

# Introduction of e-commerce

[Business](#), [E-Commerce](#)



Commerce (the trading of goods) has been a major impetus for human survival since the beginning of recorded history and beyond. The mass adoption of the Internet has created a paradigm shift in the way businesses are conducted today. The past decade has seen the emergence of a new kind of commerce: e-commerce, the buying and selling of goods through human-computer interaction over the Internet. Traditional physical trading of goods and currency is becoming increasingly unpopular and more businesses are jumping on the e-commerce bandwagon.

Today, the line between e-commerce and traditional commerce is becoming more blurred as more businesses start and continue to integrate the Internet and e-commerce technologies into their business processes.

### 1. 2 DEFINITION OF E-COMMERCE

The e-commerce can be defined as a modern business methodology that addresses the needs of organizations, merchants, and consumers to cut costs while improving the quality of goods and services and increasing the speed of service delivery, by using Internet.

It differs from the traditional electronic commerce (e-commerce) in the way that it enables the trading of goods, money and information electronically from computer to computer. Business is done electronically and there is no longer a need for physical currency or goods to conduct business.

### 1. 3 EVOLUTION OF E-COMMERCE

Evolution of e-commerce can be attributed to a combination of regulatory reform and technological innovation. Though Internet (which played an important role in evolution) appeared in the late 1960s, e-commerce of today took off with the arrival of World Wide Web and browsers in early 1990s.

The liberalizing of the electrification sector and innovations such as optic fiber, DSL etc. (which has helped to expand the volume and capacity of communications) have helped in the process of that rapid growth. As a result the barriers to entry and engage in e-commerce have fallen rapidly. A brief timeline of evolution is as follows:

2 E-COMMERCE

1. 4 1969 Internet/Apparent
- 1989 WWW HTML invented at CERN
- 1991 NSF lifts restrictions on commercial use of Internet
- 1993 Mosaic browser invented at University of Illinois, Urbana Champagne, is released to public
- 1994 Netscape releases Navigator browser
- 1995 Dell, Cisco, Amazon etc. Gang aggressively to use Internet for commercial transactions

The growth of Internet has a special significance in the growth of e-commerce. It has the potential to involve general people into the process thereby increasing its reach far beyond large companies.

CONDUCTING BUSINESS ONLINE (E-COMMERCE)

Doing business online is electronic commerce, and there are four main areas in which companies conduct business online today:

2. 3. 4. Direct marketing, selling, and services. Online banking and billing. Secure distribution of information. Value-chain trading and corporate purchasing.
4. 1 Direct Marketing, Selling, and Services Today, more websites focus on direct marketing, selling, and services than on any other type of electronic commerce. Direct selling was the earliest type of electronic commerce, and has proven to be a stepping-stone to more complex commerce operations for many companies. Successes such as Amazon. Com, Barnes and Noble, Dell Computer, and the introduction of e-tickets by major airlines, have catcalled the growth of this segment, proving the reach and customer acceptance of the Internet.
1. 4. 2 Financial and Information Services

A broad range of financial and information services are performed over the Internet today, and sites that offer them are enjoying rapid growth. These sites are popular because they help consumers, businesses of all sizes, and financial institutions distribute some of their most important information over the Internet with greater convenience and richness than is available using other channels. For example, you have: ; Online banking Online billing Secure information distribution 1. 4. 2. 1 Online Banking Consumers and small businesses can save time and money by doing their banking on the Internet.

Paying bills, making transfers between accounts, and trading stocks, bonds, and mutual funds can all be performed electronically by using the Internet to connect consumers and small businesses with their financial institutions.

ELECTRONIC COMMERCE-? TECHNOLOGY AND PROSPECTS 3 1. 4. 2. 2 online Billing Companies whose bills can achieve significant cost savings and marketing benefits through the use of Internet-based bill-delivery and receiving systems. Today, consumers receive an average of 23 bills per month by mail from retailers, credit card companies, and utilities. 1. 4. 2.

