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701 E. Chocolate Avenue, Hershey PA 17033-1240, USA
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ITB8574

Chapter XI

An Internet Business Framework for Government Agencies

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INTERNET COMMERCE

The Internet offers enormous potential as a means of communication, doing business and providing channels for service delivery. The most striking feature about the Internet as a technology has been its very high rate of growth compared with other modern communication technologies such as the telephone, television and facsimile.

The trend over the last few years of increasing uptake of the Internet is evidenced by host counts doubling approximately every two years (http://www.nw.com/zone/WWW/top.html), the number of people connected, and to a lesser extent the dollar amount of trade activity generated. In addition to the sheer number of hosts and people is the amount of traffic that is being generated. The traffic level on the Internet is doubling every 100 days (International Telecommunications Union [ITU], 1999). Forecasts of the on-line trade of goods in the U.S. are in the order of $1 trillion, and revenue generated by Internet electronic services alone is of the order of $220 billion by the year 2003 (http://www.forrester.com/ER/Research/Report/0,1338,5417,FF.html). These measures of the growth of Internet participation and predictors of future uptake suggest that the Internet "revolution" is more than journalistic hype. This is underlined in a provocatively titled article "Use Net or Die, Travel Agents Told," reporting advice from the Australian Tourism Commission (ATC) to travel agents that Internet travel sales are doubling every six months (Southgate, 1999). The ATC is predicting A$13 billion in net-based business in the Year 2000. Ansett Airlines expects 50% of its sales to be online by 2005, up from 1% today. Travel agents, like other 'middlemen' face significant threats from disintermediation as hotels and others who sell their wares through intermediaries work out effective strategies to use the Internet to sell direct to end consumers. Some hotels, for example, are using the commission (typically 10%) they pay to an agent to deliver lower room costs to consumers who transact directly with them over the Net. Businesses, and to some extent, governments that choose to ignore the Internet as a medium for doing business may be doing so to their detriment.

This chapter appears in the book, *Electronic Commerce: Opportunity and Challenges* edited by Syed Mahbubar Rahman and Mahesh S. Raisinghani.

In this chapter, the Internet is viewed as an electronic market environment: a virtual space for buyers and sellers to meet and to conduct a transaction (traditionally this would be that of buying and selling), as well as an electronic shopfront environment for public service delivery. To date, much of the literature has focussed on identification of the critical success factors for effective implementations of Web-enabled technologies in the commercial sector in a relatively generic sense.

The term "Internet commerce" covers a wide range of business activities, so it becomes important to place some boundaries around the concept to get a working understanding of what these business activities are. The definition of Internet commerce that is used in this chapter is fairly broad: it is an activity that involves some form of obligation between two or more parties, or some type of exchange that occurs over the Internet. Electronic commerce is a broader term that covers all electronic communications channels. An electronic marketplace is the term used to refer to the virtual space on the Internet.

This chapter is divided into three sections. The first explores some of the "models" or frameworks of Internet commerce proposed in the literature that try to explain the shape and the expected gains of the electronic marketplace. Most models were developed within the context of private sector activity, so they provide few pointers or useful information for where the public sector should look to capitalise on the opportunities offered by Internet commerce. The second section develops a framework for government on-line service delivery on the Internet that incorporates the lessons learned from the commercial sector. The purpose of the framework is to provide a migration path towards more efficient service delivery, and to open the door to new ways of conducting government business. The chapter ends with an application of the framework using two real world case studies and examines some of the practical issues revolving around on-line government service delivery. The examples and cases studies are drawn from the Australian experience.

MODELS OF INTERNET COMMERCE

A simple way of classifying the commercial activity that we see on the Internet is as either business-to-business or business-to-consumer. Of the business-to-consumer market, there appears to be two classes of purchases that stand out as being acceptable to the consumer. The first is a conventional buying activity for low value physical goods such as books, CDs, flowers, personal computer peripherals and software (Department of Foreign Affairs and Trade [DFAT], 1999a). The other class is the service provision of simple, product-like services such as the travel services and on-line auctioning. It also covers "Internet-enabled" businesses such as search facilities for information archives, search engines for Web pages and other information-centred activities. On-line services are becoming increasingly prevalent, and there is some evidence that an unmet demand for these services exists (Putnam, 1999).

Commonly acclaimed advantages of doing business via the Internet include: the removal of time and space barriers (to yield a global marketplace and 24-hour-a-day, seven-days-a-week trading); the efficiency gains in the supply-chain due to process automation and reduced cycle times; and the changes in the industry market value chain with the removal of conventional intermediaries (Choi, Stahl, and Whinston, 1998; Wigand and Benjamin, 1995). Large efficiency savings are attributed mostly to the business-to-business Internet commerce sector rather than to business-to-consumer transactions (see for ex-