

Cases on Database Technologies and Applications



Mehdi Khosrow-Pour

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A. S. C. Hooper, Victoria University of Wellington, New Zealand

A South African library network company (LIBNET) provided a networked service to participating libraries. This case study explores some of the issues influencing tariff determination in a cooperative database. Questions of data ownership and the provision of incentives for the uploading of data also raise legal and ethical issues. The case study provides a basis for exploring business strategy in collaborative database management.

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Keith Smith, VF Corporation, USA

This case is a description of how a successful executive information system evolved into a data warehouse at VF Corporation, the largest publicly held apparel manufacturer in the world (www.vfc.com). The case discusses the forces that necessitated the development of this data warehouse and the challenges that the development team faced in achieving its goals.

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Susan J. Chinn, University of Southern Maine, USA

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John J. Voyer, University of Southern Maine, USA

This case reveals many problems facing small non-profit organizations, which primarily expend their resources on mission-critical activities, and allows readers to supply possible courses of action. Second, it provides an opportunity to evaluate how a consulting experience was handled and to make recommendations to ensure successful project implementation.

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Derrick J. Neufeld, University of Western Ontario, Canada

Scott Griffith, Tell Us About Us Inc., Canada

Isobord, a start-up company that is setting up a new strawboard production plant in Manitoba, Canada, is facing critical operational problems that threaten its future. A geographic information system (GIS)/relational database management system (RDBMS) solution is being explored, but budget and time constraints, as well as organizational inexperience, seriously threaten the project. An information technology decision must be made immediately if there is to be any hope of implementing technology to manage the first year's straw harvest.

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Susan Rebstock Williams, Georgia Southern University, USA

Cheryl Aasheim, Georgia Southern University, USA

This case describes how the Charlotte-Mecklenburg Police Department began the rollout of a "mobile" information system that will eventually enable all information relating to incident reports, arrests, and investigations to be collected, distributed, and managed in a paperless, wireless environment. The strategies and approaches used to develop this system, the technologies employed, and, most importantly, the challenges faced in merging wireless, wired, database, and applications technologies while satisfying the user requirements of the police department are detailed in this case.

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Andreea M. Serban, Santa Barbara City College, USA

Gregory A. Malone, Cabrillo College, USA

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Wai K. Law, University of Guam, Guam

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Dale L. Goodhue, University of Georgia, USA

This case study briefly describes Whirlpool, the business need that suggested a data warehouse, the approval process, and the data warehouse that was built. It describes how the data warehouse is accessed, how users are trained and supported, and the major applications and benefits. The lessons learned also are described to benefit those companies that are implementing or thinking about implementing data warehousing.

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Brian G. Mackie, Northern Illinois University, USA

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Wayne E. Mackie, Saginaw Valley State University, USA

This case describes the development of a unique, student-centered, online course management systems (OCMS). The system grew from a fairly straightforward grade reporting system into a full-blown collaborative system within a short — in traditional information systems development terms — timeframe of approximately one year. Changes made to the system and the factors motivating the changes are discussed, as are challenges faced before, during, and after the development process.

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Tero Päivärinta, University of Jyväskylä, Finland

Airi Salminen, University of Waterloo, Canada

A unit of Fortum Service Ltd. operates and maintains the Rauhalahti power plant in Central Finland. The unit launched a project pursuing coordinated organization-wide electronic document management (EDM). This case follows deliberate and emergent changes related to document management in the organization. The case shows that a shift from the paper-based era towards organization-wide EDM is a comprehensive change both affecting and affected by several components in the organization.

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Ai Cheo Yeo, Monash University, Australia

Kate A. Smith, Monash University, Australia

The insurance company in this case study operates in a highly competitive environment. In recent years it has explored data mining as a means of extract-

ing valuable information from its huge databases in order to improve decision making and capitalise on the investment in business data. This case study describes an investigation into the benefits of data mining for an anonymous Australian automobile insurance company.

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Long-Term Evolution of a Conceptual Schema at a Life

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Lex Wedemeijer, ABP, The Netherlands

This case study outlines the evolution of a highly integrated Conceptual Schema in its business environment. A gradual decline in schema quality is observed: size and complexity of the schema increase, understandability and consistency decrease. Contrary to popular belief, it is found that changes aren't driven only by "accepted" causes like new legislation or product innovation. The case shows that a real Conceptual Schema is the result of "objective" design practices as well as the product of negotiation and compromise with the user community.

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Nenad Jukic, Loyola University - Chicago, USA

Tania Neild, InfoGrate Incorporated, USA

This case study describes the efforts behind designing a first iteration of an evolutionary, iterative enterprise-wide data warehouse for AIIA Corp., a financial application service provider. The study demonstrates the importance of the following steps during a data-warehousing project: a well-defined mission, effective requirement collection, detailed logical definitions, and an efficient methodology for source systems and infrastructure development.

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Virginia A. Taylor, William Paterson University, USA

Caroline M. Coughlin, Consultant, USA

Historic models of library management are being tested and modified in the digital age because of several interrelated factors. Partially cost-focused

models for delivering IT systems and information sources to library users are being developed. In this case, suggestions for alternative managerial strategies and economic models for IT regional library managers to pursue are given, based on the lessons to be gleaned from this experience and an examination of the literature describing other regional IT digital library ventures.

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Andy Borchers, Kettering University, USA

Bob Mills, Prudential Chamberlain Stiehl Realtors, USA

This case describes the evolution of an IT architecture for Prudential Chamberlain Stiehl Realtors (PCSR), a 14-office, 250-sales-agent real estate firm located in Southeast Michigan. Initially, the CIO of the firm concentrated on providing basic connectivity to sales agents and a simple World Wide Web (WWW) presence. Although this was accepted by users and moved the firm forward technically, management questioned the value of this technology. In the next phase of development, PCSR worked to build a “rich” set of applications that enhance the firm’s relationships with clients and agents.

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