

# **Cases on Information Technology Planning, Design and Implementation**

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*Suresh Chalasani, University of Wisconsin - Parkside, USA*

*Dirk Baldwin, University of Wisconsin - Parkside, USA*

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This case focuses on the development of information systems for not-for-profit volunteer-based organizations. Specifically, it discusses an information system project for the Volunteer Center of Racine (VCR). This case targets the analysis and design phase of the project using the Unified Modeling Language (UML) methodology, database modeling, and aspects of project management including scope and risk management. Students must decide how to proceed, including recommending an IT solution, managing risk, managing scope, projecting a schedule, and managing personnel.

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*Nava Pliskin, Ben-Gurion University of the Negev, Israel*

*Marta Zarotski, Ben-Gurion University of the Negev, Israel*

This case looks at Dead Sea Works, an international multi-firm producer of Potash and other chemicals whose sales for 1998 were about \$500 million. In 1996, the Information Systems group convinced top management to pursue a big-bang ERP implementation of SAP R/3.

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<i>Panagiotis Kanellis, University of Athens, Greece</i>	
<i>Drakoulis Martakos, University of Athens, Greece</i>	

This case study provides a detailed account of an ill-fated initiative to centrally plan and procure an integrated applications suite for a number of British higher education institutions. It is argued that because systems are so deeply embedded in operations and organization, high-risk, ‘big-bang’ approaches to information systems planning and development must be avoided. In this context the case illustrates the level of complexity that unpredictable change can bring to an information technology project that aims to establish the ‘organizationally generic’ and the destabilizing effects it has on the network of the project’s stakeholders.

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<i>Ann F. Harbor, University of Memphis, USA</i>	

This case study provides an overview of the process utilized in implementing a broad-based strategy to address the information technology needs of a large public university, the University of Memphis. It deals at length with the planning and creation of an IT governance structure and a strategic planning and management model. In this case, modern theories of organizational change and strategic planning were applied to the creation and improvement of the University’s IT structure.

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<i>Iann Cruywagen, Interstate Bus Lines (Pty.) Ltd., Bloemfontein, South Africa</i>	

An information kiosk system is a computer-based information system in a publicly accessible place. Such a system was developed for a large public transport company to provide African commuters with limited educational background with up-to-date information on schedules and ticket prices while also presenting general company information in a graphically attractive way. The challenges regarding liaison with passengers are highlighted and the use of a touch screen kiosk to supplement current liaison media is justified in this case.

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This case focuses on four essential components of a paradigm shift in technology and higher education at the University of Minnesota Crookston (UMC). This case describes how a paradigm shift model can help to promote a long-term technology cultural change in a higher education institution. The model consists of technology commitment, technology philosophy, investment priority, and development focus. It has been used at UMC to bring about a reengineering of the entire institution to support a ubiquitous laptop environment throughout the curriculum and campus.

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<i>Ketil Stølen, SINTEF, Norway</i>	
<i>Fredrik Vraalsen, SINTEF, Norway</i>	

During a field trial performed at the Norwegian telecom company, NetCom, a methodology for model-based risk analysis was assessed. The chosen methodology was the CORAS methodology, which has been developed in a European research project carried out by 11 European companies and research institutes partly funded by the European Union. This case describes the goal of the analysis, to identify risks in relation to an organization's application that offered customers access to their personal account information online.

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This case details the implementation of the systems applications and products (SAP) production planning module at EA Cakes Ltd. The market forced the company to

change its sales and production strategy from “make-to-order” to “make-to-stock.” The decision to change the strategy involved not only the company’s decision to invest much more money in accumulation and keeping stocks of finished goods, it required a complete redesign of its production planning system, which was an integral part of an ERP system that used SAP software.

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*Martin Müller, University of Zurich, Switzerland*

*Rolf Pfeifer, University of Zurich, Switzerland*

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*Tom Butler, University College Cork, Ireland*

This article explores the political relationships, power asymmetries, and conflicts surrounding the development, deployment, and governance of IT-enabled sales and marketing information systems (IS) at Digital Devices, Inc. The study reports on the web of individual, group and institutional commitments and influences on the IS development and implementation processes in an organizational culture that promoted and supported user-led development. In particular, the article highlights the problems the company’s IS function encountered in implementing its ad-hoc strategies and governance policies.

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*Chris Sauer, The University of New South Wales, Australia*

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*Monideepa Tarafdar, University of Toledo, USA*

*Sanjiv D. Vaidya, Indian Institute of Management Calcutta, India*

This case describes challenges in the adoption and implementation of IT in two public sector enterprises in the postal and distribution businesses respectively, in India. In spite of similarities in the scale of operations and the general cultural contexts, the IT adoption processes and outcomes of the two organizations were significantly different. While one failed to implement IT in its crucial processes, the other responded effectively to changes in external conditions by developing and using IT applications for critical functions.

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*Paul Cragg, University of Canterbury, New Zealand*

*Prue Chapman, Mobile Technology, New Zealand*

This case describes Mobile Technology, a small/medium sized electronics manufacturer that has been very successful and has grown rapidly in recent years. The firm relies heavily on information technology and most of the staff has very sophisticated computer expertise, yet it has no IS department and has only just appointed an IS manager.

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*Antonio Diaz-Andrade, ESAN, Peru*

*Martín Santana-Ormeño, ESAN, Peru*

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*Jeremy Rose, Manchester Metropolitan University, UK*

*Ray Hackney, Manchester Metropolitan University, UK*

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*Wita Wojtkowski, Boise State University, USA*

*Marshall Major, Moffatt Thomas and Co. Law Firm, USA*

This case study describes experiences of a successful regional law firm — an information intensive enterprise—with the design and implementation of an enterprise portal. The technology choice is explained in detail within the context of the needs of the information intensive small enterprise. The issues discussed are both technological and behavioral.

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*Purnendu Mandal, Marshall University, USA*

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*Risto Rajala, Helsinki School of Economics, Finland*

*Matti Rossi, Helsinki School of Economics, Finland*

*Virpi Kristiina Tuunainen, Helsinki School of Economics, Finland*

This case describes evolution of a small software company through three major phases of its life cycle. During the first phase, the business was founded within a subsidiary of a large multinational information technology (IT) company. In the second phase, the business evolved as a spin-off from the initial organization through a MBO (management buy-out) into an independent software vendor. Finally, in the third phase, the business has established itself as a vertically-focused business unit within a publicly-quoted company operating in software and consulting businesses.

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*Michelle W. L. Fong, Victoria University, Australia*

This case study examines the foreign banking sector's potential in transferring technology to the domestic banks in the People's Republic of China. Although the

rationale of the Chinese government’s admission of foreign banks into its domestic banking industry was to attract foreign capital and banking expertise, the case shows that foreign banks have not been employed fully for their potential in technology transfer.

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    *Yuan Long, University of Nebraska - Lincoln, USA*  
    *Fiona Fui-Hoon Nah, University of Nebraska - Lincoln, USA*  
    *Zhanbei Zhu, Shanghai Bell Co., Ltd., China*

    This case describes the environmental and organizational context of Shanghai Bell Corporation, and the problems and challenges it encountered in developing an enterprise-wide strategic IT/IS plan. The issues covered include alignment of IT strategy with evolving business needs, application of a methodology to develop the strategic IT/IS plan, and evaluation of strategic planning project success.

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