

## Panel: E-Commerce and Marketplaces

Robert Winter (Chair)<sup>1</sup>

Paul O'Brien<sup>2</sup>

Alan Roberts<sup>3</sup>

Ray Slayford<sup>4</sup>

<sup>1</sup> Institute of Information Management  
University of St. Gallen  
St. Gallen, Switzerland  
Email: Robert.Winter@unisg.ch

<sup>2</sup> Department of Commerce  
University of Queensland  
Ipswich, Australia  
Email: P.F.O'Brien@mailbox.uq.edu.au

<sup>3</sup> Dialog  
Brisbane, Australia  
Email: alan\_roberts@dialog.com.au

<sup>4</sup> PriceWaterhouseCoopers  
Sydney, Australia  
Email: ray.slayford@au.pwcglobal.com

### Abstract

*Business Networking as well as the separation of product-oriented portions and customer process-orientated portions in value networks transform traditional business models. E-commerce and electronic marketplaces are among the first manifestations of novel, IT-enabled distribution / access channels and novel, IT-enabled business models. In this panel, we want to discuss current trends and future directions of electronic business: Will e-commerce evolve into a broader concept including other distribution and access channels, maybe as a 'collaborative' component of a generalized customer relationship management? Will marketplaces become an integral component of standardized business application packages? Which are the most important elements of a common support infrastructure for electronic marketplaces and electronic commerce? Who should be in charge to provide appropriate standards, and which reference models / solutions are still missing?*

### Keywords

Electronic Commerce, Electronic Business, Electronic Marketplace, Business Architecture, Business Model

## INTRODUCTION

The most important business potential of IT innovations is that an advanced technical networking infrastructure together with an organizational business networking infrastructure allow to broaden the design and optimization scope from an isolated company (or a company-centric view including direct customers and direct suppliers) towards entire value networks.

Innovations that enable new business architectures include cheap, high-bandwidth communication networks, high-level (i.e. business oriented) communication standards, software packages for inter-company business processes, electronic marketplaces, web storefronts, and successful business networking practices (e.g. alliances, flexible sourcing).

Parallel to the networking sophistication in the business arena, Internet literacy and Internet access are available to a growing portion of end consumers. By communicating directly with producers / service providers via electronic channels, end consumers can be integrated into value networks more closely, and product / service design can be influenced more directly. Particularly for products bound to electronic media (e.g. information, music, movies, games, software) or financial products (e.g. loans, investments, insurance), the value network can be separated into a production-oriented 'factory' and a customer process-oriented 'solutions' portion. Since missing physical restrictions allow for a flexible combination / aggregation of such products / services, business models can be tailored to specific needs of customer segments instead of having to follow the structure of production processes.

Hence, two transition arenas contribute to the transformation of traditional business models into electronic business:

- Business-to-business effects: multi-company business processes, electronic services, electronic marketplaces, and flexible sourcing.
- Business-to-consumer effects: direct access and direct response to products and services by end consumers; separation of production process-oriented portions and customer process-oriented portions of value networks, flexible combination / aggregation of certain products and services tailored to customer intentions and life events.

In their combination, these effects create huge optimization potentials for companies. Being an integral part of a value network, companies can identify promising business models more flexibly and can exploit core competencies more focussed, while overall efficiency and total customer value can be increased.

Figure 1 illustrates a simplified process model for e-business: Intra-business processes are tightly integrated by enterprise resource planning / management, supply chain management, and business support services. While e-procurement and e-distribution link internal processes to customer and supplier processes on the operations level, collaborative customer relationship management as well as collaborative product innovation and design maintain long-term relationships with customers and suppliers. Enterprise management comprises both intra-company and collaborative components.

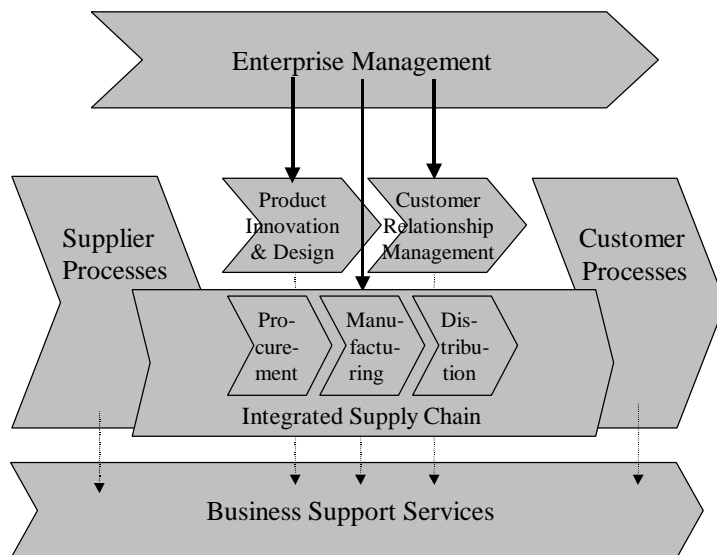


Figure 1: Business model of the information age

While being restricted to web storefronts and electronic access and/or distribution of traditional goods and services for some time, e-commerce is currently evolving into a broader approach that extends into collaborative customer relationship management, collaborative business management, and collaborative procurement. This is due to the fact that e-commerce concepts must fail when not being integrated with the upstream portion of the supply chain (e.g. electronic orders are accepted for unavailable products), with operational customer relationship (e.g. 1:1 marketing campaigns not based on e-sales history), and with enterprise management (e.g. sales conditions differing across distribution / communication channels).

