Editorial: Electronic Commerce Competence Center (ec3)

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This issue of the *International Journal on Electronic Business* is somewhat 'special' since it is dedicated to a single research institution – the Electronic Commerce Competence Center (ec3) in Vienna, Austria. We thank the editor in chief, Eldon Y. Li, and the publisher of IJEB for giving us this opportunity. This special issue addresses different topics of e-business and gives further insights into the recently founded research centre.

We would also like to thank the reviewers, who must remain anonymous, who did an excellent job in helping us to select the best papers submitted to this special issue, and who supported the authors considerably in improving their papers. Based on their reviews, we have accepted 11 papers ranging from business to technical aspects of e-business and we added the twelfth paper describing the competence centre itself.

The first paper by Froeschl provides background of the research context by introducing the objectives and the current organisation of ec3. In accordance with this introductory paper, all other papers can be classified into three groups: business modelling, business intelligence and business engineering. Thus, we start with papers describing the economical background of e-commerce as well as m-commerce, continue with papers on business intelligence and modelling, and finally, present papers addressing implementations of certain functions in e-business.

The second paper by Gratzer et al. discusses the importance of e-business for the tourism sector, in which Austria plays a forerunner role. This paper also sets background for some of the later papers, which deal with tourism as an application domain.

The third paper by Denk and Hackl examines the future chances of m-commerce. The work described sets Austrian activities in an international context, presents an international roadmap for further research and with that, it provides a benchmark for the research activities at ec3 also influenced by problems yet to be solved in m-commerce.

The fourth paper by Natter et al. presents a structured method and a tool for developing new products and services based on web-based communication between an enterprise and its customers. The proposed method derived from the well-known 'house of quality' applies methods such as web mining (as also described in the next paper). This approach was tested on a real case in the telecommunications field.

The fifth paper by Grossmann et al. develops a framework for web usage mining, which integrates click-stream analysis and other relevant data sources. This framework was derived from several projects of the authors.

The sixth paper by Denk et al. describes ec3's approach to knowledge management and explicitly addresses the problem which exists in a highly innovative research institute: how to make business as well as technical knowledge accessible to partners, investors and a wider audience.

The seventh paper by Glawar et al. describes topic maps for knowledge management. The paper addresses technical issues such as mapping topic maps to a relational database and applying constraint mechanisms to the model.

The eighth paper by Baumgartner and Herzog presents the Lixto tool, which enables the extraction of knowledge from semi-structured websites. In the described application, an extension of Lixto was used to extract quality management related knowledge from the web portal of an automotive company. This knowledge can be delivered through different channels to the companies' suppliers.

The ninth paper by Berger et al. describes work on a web based multilingual interface for a tourism information system. The paper further describes the experiments with a prototype that enables customers to search for hotels and other resources in the information system of a large Austrian tourism portal, in a natural language.

The tenth paper by Rainer describes the process-oriented modelling of virtual enterprises. The modelled processes, which can also comprise of web services, may be translated into XPDL format. A scenario from the tourist domain is used as a benchmark example.

The eleventh paper by Hrastnik describes an extension of the open business engine, which executes web processes modelled in XPDL. The engine was extended in order to be able to call web services from an executable process. This paper uses the same scenario as the paper mentioned above.

Finally, the twelfth paper by Dorn describes a general process of planning and scheduling customer demands in a distributed virtual enterprise. The paper describes, for a tourism scenario, how knowledge is to be represented and processed.