



# CONFENIS

THE IV IFIP INTERNATIONAL CONFERENCE ON RESEARCH AND  
PRACTICAL ISSUES OF ENTERPRISE INFORMATION SYSTEMS,  
RIO GRANDE DO NORTE, BRAZIL, AUGUST 25-27, 2010

During the 21st century, organizations have witnessed increasing global competition. In order to compete at the global level, enterprises have implemented computerized systems which have a significant impact on their operational efficiency and thus, provide them with the competitive edge in their industry. To address the critical issues that are related to these computerized systems, there has been a tremendous increase in the attractiveness of research in the area of enterprise information systems as well as the implementation of enterprise resource planning systems that deal with large amounts of data which are capable of supporting the business processes of enterprises. This is evident from the numerous journal publications, conferences dedicated to enterprise information systems such as CONFENIS: *Conference on Research and Practical Issues of Enterprise Information Systems*, CENTERIS: *Conference on Enterprise Information Systems*, and ICEIS: *International Conference on Enterprise Information Systems*, and journals such as *Enterprise Information Systems*, ***Enterprise Modelling and Information Systems Architectures: An International Journal***, ***Global Journal of Enterprise Information System***, *International Journal of Enterprise Information Systems*, and *The Journal of Enterprise Information Management* that are now devoted to this field of research. Organizations around the globe are investing large amounts of resources in acquiring and implementing enterprise information systems especially enterprise resource planning systems marketed by companies such as Microsoft, Oracle, and SAP. In addition, universities across the world are also integrating the dissemination of knowledge associated with enterprise resource planning system across their curriculum.

To address the issues associated with academic research and practical applications in enterprise information systems, the International Conference on Research and Practical Issues of Enterprise Information Systems (CONFENIS) 2010 is the fourth in a series of conferences that have been organized under the auspices of International Federation for Information Processing (IFIP) Technical Committee (TC) 8 Working Group (WG) 8.9. CONFENIS 2010 is the first to be held in the southern hemisphere Natal, Brazil. The first CONFENIS 2006 was held at Vienna, Austria, April 2006 (<http://www.confenis.org/confenis2006/www.confenis.org/index71ca.html?q=node>). The Second CONFENIS 2007 was organized in Beijing, China, October 2007 (<http://confenis.org/>). The Third CONFENIS 2009 was held in Gyor, Hungary (<http://rs1.sze.hu/~raffai/confenis2009/>).

CONFENIS 2010 is the primary international event of the IFIP TC8 WG 8.9. This event provides an opportunity for academicians and practitioners throughout the world to gather, exchange ideas, and present original research in the field of enterprise information systems. This proceeding is comprised of papers in English and Portuguese that were submitted and accepted for presentation at CONFENIS 2010, Natal, Brazil. The papers are the work of scientists and professionals that have addressed the current research



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topics in the area of enterprise information systems and closely related research frontiers that were presented at this unique international forum. It is the hope of the CONFENIS 2010 Organizers that this small but high quality proceeding will contribute towards the advancement in the research and application of enterprise information systems around the globe within academia as well as business and government organizations.

Distinguished Keynote Scholars invited for this meeting include Professor Michael Rosemann, Business Process Management Group, Faculty of Science and Technology, Queensland University of Technology, Brisbane, Australia and Professor Young B. Moon, Director of the Institute for Manufacturing Enterprises, Department of Mechanical and Aerospace Engineering, Syracuse University, Syracuse, NY, United States of America.

In addition to the support of IFIP TC8 WG8.9, CONFENIS 2010 is organized by the Instituto Federal Fluminense and Instituto Federal do Rio Grande do Norte. In addition, CONFENIS 2010 is sponsored and supported by the Secretary for Professional and Technological Education, Ministry of Education, Brazil. We are further indebted to the guidance of Professor Li D. Xu, Chair IFIP TC8 WG8.9, Old Dominion University, Norfolk, Virginia, USA and Professor A Min Tjoa, Vice Chair IFIP TC8 WG8.9, University of Technology, Institute of Software Technology and Interactive Systems, Vienna, Austria. In addition, we would like to thank Professor Charles Møller, Center for Industrial Production, Aalborg University, Aalborg, Denmark, for his assistance with the conference management system as well as other aspects of the conference. Last but not least, we would like to thank the local arrangements team, headed by Miss Janei Resende and Professor Willys Farkat, who were able to deal with a multitude of details in order to provide to the highest level of professional organization for the CONFENIS 2010.

