EDITORIAL PREFACE

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In your hands, the last issue of 2014 of the International Journal of Web Portals, with four recent and relevant developments of theory and practice of virtual and networked environments, communication in virtual teams, business intelligence and web services composition. In another highly international issue, you will find a set of contributions authored by renowned authors, this time from Iberian Peninsula (Portugal and Spain) and north of Africa (Tunis and Algeria), briefly introduced below.

The integration of functions in business networks requires a high level of integration of the information processes to respond to the requirements of collaborative processes. The collaborative company needs to reach and maintain agility in the dynamics of their collaborative processes. Within the frame of a collaborative network, the development of a web platform permits the growth of an area that integrates collaborative processes, in which several companies participate, each supplying their own data. In the first paper, “Virtual Office: A web platform for a collaborative networked organization” Victoria de la Fuente and Ros-McDonnell present and discuss the Fruit-and-Vegetable Collaborative Network, formed by producers, processors, packaging companies, marketers, transporters, and distributors. It has been developed via a web platform (Virtual Office), which allows the network to carry out processes in a collaborative way, and helps the network in its process of confidence-building and in the interactions among its members.

Several studies have highlighted the relevance of face-to-face communication, suggesting that computer-mediated communication can lead to decreases in group effectiveness and reduce satisfaction levels in terms of trust and comfort of its users. Supported by an experiment where the emotional or affective aspects of communication were tested, the authors of “Evaluation of User Acceptance of Virtual Environments and Interfaces for Communication in Virtual Teams” validate the thesis that, from the users’ perspective, there is no opposition to the acceptance of virtual environments and interfaces for communication, and that these environments are able to cope with the reconfiguration dynamics requirements of virtual teams or client-server relations in a virtual enterprise operation. For the thesis validation, Cruz-Cunha, Putnik, P. Gonçalves and J. Gonçalves experimented two architectures, the Direct Communication Architecture (DCA) and the Virtual Communication Architecture (VCA) and found that the VCA could represent a “natural” environment to cope with the new generation of organizational environments and teams, characterized by intense reconfiguration dynamics.
Exploring intelligent data stored in data warehouses may efficiently assist the knowledge-seeker in his decision process. Such traced information related to performed analysis by decision-makers on data warehouses are stored in OLAP log files. These files contain useful knowledge about the analysts’ preferences, but sometimes, some formulated queries provide no results. Such a dilemma is known as the sparsity problem. In “Towards an intelligent OLAP system facing sparse problems, Ahmed, Koubaa and Gargouri focus on a specific class of preferences, namely the conflicting preferences, to overcome that limitation in user-centric data warehouses. Indeed, a conflicting preference describes a low frequency preference stored in OLAP log files, so that it is considered as tailored to given analysts. Such preferences are characterized by their rarity. To deal with this issue, the authors propose a new approach to discover these preferences through mining of rare association rules using a new introduced method for generating the N highest confidence rare association rules. The derived rare preferences will be used to reformulate the launched query avoiding an empty result. The carried out experiments on the authors’ built online recruitment data warehouse point out the efficiency of the approach.

Web services composition has emerged as a solution to answer the requester’s requirements. However, the selection of an appropriate Web service has become a difficult task due to the number of Web services present on the Web and mostly they offer similar functionalities. User preferences are a key factor that can be used to rank candidate services and retain only the best ones. To improve the process of web service composition, Hachemi and Benslimane propose a Case-Based Planning (CBP) approach based on preferences which uses successful experiences in past to solve similar problems at present or/and in the future. How to make a choice based on non-functional factors becomes a problem that need to be solved. The paper, “Case-based planning with User preferences for Web Service Composition”, argues that the selection should be considered in a global manner based on the user’s preferences. The authors present a framework that deals with web service composition based on user preferences and CBP method. Results obtained offer more than a solution to the user and taking both functional and non-functional requirements.

Before finishing this editorial preface, we would like to take this opportunity to express our gratitude to IGI Global for the excellent support of their team of professionals. We would like also to thank all the members of the Editorial Board for their commitment and for sharing their knowledge and experience in the support of the decision-making process. Finally, we would like to express our gratitude to all the authors who submitted their work, for their visions and excellent contributions.

We hope you will find here an interesting and a valuable source of knowledge and ideas. Enjoy your reading!

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