Data warehousing has become an important component of organizations' information technology architectures. The worldwide data warehousing market is growing 43 percent annually, and is expected to reach $148 billion by 2003 [1]. Annual warehousing budgets increase 291 percent each year and are projected to be $6.7 million in 2002 [1]. These figures validate that data warehousing has become a mainstream IT phenomenon that must be investigated and understood by practitioners and researchers alike.

Although warehousing has been assimilated into IT environments worldwide, the market continues to evolve. Current trends include the storage and management of large volumes (e.g., terabytes, petabytes) of data; the delivery of business intelligence information to large, diverse user groups using enterprise portals and Internet technology; and support for personalized customer experiences by marrying warehouse data with customer relationship management tools and analytics.

This minitrack was created to promote research in technical and managerial areas of data warehousing and to showcase efforts that can help companies improve the effectiveness of their warehouse initiatives. It intends to describe how data warehousing continues to adjust to the changes that shape today's business environment.

Eckerson [2], writing for The Data Warehousing Institute, expects the amount of usable data maintained in a data warehouse to increase on average by 290 percent to more than 1.2 terabyte in 2002. The growth in data volumes is driven by end-users' needs for more detailed data and more subjects in the warehouse as well as by the growing need to integrate external data. Ken Hawick, Paul Coddington, Heath James, and Craig Patton review the available tools and techniques for supporting warehoused data in a distributed environment in "On-Line Data Archives." They have been developing a wide-area data warehousing software infrastructure for vast amounts of distributed information that can be accessed by a variety of scientific and decision support applications. The issues and future directions for building such infrastructures are presented.

The number of data warehousing users is expected to more than quintuple (430 percent increase) by 2002, with an average of 2718 individual users and 609 concurrent users per warehouse [2]. In "Explaining Variation in Data Warehouse Usage: Building a Competency Profile of Tomorrow's Analyst," Kathryn Brohman examines the roles of users within human information processes with a specific focus on the competencies of the data analyst that influence warehouse usage. A research model of the effects of business expertise, data expertise, and technical expertise on usage and perceived insight is empirically tested using a survey of 169 data analysts from seven organizations. The study finds that technical and business competencies have a significant positive influence on SDA usage, and that data warehouse usage has a significant influence on perceived insight gained.

Robert Winter describes the variety of applications that exist within today's warehousing environments in "The Current and Future Role of Data Warehousing in Corporate Application Architecture." He creates a general application model along the dimensions of process,
product, and function to help understand the implications of integrating vertical applications, decision support applications, and the data warehouse with cross-product applications and channel-oriented, horizontal applications. Winter provides research questions that result from the proposed, extended role of the data warehouse in corporate application architecture.

The fastest growing and largest segment of warehouse applications will be CRM-based analytic applications, such as those provided by Broadbase Software, E.piphany, and MicroStrategy. Customer relationship management (CRM) is a specific application of data warehouses that has received much attention recently for its support of one-to-one customer experiences and personalized touchpoints. CRM software creates a comprehensive view of the relationship between a business and its customer CRM, and companies are beginning to incorporate CRM as an important piece of their business strategies. Ron Swift, Assistant Vice President of NCR Corporation will discuss a framework for combining technologies and high-touch techniques for determining behaviors, resource allocations, marketing, sales, supply, and strategic planning in his presentation, "The Critical Success Factors of Data Warehousing for Customer Relationship Management and Relationship Technologies." His experience with CRM applications provides him with unique exposure to cutting edge projects in practice.