Rogério Atem de Carvalho  
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## The Context-Aware Organization

Professor Michael Rosemann, MBA, PhD

Queensland University of Technology, Faculty of Science and Technology, Business Process Management Group

Enterprise Information Systems nowadays provide mature and comprehensive support for the majority of an organization's business processes. However, these systems tend to be static, closed systems and are decoupled from their environment. Organizations, however, are living systems with a plethora of interrelationships to their environment. This presentation argues for the paradigm of the context-aware organization, and corresponding enterprise information systems, so that higher levels of agility can be achieved when responding to environmental changes. Based on two significant case studies (aviation and insurance), an extended conceptualization of enterprise information systems as complex adaptive systems will be offered. It will be shown that information technology plays a vital role in achieving the vision of a context-aware organization by providing discovery, analysis, and automation support.

### Bio

Dr Michael Rosemann is Professor, Head of the Information Systems Discipline and Co-Leader of the Business Process Management (BPM) Group at Queensland University of Technology, Brisbane, Australia. The IS Disciplines comprises more than 70 PhD students and includes one of the largest Business Process Management Groups in the world. Michael is the Chief Investigator of a number of research projects funded by the Australian Research Council (ARC) and various industry partners.

He is the author/editor of seven books, more than 150 refereed papers (incl. MISQ, EJIS, JAIS, CAIS, Information Systems, DSS, IEEE TKD) and Editorial Board member of nine international journals. His book 'Process Management' has been translated into German, Russian and Chinese. Dr Rosemann's PhD students have won the Australian award for the best PhD thesis in Information Systems in 2007 and in 2008 and have been a runner-up for the international ICIS PhD award in 2008. Michael is the co-inventor of five US patent proposals and founder and chair of the Australian BPM Community of Practice. He has been the Chair of the 5th International Business Process Management Conference in 2007 and will be Co-Chair of ACIS 2010. Michael has conducted invited presentations for large EIS vendors such as SAP and Oracle. He regularly conducts executive training in BPM and provided advice to organisations from various industries including telecommunications, banking, insurance, utility, retail, public sector, logistics and film industry.



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## Sustainability and Enterprise Information Systems

Professor Young B. Moon, PhD

Syracuse University, Institute for Manufacturing Enterprises, Department of Mechanical and Aerospace Engineering

Sustainability is an ability to “meet the needs of the present without compromising the ability of future generations to meet their own needs,” as defined by the United Nations World Commission on Environment and Development. While numerous advances have been made toward the goal of sustainability over the decades, the recognition of potential contributions of Enterprise Information Systems to Sustainability has been relatively recent. This keynote speech presents the current status of various issues surrounding sustainability, ways to address the sustainability issues, opportunities for business successes, and the role of the Enterprise Information Systems. The approaches and solutions currently available from leading Enterprise Information Systems vendors are discussed along with remaining problems that the Enterprise Information Systems community needs to address.

### Bio

Dr. Young Moon is Professor of Mechanical and Aerospace Engineering and the Director of the Institute for Manufacturing Enterprises at Syracuse University, Syracuse, NY, USA.

He holds a Bachelor of Science degree from Seoul National University, Seoul Korea, a Master of Science from Stanford University, and a Ph.D. degree from Purdue University. A firm believer of meaningful interactions between academia and industry, Moon is also a licensed Professional Engineer (P.E.) registered in the state of New York, a Certified Fellow in Production and Inventory Management (CFPIM), and a Certified Manufacturing Engineer (CMfgE).

Professor Moon has held visiting positions in Engineering, Business Administration, and Information Studies at various institutions including Massachusetts Institute of Technology (MIT), Korea Advanced Institute of Science and Technology (KAIST), Universidad Carlos III de Madrid, Drexel University, University of Pennsylvania, Boğaziçi Üniversitesi, Univerza na Primorskem, Univerzitet u Sarajevu, National Institute of Standards and Technology (NIST), Hewlett Packard (HP), and Windsor Manufacturing Company.

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Intelligent Supply Chains Track 



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