
Editorial: From e-commerce to e-business

Eldon Y. Li

Orfalea College of Business,
California Polytechnic State University, USA
E-mail: eli@calpoly.edu

Biographical notes: Dr. Eldon Y. Li is Professor and Coordinator of MIS Program at the Orfalea College of Business, California Polytechnic State University, San Luis Obispo, California, USA. He holds MS and PhD degrees from Texas Tech University. He has published over 100 papers in the areas of human factors in information technology (IT), strategic IT planning, software engineering, quality assurance, information management, and business management. He is the Founding Editor for the *International Journal of Electronic Business*, the *International Journal of Internet and Enterprise Management*, and the *International Journal of Internet Marketing and Advertising*. He is currently the President for the Western Decision Sciences Institute (WDSI), the Secretary General for the Asia Pacific Decision Sciences Institute (APDSI), and the Founding Executive Director of the International Consortium for Electronic Business (ICEB).

Electronic commerce (e-commerce) has been around for over a century. Since the invention of the telephone by A.G. Bell in 1876, countless business deals have been conducted over the telephone networks. For those who prefer printed documents, telex and fax have been serving the purpose as they eliminate the need for recording phone-in orders into written orders. Nonetheless, all these forms of business transactions required keyboard operators to transcribe source documents into electronic data when computers came into the commercial world in the early 1950s. Since the late 1960s, business-to-business (B2B) electronic transactions have been conducted via Electronic Data Interchange (EDI) technology using X.12 protocol through value added networks or telephone networks. In contrast, business-to-consumer (B2C) transactions have been relying on call centres where the electronic-data conversions take place. It was not until 1991 did the National Science Foundation lift the restriction on the commercial use of its NSFNET, the backbone of the internet. This cleared the way for the age of electronic commerce for businesses and consumers alike.

1991 is a critical year for internet development. Before then, internet access was the privilege of users in educational institutions, research laboratories, military command centres, government agencies, etc. In that year, Mark MaCahill at the University of Minnesota released 'gopher', the first point-and-click way of navigating the files on the internet. Furthermore, Tim Berners-Lee at the CERN in Switzerland posted the first computer code of the World Wide Web, the first code to combine texts, pictures, and sounds on web pages. Later, in 1993, Marc Andreessen and his colleagues at the University of Illinois at Urbana-Champaign released the first graphics-based browser for the World Wide Web, called 'Mosaic'. In 1995, James Gosling and his co-workers at Sun Microsystems released an internet programming language called 'Java', enabling not only information but also applications to be retrieved, displayed, and used over the net.

By the end of 1996, over 30 million people were connected to the internet and over US\$1 billion per year changed hands at internet shopping malls. Despite the recent dot-com meltdown, electronic commerce is expected to grow, especially in the B2B sector. According to the prediction of International Data Corporation, B2B annual commercial spending will soar from 70% of the US\$50 billion total e-commerce spending in 1998 to 87% of the US\$1.3 trillion expected in 2003.

During the growth of e-commerce, many more non-commerce and not-for-profit electronic activities are being conducted over the net. For example, e-banking, e-education, e-entertainment, e-government, e-learning, e-library, e-medicine, e-services, etc., are all growing in popularity over the net today. The term 'e-business' is being used to encompass both commercial and non-commercial activities on the net. As the scope and activities of e-business continue to expand, researchers and developers around the world are finding ways to integrate e-commerce technologies (including coding and messaging, communication protocols and mobile technologies) with business processes and user activities. The purpose of launching the International Journal of Electronic Business (IJEB) is to provide an intermediary for these researchers and developers, be they professionals or academicians, to share their thoughts and knowledge regarding the advances of e-business. It focuses on both the theory and practice of e-business methods. The journal publishes original and review papers, technical reports, case studies, conference reports, management reports, book reviews, and notes, commentaries and news that are related to social, political and economic issues as well as the emerging issues of interest to professionals and academicians. The international dimension is also emphasized in order to overcome cultural and national barriers and to meet the needs of accelerating technological change and changes in the global economy.

In closing, we would like to express our gratitude to Inderscience's staff for their high-quality professional assistance during the pre-publication process and to our editorial team and board members for their continuous support during the journal's planning phase. Our most sincere thanks goes to all the authors who share their knowledge and research outcomes with the readers of this inaugural issue. Without them, the debut of this journal would not be possible. Finally, to our readers around the world, we thank you very much for using this journal as your source of information and hope you find it helpful in your research endeavours.