E COMMERCE

Introduction

One of the most profound changes currently transpiring in the world of business is the introduction of electronic commerce. The impact of electronic commerce (ecommerce, or EC) on procurement, shopping, business collaboration, and customer services as well as on delivery of various services is so dramatic that almost every organization is affected. E-commerce is changing all business functional areas and their important tasks, ranging from advertising to paying bills. The nature of competition is also drastically changing, due to new online companies, new business models, and the diversity of EC-related products and services. EC provides unparalleled opportunities for companies to expand worldwide at a small cost, to increase market share, and to reduce costs. In this chapter we will explain the major applications of EC, the issues related to its successful implementation and to its failures, and what services

are necessary for its support. We look at business-to-consumer (B2C) commerce, business-to-business (B2B) commerce, intrabusiness commerce, and e-government.

Overview of E-Commerce

Electronic commerce (e-commerce, or EC) describes the buying, selling, and exchanging of products, services, and information via computer networks, primarily the Internet. Some people view the term commerce as describing transactions conducted between business partners. To them, the term electronic commerce seems fairly narrow, so many use the term e-business (electronic business) instead. It refers to a broad definition of EC, not just buying and selling, but also servicing customers, collaborating with business partners, and conducting electronic transactions within an organization.

Definition of E-Commerce

Electronic commerce or e-commerce refers to a wide range of online business activities for products and services. It also pertains to "any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact.

E-commerce is the use of electronic communications and digital information processing technology in business transactions to create, transform, and redefine relationships for value creation between or among organizations, and between organizations and individuals.

E-commerce is usually associated with buying and selling over the Internet, or conducting any transaction involving the transfer of ownership or rights to use goods or services through a computer-mediated network.

Types of E – Commerce

The opening case shows an example of business-to-business EC (B2B), in which two or more businesses make transactions or collaborate electronically. Although B2B is the major current type of electronic commerce (as measured by monetary volume), there are several other important types of EC:

Collaborative commerce (c-commerce). In this type of EC, business partners collaborate electronically. Such collaboration frequently occurs between and among business partners along the supply chain.

- ✓ **Business-to-consumers** (B2C). In this case the sellers are organizations, the buyers are individuals.

- ✓ **Consumers to businesses** (C2B). In this case consumers make known a particular need for a product or service, and organizations compete to provide the product or service to consumers. (An example would be Priceline.com, where the customer names the price and suppliers try to fulfill it.)
- ✓ **Consumer-to-consumer** (C2C). In this case an individual sells products (or services) to other individuals.
- ✓ **Intrabusiness (intraorganizational) commerce**. In this case an organization uses EC internally to improve its operations. A special case of this is known as B2E (business to its employees) EC.
- ✓ **Government-to-citizens** (G2C) and to others. In this case the government provides services to its citizens via EC technologies. Governments can do business with other governments (G2G) as well as with businesses (G2B).
- ✓ **Mobile commerce (m-commerce).** When e-commerce is done in a wireless environment, such as using cell phones to access the Internet, we call it m-commerce.

History and Scope of E-Commerce

E-commerce applications began in the early 1970s with such innovations as electronic transfer of funds. However, the applications were limited to large corporations and a few daring small businesses. Then came electronic data interchange (EDI), which added other kinds of transaction processing and extended participation to all industries. Since the commercialization of the Internet and the introduction of the Web in the early 1990s, EC applications have rapidly expanded.

The field of e-commerce is broad. There are many applications of EC, such as home banking, shopping in electronic malls, buying stocks, finding a job, conducting an auction, collaborating electronically with business partners around the globe, and providing customer service.

What is m-commerce?

M-commerce (mobile commerce) is the buying and selling of goods and services through wireless technology-i.e., handheld devices such as cellular telephones and personal digital assistants (PDAs). **Japan is seen as a global leader in m-commerce.**

How is the Internet relevant to e-commerce?

The Internet allows people from all over the world to get connected inexpensively and reliably. As a technical infrastructure, it is a global collection of networks, connected to share information using a common set of protocols. Also, as a vast network of people and information, the Internet is an enabler for e-commerce as it allows businesses to showcase and sell their products and services online and gives potential customers, prospects, and business partners access to information about these businesses and their products and services that would lead to purchase.

How is e-commerce helpful to the consumer?

In C2B transactions, customers/consumers are given more influence over what and how products are made and how services are delivered, thereby broadening consumer choices. E-commerce allows for a faster and more open process, with customers having greater control. E-commerce makes information on products and the market as a whole readily available and accessible, and increases price transparency, which enable customers to make more appropriate purchasing decisions.

How does e-commerce link customers, workers, suppliers, distributors and competitors?

To manage the chain of networks linking customers, workers, suppliers, distributors, and even competitors, an integrated or extended supply chain management solution is needed. Supply chain management (SCM) is defined as the supervision of materials, information, and finances as they move from supplier to manufacturer to wholesaler to retailer to consumer. It involves the coordination and integration of these flows both within and among companies. The goal of any effective supply chain management system is timely provision of goods or services to the next link in the chain.

There are three main flows in SCM (Supply chain management**), namely:**

● The product flow, which includes the movement of goods from a supplier to a customer, as well as any customer returns or service needs.

● The information flow, which involves the transmission of orders and the update of the status of delivery.

● The finances flow, which consists of credit terms, payment schedules, and consignment and title ownership arrangements.

What are the existing practices in developing countries with respect to buying and paying online?

In most developing countries, the payment schemes available for online transactions are the following:

A. Traditional Payment Methods

● Cash-on-delivery. Many online transactions only involve submitting purchase orders online. Payment is by cash upon the delivery of the physical goods.

● Bank payments. After ordering goods online, payment is made by depositing cash into the bank account of the company from which the goods were ordered.

B. Electronic Payment Methods

● **Innovations affecting consumers**, include credit and debit cards, automated teller machines (ATMs), stored value cards, and e-banking.

● **Innovations enabling online commerce** are e-cash, e-checks, smart cards, and encrypted credit cards. These payment methods are not too popular in developing countries. They are employed by a few large companies in specific secured channels on a transaction basis.

● **Innovations affecting companies** pertain to payment mechanisms that banks provide their clients, including inter-bank transfers through automated clearing houses allowing payment by direct deposit.

What is an electronic payment system? Why is it important?

An electronic payment system (EPS) is a system of financial exchange between buyers and sellers in the online environment that is facilitated by a digital financial instrument (such as encrypted credit card numbers, electronic checks, or digital cash) backed by a bank, an intermediary, or by legal tender.

EPS plays an important role in e-commerce because it closes the e-commerce loop. In developing countries, the underdeveloped electronic payments system is a serious impediment to the growth of e-commerce. In these countries, entrepreneurs are not able to accept credit card payments over the Internet due to legal and business concerns. The primary issue is transaction security.

The absence or inadequacy of legal infrastructures governing the operation of e-payments is also a concern. Hence, banks with e-banking operations employ service agreements between themselves and their clients.

The relatively undeveloped credit card industry in many developing countries is also a barrier to e-commerce. Only a small segment of the population can buy goods and services over the Internet due to the small credit card market base. There is also the problem of the requirement of “explicit consent” (i.e., a signature) by a card owner before a transaction is considered valid-a requirement that does not exist in the U.S. and in other developed countries.

What is e-banking?

E-banking includes familiar and relatively mature electronically-based products in developing markets, such as telephone banking, credit cards, ATMs, and direct deposit. It also includes electronic bill payments and products mostly in the developing stage, including stored-value cards (e.g., smart cards/smart money) and Internet - based stored value products.