Secure Information Distribution To many businesses, information is their most valuable asset. Although the Internet can enable businesses to reach huge new markets for that information, businesses must also safeguard that information to protect their assets. Digital Rights Management provides protection for intellectual and information property, and is a key technology to secure information distribution. 1. 4. 3 Maintenance, Repair, and Operations (MR.) The Internet also offers tremendous time and cost savings

for corporate purchasing of low-cost, high-volume goods for maintenance, repair, and operations (MR.) activities.

Typical MR. goods include office supplies (such as pens and paper), office equipment and furniture, computers, and replacement parts. The Internet can transform corporate purchasing from a labor and paperwork-intensive process into a self-service application. Company employees can order equipment on websites, company officials can automatically enforce purchase approval and policies through automated business rules, and suppliers can keep their catalog information centralized and up-to-date. Purchase order applications can then use the Internet to transfer the order to suppliers.

In response, suppliers can ship the requested goods and invoice the company over the Internet. In addition to reduced administrative costs, Internet-based corporate purchasing can improve order-tracking accuracy, better enforce purchasing policies, provide better customer and supplier service, reduce inventories, and give companies more power in negotiating exclusive or volumetrically contracts. In other words, the Internet and e-business have changed the way enterprises serve customers and compete with each other, and have heightened awareness for competing supply chains. 1. 4. 4 Value-Chain Integration

No other business model highlights the need for tight integration across suppliers, manufacturers, and distributors quite like the value chain. Delays in inventory tracking and management can ripple from the cash register all the way back to raw material production, creating inventory shortages at any

stage of the value chain. The resulting out-of-stock events can mean lost business. The Internet promises to increase business efficiency by reducing reporting delays and increasing reporting accuracy. Speed is clearly the business imperative for the value chain.

### 1. 5 ISSUES IN IMPLEMENTING ELECTRONIC COMMERCE

Although it is simple to describe their benefits, it is not nearly as easy to develop and deploy commerce systems. Companies can face significant implementation issues:

- 1. 5. 1 cost Electronic commerce requires significant investments in new technologies that can touch many of a company's core business processes. As with all major business systems, electronic commerce systems require significant investments in hardware, software, staffing, and training. Businesses need comprehensive solutions with greater ease-of-use to help foster cost-effective deployment.
- 5. 2 value Businesses want to know that their investments in electronic commerce systems will produce a return. Business objectives such as lead generation, business-process automation, and cost reduction must be met. Systems used to reach these goals need to be flexible enough to change when the business changes.
- 1. 5. 3 security The Internet provides universal access, but companies must protect their assets against accidental or malicious misuse. System security, however, must not create prohibitive complexity or reduce flexibility. Customer information also needs to be protected from internal and external misuse. Privacy systems should safeguard the personal information critical to building sites that satisfy customer and business needs.
- 1. 5. 4 Leveraging

Existing Systems Most companies already use information technology (IT) to conduct business in unlettered environments, such as marketing, order management, billing, inventory, distribution, and customer service. The Internet represents an alternative and complementary way to do business, but it is imperative that electronic commerce systems integrate existing systems in a manner that avoids duplicating functionality and maintains usability, performance, and reliability.

5. 5 Interoperability When systems from two or more businesses are able to exchange documents without manual intervention, businesses achieve cost reduction, improved performance, and more dynamic value chains. Failing to address any of these issues can spell failure for a system's implementation effort. Therefore, your company's commerce strategy should be designed to address all these issues to help customers achieve the benefits of electronic commerce. Your company's vision for electronic commerce should also be to help businesses establish stronger relationships with customers and industry partners.

For example, a successful strategy for delivering this vision is described by three work-flow elements (platform, portal, and industry partners), each backed by comprehensive technology, product, and service offerings.

5 From self-service portals to transaction processing, a successful work-flow strategy can be the underlying engine delivering state-based, processed-focused control services for e-business applications. Human labor is expensive, and work-flow technology allows e-businesses to supplement, and in some cases eliminate, reliance on human supervision and intervention.

