# Enterprise, applications and services in the finance industry [Editorial]

**Daniel Veit, Christof Weinhardt**

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Recent technological advances have fostered many innovations in banks, insurances as well as all kind of national and international financial institutions. This development gave rise to a number of research areas in information systems and computer science which deal with the introduction and evaluation of enterprise, applications and services in the financial industry.

This special issue tries to capture some aspects of these developments and comprises three main topics in the consecutive contributions.

In the first contribution, Alexander Felfernig and co-authors elaborate on knowledge representations for the interactive selling of financial services. Their key topic is the heterogeneity of service level provided by financial sales representatives. In the domain of financial services, especially in the retail market, the authors state that the quality of consulting varies significantly depending on the individual sales person. Their contribution is the design and analysis of technologies for flexible mapping of products, marketing strategies and sales knowledge to the incorporation of a knowledge-base for the sales person. Here, the focus lies on interactive selling of financial products based on a homogeneous quality of consulting service. In the remainder of their article, they report on the experiences they gained from financial service recommender development projects using the CWADVISOR environment.

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The empirical evaluation of their developed recommender methodology showed significant improvements in process time during customer consulting, in the recommendation level as well as the e-learning processes for the introduction of new representatives.

In the second article Kunzelmann et al. report on innovative order types as success factors in stock exchange competition. They argue that in an increasing competition for liquidity among global financial markets, the market model, order types and associated fee-models are the key issues that determine the success or failure of financial exchanges. However, the authors state that building a market model for financial exchanges can, practically speaking, not be performed on the white board. In contrary, the situation ex ante has to be analyzed in depth in order to change—step by step—towards a new specification of such a market model. Misguided developments may happen easily and may quickly result in bad investments leading to bankruptcy in the worst case. In their work they show how the introduction of two specific order types—namely relative and bracket order—may affect the market model of an exchange. In the remainder of their contribution they show how the conception and evaluation of these order types can be performed using a market engineering tool such as meet2trade.

The third contribution by Fethi Rabhi and co-authors focuses on a service-oriented architecture (SOA) for financial business processing. They show how the introduction of such service-oriented architectures by loosely coupled and service-based components affects the integration of inter-company business processes. Here, they devote a special focus on the integration of basic and composite services and their interaction among different enterprises. Based upon a case study—in the course of the article—the authors introduce how the implementation of a realistic business process is carried out that is related towards simulating trading strategies in capital markets. Here, the adequateness of service-oriented architectures as an implementation paradigm—with respect to e.g. flexibility, performance and development costs is evaluated. The key insights they gain in this area is the dependency of the applicability of SOA to processes in financial industry on the depth and number of involved business processes, the nature of these processes as well as the existence of legacy systems and quality measures. Main issues that hamper the introduction of such architectures are the scarce documentation of existing business processes in financial industry, the performance penalties incurred by SOA-enabling technologies as well as the extra development time that has to be employed in order to create service wrappers for SOA-compatibility.

Over-all these three articles provide deep insights into three special areas of the application of novel methodologies from information systems in the financial industry domain. Nevertheless, there are many open issues to investigate in future research endeavours in this area.

The special issue at hand contains revised papers of the 2005 edition of the workshop series on Enterprise, Applications and Services in the Finance Industry—short FinanceCom, which has been launched in 2003 by Fethi Rabhi in Melbourne, Australia. The second instance of the workshop which

has also been technically co-sponsored by IEEE was carried out at the European Conference of Information Systems (ECIS) in 2005 in Regensburg, Germany.

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