Guest Editorial Preface

Special Issue on CENTERIS:
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PREFACE

This issue of the Information Resources Management Journal integrates adapted and enhanced versions of five papers selected among the presented at the International Conference *CENTERIS'2014 – Conference on ENTERprise Information Systems: aligning technology, organizations and people*, held in Tróia, Portugal, on October 2014. CENTERIS'2014 gathered academics, researchers, IT/IS professionals, managers and solution providers from 30 different countries representing the five continents, to share experiences, bring new ideas, debate issues and introduce the latest developments in Enterprise Information Systems.

INSIDE THIS ISSUE

This special issue includes five contributions to the discussion of the main issues, challenges, opportunities and developments related with EIS as tools for competitiveness, written by fourteen internationally renowned and experienced researchers in the EIS field.

In the first paper, "Factors for adopting ERP as SaaS amongst SMEs: The Customers *vs.* Vendor point of view", Rodrigues, Ruivo, Johansson and Oliveira identify the factors for adopting Enterprise Resource Planning (ERP) delivered as Software-as-a-Service (SaaS) among small and medium enterprises. The authors conducted a two phases' qualitative-methodology: interviews with 20 experts from SaaS vendor (Microsoft) and a case-study with executives in three organizations which implemented vendor's ERP as SaaS (customers). The vendor identified 10 factors for adoption - Costs, Security, Availability, Usability, Implementation, Ubiquity, Flexibility, Compatibility, Analytics and Best-practices, where costs, security and availability were considered the most important factors. The customers identified three additional factors: the trust in the Solution partner, Data integrity, and level of Integration of cloud platforms. Considering all 13 factors, Cost, trust in the Solution partner and Availability, were identified as the most important for customers, which gave much less importance to the others factors. These results will help professionals and researchers to improve understanding and accelerate ERP adoption as SaaS among SME.

Information systems urbanization has been proposed by many academics and practitioners to facilitate building agile information systems needed by modern organizations to take into account continuous change and overcoming problems induced by external pressures. Nevertheless, as stressed by many authors, integration of urbanized information systems is among the most important challenges faced by organizations. The integration of an urbanized information system consists in the governance of the relationships between its components. Starting from the 5+1 architecture model of urbanized applications, there are three categories of information systems integration: data-based integration, process-based integration, and service-based integration. In the paper "Services-Based Integration of Urbanized Information Systems: Foundations and Governance", Guetat and Dakhli focus their

attention on the third category and analyze the contribution of services to urbanized information systems integration. In particular, the authors demonstrate that the dependencies between applications belonging to an urbanized information system are based on exchanges of reusable public applicative services. Moreover, the paper highlights the role played by such services in the integration of urbanized information systems and underline that the effectiveness of reusable public services as instruments of information system integration requires the governance of these services.

In "IT Project Development using Capability Maturity Model", the authors Kabir and Rusu state to have noticed the use of different frameworks in many research studies on IT project development process. In fact, many companies choose specific frameworks to run their IT projects based on project type and face dissimilar problems during the execution. In this research, the authors present a framework for IT project development using Capability Maturity Model. The framework has been developed to improve the IT project development in a large company because of the lower rate of successfully IT projects in that company. To develop the framework authors have used design science research and have evaluated this framework with the project managers from that large company. The result of this research is a framework for IT projects development that is based on generic Capability Maturity Model and is adapted to the specific needs of an IT project development environment. Moreover, the framework identifies for each key process area of IT project development.

The fourth paper of this issue, "The developing of the maintenance and repair body of knowledge to increasing equipment maintenance and repair organization efficiency", by Alexey Kizim, describes a comprehensive approach to ensuring equipment maintenance and repair organization (MRO) efficiency in solving tasks with supporting tools and a systematic approach. The paper addresses the problem of maintenance and repair organization and presents the MRO process formalization aspects, highlighting the main essence of the MRO process, together with the ways of improving MRO by using the system approach, correlated goals and key performance indicators, and proposing some methods of improving the MRO organization efficiency. The MRO process formalization with functional and business models and incorporating them into a common information MRO support model is proposed, describing the MRO KPI as a model, and proposing the principal algorithm of the continuous MRO improvement based on KPIs. The task of MRO knowledge accumulation and using was considered. Ontology for knowledge managing in the MRO tasks and the use of neural networks for decision making in the several MRO decision-making tasks was demonstrated, together with the application of intelligent agents and multi-agent system for performance monitoring, data collection and decision making. The paper proposes also a life cycle cost of the equipment formula and describes the tasks of optimization in MRO support and knowledge accumulation, application and reasoning by ontologies.

Selecting the best desirable Enterprise Resources Planning (ERP) system has been a critical problem for organizations for a long time, as the failure on the selection process may have a highly negative impact in terms of costs and market share of a company. Multiple-criteria decision-making has been proved to be a useful approach to analyze these conflicting qualitative and quantitative factors and Analytic Hierarchy Process (AHP) has been applied successfully in most cases of software packages selection problems. In "ERP selection using an AHP-based decision support system", Cruz-Cunha, Silva, Gonçalves, Fernandes and Ávila propose an AHP model for the selection of an ERP system. The model's set of criteria was extracted from the literature review and validated within Portuguese organizations. This model can be applied in the ERP system selection using a software application that is under development. This software application eases the application of the AHP process to the selection of ERP packages and will provide input from real-world cases that will allow updating and refining the model.

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