Preface

“Globalization is not an objective but an imperative, as markets and geographical barriers become increasingly blurred and even irrelevant”

John Welch Jr.
CEO
General Electric

These words by John Welch Jr., CEO of General Electric, were said at the beginning of the 1990s—the decade in which we witnessed the exponential growth of the Internet and e-business. Globalization took on a new meaning with success stories like Amazon.com and eBay. Even small companies in geographically disadvantaged countries have been able to penetrate international markets as the Internet creates a level playing field. For example, jenniferann.com—a small company that sells New Zealand-made lingerie and accessories—operates out of Pokeno, a small farming township south of Auckland, the country’s major city. These successes are not restricted to just the dot-coms. Many companies have also effectively organized their global operations using the Internet and other information technologies (ITs). An example of such a company is United Parcel Service (UPS) its global operations are a classic case study on how the Internet and IT in general can be used to support and shape the business.

As organizations continue to compete globally in the new millennium, the effective deployment and exploitation of information technology will create the difference between those that are successful and those that are not. What lessons are there to be learned from organizations that run global IT operations and deploy IT in support of their global business operations? What lessons are there to be learned in the development, implementation, use and management of IT from public and private organizations operating in countries other than their own?

This book brings together 14 cases that report on these aspects of global IT applications and management. These cases are based on the actual experiences
of business and IS professionals in large and small organizations. The primary mission of this book is to document successes and pitfalls of IT applications and management in organizations that compete in the global arena, and in public and private organizations around the globe. Cases included in this publication can be valuable teaching and research resources for educators and researchers in the global IT field. The cases are organized into three sections. The following paragraphs provide summaries of the cases included in each of the three sections.

**Section I: Global Teaching Cases**

*The Australasian Food Products Co-Op: A Global Information Systems Endeavour*

International information systems (IIS) have taken on increased importance as organizations develop and refine their global operations. This case is based on the history of an IIS project in a real transnational enterprise. It describes an “information system migration” following the development of a Global Business Strategy of a Multi-National enterprise through various stages. The Co-op, a very large organization, had to grapple with sufficient command and control to mount synchronised international marketing and logistics operations in an increasingly competitive global market. At the same time, management in its international sites demands local autonomy. The case describes the Co-op’s attempt at developing an international information system that provides a balance between central control and local flexibility. It focuses on the management issues and difficulties faced by the organization in delivering such a global system. Failure of the IIS to adapt to the organization’s strategy changes sets up a field of antagonistic forces, in which business resistance eventually defeated all attempts by the information technology people to install a standard global information system.

*LXS Ltd. Meets Tight System Development Deadlines via the St. Lucia Connection*

This case describes how a LXS Ltd., a Toronto-based software house, meets a tight systems development deadline for their new product called Estitherm, a Web-based software tool that supports heat loss calculations for architectural engineers designing structures. Estitherm’s development requires sophisticated Java programming skills. The project stalls when LXS is unable to hire enough additional programmers to be able to meet the development deadlines dictated
by competition. Through lucky coincidence, LXS’ Chief Scientist stumbles onto a pool of Java talent while vacationing on the Caribbean island of St. Lucia. Negotiations follow, a contract is signed and the project is quickly brought to successful completion with the aid of Caribbean programmers, working via the Internet. Similar contract arrangements hold the promise for improved economic conditions in Caribbean nations and can reduce software backlogs for companies in developed nations, but better mechanisms are needed to bring together buyers and sellers of IT services.

**Success and Failure in Building Electronic Infrastructures in the Air Cargo Industry: A Comparison of The Netherlands and Hong Kong SAR**

This case describes the genesis and evolution of two IOSs in the air cargo community and provides information that lets students analyze what led one to be a success and one to be a failure. The two examples are from the Netherlands and Hong Kong SAR. The case emphasizes the complex, institutional and technical choices by the initiators of the system in terms of their competitive implications that were the main causes for the systems’ fate. The case thus argues that it was the institutional factors involved in the relationships of the stakeholders that led to the opposite manifestations of the two initiatives and not the available technology nor a lack of talent in producing sufficiently good systems. The case therefore lends itself to advocate that also non-technological factors should be taken into account when designing and implementing interorganizational information systems.

**Ford Mondeo: A Model T World Car?**

This case weighs the advantages and disadvantages of going global. Ford presented its 1993 Mondeo model, sold as Mystique and Contour in North America, as a ‘world car.’ It tried to build a single model for all markets globally to optimize scale of production. This required strong involvement from suppliers and heavy usage of new information technology. The case discusses the difficulties that needed to be overcome as well as the gains that Ford expected from the project. New technology allowed Ford to overcome most of the difficulties it had faced in earlier attempts to produce a world car. However, IT was flanked by major organization changes within Ford. Globalization did not spell obvious success though. While Ford may in the end have succeeded in building an almost global car, it did not necessarily build a car that was competitive in various markets. The Mondeo project resulted in an overhaul of the entire organization under the header of Ford 2000. In terms of Ford’s own
history, the Mondeo experience may not be called a new Model T, but does represent an important step in Ford’s transformation as a global firm.

