the School of Management and Information Systems at Victoria University in Melbourne, Australia. In his PhD he used actor-network theory to investigate adoption of Visual Basic in the curriculum of an Australian university. Arthur's research interests include technological innovation, history of technology, project management, information systems curriculum, information technology in educational management and electronic business. Much of his research is based on the use of actor-network theory. Arthur is a Fellow of the Australian Computer Society and active in the International Federation for Information Processing (IFIP) as Chair of IFIP WG9.7 – History of Computing, Chair of IFIP WG3.4 – ICT in Professional and Vocational Education and a member of IFIP WG3.7 – Information Technology in Educational Management.