Message from the DEECS 2009 Chairs

As part of their e-business activities, enterprises create, share, recombine, and process an ever increasing amount of data and documents that range from simple transactional data to complex business process definitions. In many respective processes, multiple spheres overlap, e.g., (1) inter- with intra-organizational data sources in collaborative processes, (2) master data with transactional data, (3) regular data with behavioral aspects of processes, or (4) facts with normative assertions. Since business entities are members of multiple value chains and data sources are often used in multiple contexts and processes, there are often conflicting requirements on the representation of such data. At the same time, enterprise computing infrastructures are currently transforming into service-oriented systems; this change has severe consequences yet also offers opportunities for the data management processes.

All this in combination makes data engineering in e-commerce and service-oriented computing a very challenging task, already at the level of a single company but even more in value chains. Also, respective modeling choices may have long-lasting and far-reaching impact and affect (1) operational efficiency, (2) business process agility, (3) the range of analytical tasks for decision support, and (4) strategic options. Eventually, those choices determine the current and future degree of automation in content and process integration.

The 4th International Workshop on Data Engineering Issues in E-commerce and Services (DEECS 2009) provides a venue for discussing and exchanging ideas on data and knowledge engineering issues in the dynamic environment of e-business, enterprise computing, and business services and transformation. It aims at bringing together researchers from different, though overlapping areas: data engineering, knowledge engineering, and business process management; the common interest is solving problems of data engineering in e-commerce and service-oriented systems. The expected outcome is (1) a better understanding of the problem domain and its characteristics, (2) a critical discussion of recent approaches, models, methods, prototypes, and experiences with applying those in laboratory experiments and realistic e-commerce scenarios, (3) a deeper insight into the potential of applying knowledge engineering to the problem domain, and (4) an extended body of knowledge in the field of data and knowledge engineering in e-commerce.

DEECS 2009 is the fourth event in a successful series of workshops. Previous events have been held in conjunction with IEEE ICDE 2005, IEEE CEC'06/EEE'06, and ACM EC'07. Key topics of those events were the data integration challenges in e-commerce, the contribution of semantic technologies to solving problems of knowledge representation, mapping and alignment of conceptual structures, and search and discovery, in particular its role in service-oriented computing. This year’s edition shows a stronger link to business processes and business process management.

DEECS 2009 received nine submissions from six countries. Based on at least two blind reviews from PC members, only four were accepted as full papers and included in the proceedings (acceptance rate: 44.4%). In addition, one paper was accepted for presentation only. It can be retrieved from the workshop website.

We would like to thank all authors for their valuable contributions and all members of the organizing and program committee for their hard work.


Hohenheim and Munich

Joerg Leukel and Martin Hepp

Program Chairs