**Lone River Winery Company: A Case of Virtual Organization and Electronic Business Strategies in Small and Medium-Sized Firms**

Electronic networks and virtual organizing capabilities are shaping the competitive performance of small firms in the global information economy. As hardware becomes increasingly affordable, soft assets and strategies will determine the real winners. Successful small and medium-sized firms will be those with distinctive skills to manage the unique features of both the electronic marketplace and the enabling infrastructure. This chapter discusses a case example of Internet infrastructure and e-business strategy management in small and medium-sized firms (SMFs). The case focuses on the key features of electronic business strategy using a virtual organizing framework. Based in the Swan Valley region of Perth, W. Australia, Lone River Winery Co. Ltd., has over the past five years employed the Internet to extend its business scope beyond the Australian wine market.

**Dancing with a Dragon: Snags in International Cooperation Between Two IT Companies**

International strategic alliances are an increasingly popular way for companies to expand their operations beyond national boundaries. For small and medium-sized enterprises, this route provides interesting characteristics that match their resources and ambitions. It is particularly appropriate to small companies in the information and communication technologies sector. The short product life cycles, rapid market developments and increasing product complexity enhance the attractiveness of international alliances. However, success does not come automatically in international strategic alliances. This case applies the aspects of strategic fit, resource fit, cultural fit and organizational fit to analyze the cooperation between a small Dutch IT company and a major Chinese Internet contents provider. Their cooperation does not run smoothly. The chapter identifies several misfits in this case study.

**Section II: Regional Teaching Cases**

**Success in Business-to-Business E-Commerce: Cisco New Zealand’s Experience**

The growth of business-to-business e-commerce has highlighted the importance of computer and communications technologies and trading partner trust for the
development and maintenance of business relationships. The case study of Cisco New Zealand permits students to learn about: (i) the factors that influence the successful trading partner relationships in business-to-business e-commerce participation; (ii) different types of trading partner trust relationships and their impact on the benefits of business-to-business e-commerce applications; (iii) the implementation of Cisco Connection Online (CCO) and, in particular, what made Cisco’s implementation successful and the challenges (issues) they face; (iv) the different roles of trading partner relationships and their impact on trust, the different forms of trust experienced in Cisco New Zealand and Compaq New Zealand using CCO, and (v) successful management practices in the context of CCO and their impact on inter-organizational trust in business-to-business e-commerce participation.

Geographical Information System (GIS) Implementation Success: Some Lessons from the British Food Retailers
Geographical Information Systems (GISs) are becoming more prevalent for retailers in their use for both operational day-to-day and strategic long-term decision-making. This chapter presents the results of in-depth case studies, reflecting upon the GIS implementation experiences of key UK food retailers. Two retailers were studied that have different positions in the marketplace and have employed GIS to varying degrees. The theory developed shows the factors that are significant in the implementation of a GIS in retailing organizations. It reflects upon the experiences of market leaders and the retailers that struggle to keep up with them.

Implementing and Managing a Large-Scale E-Service: A Case on the Mandatory Provident Fund Scheme in Hong Kong
This case concerns a recently launched retirement protection scheme, the Mandatory Provident Fund (MFP), in Hong Kong. Service providers, employers, employees and the government are the four main parties involved in MFP. The service has been implemented in two versions, a bricks model and a clicks model. The former is based on a conventional model with paper-based transactions and face-to-face meeting. The focus of this case, however, is on latter, which introduces MFP as a service in an e-environment that connects all parties electronically and conducts all transactions via the Internet or other computer networks. The case discusses the MFP e-business model and its implementation. The chapter analyzes the differences between the old and the new model; and highlights the chief characteristics and benefits of the e-
business model as they arise from the emerging digital economy. It also discusses some major problems, from both managerial and technical perspectives, that have occurred during the phases of implementing and launching the new service.

_Engaging Electronic Medicine at Kiwicare: The Case of Video Conferencing Adoption for Psychiatry in New Zealand_

This case study highlights the factors influencing adoption of telemedicine utilizing video conferencing technology (TMVC) within a New Zealand hospital known as KiwiCare. The author applied the technological innovation literature to provide insights into TMVC adoption within KiwiCare. The case study indicates that the weak presence of critical assessment into technological innovation factors prior to the adoption decision can lead to its weak utilization. Factors like complexity, compatibility and trialability were not assessed extensively by KiwiCare and would have hindered TMVC adoption. TMVC was mainly assessed according to its relative advantage and to its cost effectiveness along with other facilitating and accelerating factors. This is essential but should be alongside technological and other influencing factors highlighted in the technology innovation literature.

