CHAPTER II

E-COMMERCE

E-Commerce Types

E-commerce can be classified into three types of business transactions, that is, business-to-consumer (B2C), business-to-business (B2B), and consumer-to-consumer (C2C).

• B2C refers to a transaction occurring between a business and a consumer. When most people think of E-commerce, this type is the first that comes to mind.³ Typically, a consumer uses a Web browser and connects to the seller.

The revenue of B2C E-commerce is projected to grow from \$1.5 billion in 1997 to \$40 billion in the year 2000. Consumers are projected to spend \$100 billion on the Internet by 2003.¹⁰

• B2B refers to a transaction occurring between businesses. It involves the use of web-based technologies to conduct business between two or more companies. The essential aspect of B2B is system-to-system interactions. B2B E-commerce is less visible to the public.

Currently, the volume of e-business activity is around 90 percent B2B. The growth of B2B E-commerce has been very fast. US-based Forrester Research estimates that B2B E-commerce will grow to more than \$1 trillion by 2003.¹⁰

• C2C refers to a transaction occurring between consumers. C2C transactions have become popular in recent years. People advertise their products for sale through specific Web sites. One of the largest companies of this type is eBay. eBay enables its customers to buy items from other customers.³

Electronic Data Interchange

Electronic Data Interchange (EDI) is the basis of E-commerce. It involves the computer-to-computer exchange of standard business forms such as purchase orders, invoices, shipping documents between a company and its trading partners, including suppliers, customers, banks and others.

As EDI is a well established and effective technology, using EDI can result in many benefits for companies, including decreased purchase prices and better customer service. Traditionally, companies have exchanged business documents by mailing preprinted business forms. By integrating computers and data communications into the business process, companies can benefit from exchanging information electronically. EDI can help to reduce paperwork, minimize costs, increase productivity, improved accuracy, and improve response time.¹²

There are two main formats for EDI conventions in transferring of business documents: ANSI X.12 is used mainly in North America and UN/EDIFACT is used worldwide.

EDI technology is approximately the same age as the Internet. In the past, the two technologies have been mutually exclusive, but this has changed. These two

technologies have begun to merge. This merger will result in EDI and the Internet eventually becoming universally accessible.¹³

Microsoft Technologies for E-Commerce

Internet Information Server

Internet Information Server (IIS) is a World Wide Web server, which can publish HTML and ASP pages.⁵ It is important that an E-commerce site run on Windows NT Server or Windows 2000 Server that has IIS as the web server.

If Windows NT 4.0 Server is running, IIS 4.0. needs to be installed. IIS 4.0 can be downloaded from Microsoft's web site. ASP 2.0 is shipped with IIS 4.0 and is installed automatically when IIS 4.0 is installed.⁴

IIS 5.0 is shipped with Windows 2000 Server, but it is not installed by default when Windows 2000 is installed. ASP 3.0 is shipped with IIS 5.0 and is installed automatically when IIS 5.0 is installed.

Microsoft Access

To create an E-commerce web site, first creating a database is necessary. Microsoft Access will be used as my database. It will be created to store the product catalog and information. As Microsoft Access is a desktop database and cannot support more than 30 users concurrently, my store web site will be a low traffic web site.¹

Microsoft FrontPage

Earlier, there were no graphical tools to create web pages. Developers had to use Notepad to create HTML pages. As the prevalence of the Web grew, many HTML editors were developed. FrontPage was one of them. The advantages of FrontPage are as follows: ¹¹

• It automatically imports and converts an existing text file into an HTML page such as bulleted and numbered lists and centered text.

• Working with graphics is easy with automatic conversion of images into GIF or JPEG format.

• Drag and drop or clicking a button can be used to create Hyperlinks.

• One can easily create forms with text fields, check boxes, radio buttons, dropdown lists, and push buttons.

Although FrontPage is very useful for editing HTML pages, it has drawbacks when it is used to edit ASP pages. As ASP is scripting code, FrontPage cannot create ASP as easily as it can create HTML pages because FrontPage is not easy to enter ASP codes.

In spite of this limitation, FrontPage still can be used to create web pages. One can use FrontPage to create the HTML pages for web pages and then view the HTML source codes and add in the ASP code.