Lecture Notes in Business Information Processing

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Enterprise Information Systems of the Future

6th IFIP WG 8.9 Working Conference, CONFENIS 2012 Ghent, Belgium, September 19-21, 2012 Revised Selected Papers



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Preface

Enterprise information systems of the future – evolving toward more performance through transparency and agility. The theme of CONFENIS 2012, the 6th International IFIP TC8 WG 8.9 Conference on Research and Practical Issues in Enterprise Information Systems, held in Ghent (Belgium) during September 19–21, 2012, emphasized two evolutions in the domain of enterprise information systems. The first evolution is the development of more open systems, e.g., the creation of interoperation between systems from collaborating organizations or the composition of systems from standard modules and packages offered by different vendors. The second evolution is the move toward more flexible systems; meaning easily configurable and adaptable systems based on service-oriented software architectures, the software as a service business model, cloud-computing infrastructures, and software product line approaches. Apart from these industry evolutions, we have also witnessed a rediscovery of the design science tradition in enterprise information systems research. Design science is where the origin of our academic discipline lies; however, the last few decades have seen enterprise information systems researchers move away from their core object of study (i.e., the system) toward the study of the environment in which the system resides (i.e., the organization and its users). Fully embracing novel and exotic research methods, paradigms, and theories originating in the social sciences, the enterprise information system became for many researchers a black box of which the design was left to computer scientists and was considered outside the realm of enterprise information systems research. Luckily, times are changing.

With CONFENIS 2012 we heartily wished to support the revisiting of design science research in enterprise information systems. With full respect for the pluralistic and open-minded spirit of the IFIP TC8 WG 8.9 Enterprise Information Systems community, we especially welcomed in our call for papers novel design science research contributions. We explicitly called for technical or evaluation papers on methods, techniques, and technologies to make enterprise information systems more transparent (e.g., research on enterprise modeling, ontology and architecture that would 'open up' the structure and behavior of enterprise systems) as well as more empirically driven research and theoretical, conceptual, or even visionary papers on how flexible enterprise information system solutions can foster business agility and innovation.

Our call was responded to with the submission of 53 contributions, including completed research papers, work-in-progress papers, experience reports, and visionary/conceptual papers. After a rigorous review process of 3 months, facilitated by the EasyChair conference management system, we finally selected 25 papers, of which 10 full-length papers and 15 short papers, to be published in this LNBIP volume.

These 25 papers present a well-balanced mix between the more traditional social sciences and the more novel (or reactionary as its opponents would claim) design science paradigms in enterprise information systems research. Moreover, they include practitioner-oriented and practice—originating contributions, reminding us of the relevance of our discipline and the applied nature of its research. Topics addressed by the accepted papers fall into three categories, ranging from a broad to narrow views on enterprise information systems research:

- Researching information systems in business, with topic areas such as enterprise modeling, business process management, and business process mining
- Researching enterprise information systems from a management or organization perspective, with topic areas including management of enterprise systems, business intelligence, service innovation, decision support and negotiation, and strategic planning of enterprise systems
- Researching design, implementation, and offering of ERP systems, with as
 topic areas ERP system design methodologies, case studies and worldwide
 experiences in implementing ERP systems, and ERP systems as a service

Not included in the volume, but an essential part of the CONFENIS 2012 academic program, were the talks by invited speakers. Bill McCarthy of Michigan State University, founder of the Resource-Event-Agent semantic data model for accounting information systems, which is instrumental to the development of integrated enterprise information systems, gave a talk on "The REA-Invention of Double Entry Bookkeeping — Moving Accounting Back to the Center of Enterprise Information Architectures". Hajo Reijers of the Eindhoven University of Technology provided us with novel insights into "The Process of Process Modeling" while Carol Brown of Stevens Institute of Technology widened our view with her talk on "Enterprise Systems in Healthcare: Leveraging What We Know from Other Industries."

The success of a conference is a joint effort in which the Program Chair's contribution is nothing more than a drop in the ocean. First and foremost, we thank the director and staff members of the Economic Council of the province of East Flanders (EROV) for their enthusiasm, dedication, and excellent work in organizing this conference. I personally wish to thank my esteemed colleague, Dirk Deschoolmeester, Emeritus Professor of Ghent University and representative for Belgium in IFIP TC8, for bringing the CONFENIS conference to Ghent. Further, we sincerely thank the members of the Program Committee for their careful and timely review of the submissions. Most importantly, we thank the authors for submitting high-quality papers to CONFENIS 2012. We are proud to present in this LNBIP volume, which is the result of their hard labor.

September 2012 Geert Poels

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