The Internet has taken over our world in a storm, affecting most aspects of our personal as well as professional lives. One of the most remarkable phenomenon is how the internet has influenced business, both in terms of how we conduct business nowadays as well as in terms of opening up novel business opportunities. This has resulted in a surge of start-up companies filling this new nitch of business opportunities, as well as established companies re-inventing themselves by reaching out to their business partners (business-to-business e-commerce) and their customers (business-to-customer e-commerce) in new ways as well as internally streamlining their own business processes.

In this issue, we now take a look at *Database Technology in E-Commerce*. We study new requirements that E-commerce applications are posing to database technology (for example, on database design); new tools being developed for E-commerce applications (for example, XML/EDI tools), as well as presenting examples of working systems built using these new tools.

The first paper "Data Mining Techniques for Personalization" by Charu C. Aggarwal and Philip S. Yu provides an overview of techniques used to tailor a system to specific user needs. Their survey compares in particular collaborative filtering, content based methods, and content based collaborative filtering methods.

A natural complement to this personalization issue is the work by Kajal Claypool, Li Chen, and Elke A. Rundensteiner on "Personal Views for Web Catalogs". They illustrate how user preferences or behavior extracted with one of these mining techniques can be utilized by companies to better serve their customers (and thus themselves) by now offering and maintaining personal views to E-commerce catalogs.

The next paper by M. Tamer Özsu and Paul Iglinski also focusses on electronic catalogs, The paper titled "An Interoperable Multimedia Catalog System for Electronic Commerce" introduces the authors's project on developing the infrastructure of multimedia catalogs build over possibly distributed storage systems.

The paper by Il-Yeol Song and Kyu-Young Whang entitled "Large Database Design for Real-World E- Commerce Systems" outlines issues faced when designing a database for e-commerce environments based on their experience with real-world e-commerce database systems in several domains, such as an online shopping mall, an online service delivery, and an engineering application.

The paper "End-to-end E-commerce Application Development Based on XML Tools" by Weidong Kou, David Lauzon, William O'Farrell, Teo Loo See, Daniel Wee, Daniel Tan, Kelvin Cheung, Richard Gregory, Kostas Kontogiannis, and John Mylopoulos describes how newly emerging XML tools can assist organizations in deploying e-commerce applications. An e-business application framework and architecture are introduced using a virtual store scenario.

Serge Abiteboul, Sophie Cluet, and Laurent Mignet put forth that "Declarative Specification of Electronic Commerce Applications" could allow us in the future to develop typical E-commerce applications much more rapidly. The ActiveView language is sketched as possible candidate for such specifications.

Manish Gupta from Excelon Inc (formerly Object Design Inc.) discusses design considerations of a high performance high load e-commerce web system. The paper "TPC-W E-Commerce Benchmark Using Javlin/ ObjectStore" includes preliminary experimental results on the TPC-W benchmark.

Lastly, Ee-Peng Lim and Wee-Keong Ng in "An Overview of the Agent-Based Electronic Commerce System Project" outline issues they have encountered when building business-to-consumer e-commerce systems using agent technologies.