_The Role of Virtual Organizations in Post-Graduate Education in Egypt: The Case of the Regional IT Institute_

The role of virtual organizations and virtual teams are rapidly spreading worldwide in the related aspects to learning and human resources development. This has led to the establishment of a large number of regional and global learning consortiums and networks aiming to provide quality knowledge and information dissemination vehicles to an ever-growing community of seekers that is online, active and eager to increasingly learn more. This case reports on the experience of Egypt’s Regional IT Institute in the field of education and training. The Regional IT Institute was established in 1992 targeting the formulation of partnerships and strategic alliances to jointly deliver degree (academic) and non-degree (executive) programs for the local community, capitalizing on the enabled processes and techniques of virtual organizations. The case provides many lessons to be replicated that demonstrate the opportunity to expand in exchanging the wealth of knowledge across societies using a hybrid of forms for virtual organizations and virtual teams.
Section III: Research Cases

IT Industry Success in Small Countries: The Cases of Finland and New Zealand

Given the importance of the information technology industry in today’s global economy, much recent research has focused on the relative success of small countries in fostering IT industries. This chapter examines the factors of IT industry success in small developed countries, and compares two such countries, Finland and New Zealand. Finland and New Zealand are alike in many respects, yet Finland’s IT industry is more successful than New Zealand’s. Three major factors that impact on the development of a successful IT industry are identified: the extent of government IT promotion, the level of research and development, and the existence of an education system that produces IT-literate graduates.

Identifying Supply Chain Management and E-Commerce Opportunities at PaperCo Australia

Established supply chain management techniques such as Quick Response (QR) or Customer Relationship Management (CRM) have proven the potential benefits of re-organizing an organization’s processes to take advantage of the characteristics of electronic information exchange. This case presents the experiences of a large Australian paper products manufacturer in implementing an electronic document exchange strategy for supply chain management. It highlights the drivers for change that spurred their actions, and describes the issues associated with trying to support existing and future requirements for document exchange across a wide variety of trading partners. The experiences of PaperCo will be relevant to organizations with diverse trading partners, especially small to medium enterprises (SMEs).

Barriers to IT Industry Success: A Socio-Technical Case Study of Bangladesh

In Bangladesh, information technology (IT) use is still in a backward stage in terms of information generation, utilization and applications. A dependable information system has not been developed for the management and operation of the Government machinery and large volume of data transactions in the public/private sector organizations. There is a lack of locally and externally generated information needed for the efficient performance of the government, production, trading, service, education, scientific research and other activities of the society. This case study of the IT scenario in Bangladesh discusses the
challenges, analyzes the key issues that may be barriers to the success of its IT industry. It discusses the inherent strengths that can be used as the launching pad for making Bangladesh a potential offshore source of software and data processing services.

The Case Method and Teaching Case Note

Although there are numerous definitions, Yin (1994) defines a case study as:

“… an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.” (p. 13)

The case study method is particularly well suited to investigating information systems in organizations (Myers, 1997) and is the most common qualitative method used the field (Orlikowski and Baroudi, 1991; Alavi and Carlson, 1992).

At the same time, the case method is also a popular pedagogical approach to teaching information systems to students. It engages students and requires them to become active participants rather than passive observers. The real-life situations presented in cases encourage students to think independently and analyze the topic from all sides. The case method therefore heavily involves students in the learning process.

To support the teaching of the cases in this book, a teaching case note supplement is available to instructors. It highlights the learning objectives, provides an overview of the issues being studied and discusses the case setting. In addition, the teaching case notes supply suggestions as to how the class session may proceed as well as discussion questions. These cases can be used independently or be used with supplementary materials such as background literature as suggested in the teaching notes.

The Audience

We have witnessed a strong growth in the interest in global IT as a subject in the 1990s (Gallupe and Tan, 1999). This has led to the development of global IT workshops and courses. It is my hope that this casebook will be a valuable resource for such courses.
This book will suit students in advanced undergraduate and graduate programs in Information Systems. It can also be used in teaching aspects of International Economics or International Business, where information systems and technology are discussed. Cases in this publication can be an important resource in corporate management education programs. Whichever audience, the casebook can be used by itself, or it can serve as a supplement to global IT texts and readings.

There are a number of research cases in this book. The teaching cases have also been written based on the authors’ field research. Research questions can be raised from these cases for further investigations.

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Felix B Tan, Ph.D.
Auckland, New Zealand
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