While dedicated electronic marketplaces have been developed mostly as independent start-ups to enable business networking in the past, more and more companies are starting to integrate electronic marketplaces into their own business (or industry) architectures. In addition, software vendors have started to integrate electronic marketplaces into their business suites.

## SELECTED ISSUES

Will e-commerce evolve into a broader concept including other (even traditional, non-electronic) distribution and access channels, maybe as a 'collaborative' component of a generalized customer relationship management? If yes, what is the impact of e-commerce on that broader concept?

Will marketplaces become an integral component of standardized business application packages? If yes, which are the reference models? Will industry marketplaces still be needed? Will business-to-business and business-to-consumer marketplaces converge?

If isolated e-commerce concepts and applications fail, what additional components of business architecture should be integrated into a holistic e-business concept with highest priority? Can appropriate reference solutions be defined? What integration middleware concept seems to be most appropriate?

Which are the most important elements of a common support infrastructure for electronic marketplaces and electronic commerce? What developments are necessary to support a 'plug-and-play' configuration of new business models using shared services? Who is in charge to provide appropriate standards, and which reference models / solutions are still missing?

## PANELISTS

**Robert Winter (chair)** is managing director of the Institute of Information Management, University of St. Gallen (HSG), Switzerland, and director of HSG's post-graduate Master of Business Engineering program. He received degrees in Business Administration (1984) and Business Education (1986) from Goethe University, Frankfurt, Germany. As a research assistant with Goethe University from 1984 through 1994, he received Dr.rer.pol with a dissertation on relational representation of multi-stage production planning (1989) and *venia legendi* with a thesis on design and implementation of data derivation in information systems (1994). His research interests include transition to e-Business (business engineering), application architectures (in particular in service industries), data warehousing, and systems development.

**Paul O'Brien** has over 20 years experience in the IT industry in both technical and executive management positions. Prior to moving to academia in 1997 he was the Information Technology Manager for the Queensland Tourist and Travel Corporation where he was instrumental in the development of the Destination Queensland web site. Paul moved to academia to devote more time to teaching, learning and research. He is currently a lecturer in electronic commerce at the University of Queensland's new Ipswich campus where his teaching is focussed on the analysis, design and implementation of EC systems. He is also undertaking a PhD in electronic commerce in the tourism industry. He is a member of the Australian Computer Society and was a Queensland Branch executive committee member for over 5 years.

**Alan Roberts** commenced his IT career in 1965 and has seen any number of "revolutions" and "Silver Bullets" come and go since then. His career has taken him junior applications developer through to executive management in the electricity and banking worlds. He has worked in several centres in Australia, Europe and New Zealand. He is currently working as the Executive Consultant with Dialog Information Technology out of their Brisbane head office. This role involves him as the senior mentor for Dialog's professional staff in all states. He also provides strategic consulting services to customers in both government and private sector organisations. He also has a great interest in encouraging young people and developing them in the early stages of their careers through his participation in the Education Reference Group at the Distributed Systems Technology Centre at Queensland University and his involvement in the Cooperative Education stream in the IT Faculty of the Queensland University of Technology.

**Ray Slayford** has over fifteen years financial management experience developed across a wide spectrum of industry sectors including Financial Services, FMCG, Oil & Gas, Building Materials and Information Technology. Most recently, within PricewaterhouseCoopers Australian MCS practice. Ray has focussed on e-business B2B and eMarketplace strategies and initiatives. Prior to joining PricewaterhouseCoopers, Ray obtained broad project and senior line management experience with significant involvement at board level. Previous roles include Kraft Jacobs Suchard (Project Manager), Andersen Consulting (Director), CAMAS Plc (Chief Financial Officer), Coca-Cola & Schweppes (Finance Manager) and IBM UK Ltd (Business Review Analyst).

## COPYRIGHT

Robert Winter, Paul O'Brien, Alan Roberts, Ray Slayford (c) 2000. The authors assign to ACIS and educational and non-profit institutions a non-exclusive licence to use this document for personal use and in courses of instruction provided that the article is used in full and this copyright statement is reproduced. The authors also grant a non-exclusive licence to ACIS to publish this document in full in the Conference Papers and Proceedings. Those documents

may be published on the World Wide Web, CD-ROM, in printed form, and on mirror sites on the World Wide Web. Any other usage is prohibited without the express permission of the authors.