. 6 HOW DO YOU WORK WITH E-COMMERCE? E-commerce is about setting your business on the Internet, allowing visitors to access your website, and go through a

virtual catalog of your products/services online. When a visitor wants to buy something he/she likes, they merely "add" it to their virtual shopping basket. Items in the virtual shopping basket can be added or deleted, and when you're all set to checkout, you head to the virtual checkout counter, which has your complete total, and that will ask you for your name, address etc. ND method of payment (usually via credit card). Once you have entered all this information (which y the way is being transmitted securely) you can then Just wait for delivery.

1. 7 COMPARISON BETWEEN TRADITIONAL COMMERCE AND E-COMMERCE In many cases business processes use traditional commerce activities very effectively, and these processes cannot be improved upon through technology. Products that buyers prefer to touch, smell, or examine closely are difficult to sell using electronic commerce.

For example, customers might be reluctant to buy high-fashion clothing and perishable food products, such as meat or produce, if they cannot examine the products closely before agreeing to purchase them. In the case of traditional commerce retail merchants have years of experience in creating store environments that help convince a customer to buy. This combination of store design, layout and product display knowledge is called merchandising. Sales people in course of time develop skills that allow them to identify customer needs and find products and services that meet those needs.

The arts of merchandising and personal selling can be difficult to practice over an electronic link. Through commerce branded products such as books or CDC can be easily sold. As one copy of a new book is identical to there



copies and because a customer would not be concerned about freshness he would willingly order a title without examining the specific copy they would receive. The advantage of electronic commerce, namely the ability of one site to offer a wider selection of titles than even the largest physical bookstore, can outweigh the advantage of a traditional bookstore, namely the facility to browse.

Some examples of business processes are listed in the following table that suit to the e-commerce and traditional commerce respectively. Business processes well-suited to:

| Electronic commerce                            | Traditional commerce                        |
|--|---|
| Sale/purchase of books and CDC                 | Sale/purchase of high-fashion clothing ;    |
| Online delivery of software ;                  | Sale/purchase of perishable food products ; |
| Advertising and promotion of travel services ; | Small-denomination transactions ;           |
| Online tracking of shipments ;                 | Sale of expensive Jewelry and antiques      |

6 1. 8 E-COMMERCE TECHNOLOGIES What technologies are necessary for e-commerce?

The short answer is that most information technologies and Internet technologies that we discuss throughout the book are involved in e-commerce systems, biz. - Customers must be provided with a range of secure information, marketing, transaction, processing, and payment services. Trading and business partners rely on Internet and extranets to exchange information and accomplish secure transactions; including electronic data interchange (DE') and other supply chain and financial systems and databases. Company employees depend on a variety of Internet and intranet resources to communicate and collaborate in support of their

SEC work activities. . 9 The Internet, intranets, and extranets are the network infrastructure or foundation of e-commerce. Information system

professionals and end users can use a variety of software tools to develop and manage the content and operations of the websites and other SEC sources of a company. ECONOMIC POTENTIAL OF E-COMMERCE Consumers are pushing retailers to the wall, demanding lower process, better quality, a large selection of in-season goods. Retailers are scrambling to fill the order. They are slashing back-office costs, reducing profit margins, reducing cycle times, buying more wisely, and making huge investments in technology.

They are revamping distribution channels to make sure that warehouse costs are down by reducing their average inventory levels and coordinating the consumer demand and supply patterns. In the push to reduce prices, more and more retailers are turning to overseas suppliers, in part because of cheaper labor costs. The effect of e-commerce can also be seen over the retail industry and marketing. 1. 9. 1 E-commerce and Retail Industry

Retailers are in the immediate line of fire and are first to bear the brunt of cost cutting.

They are putting that pressure on the manufacturing and supplier end of the pipeline. At the same time, the quest for efficiencies has led to turmoil and consolidation within the retail industry. The pressure experienced by retailers and suppliers can be seen in the disappearance of jobs, in mergers, and in the increase in business failures in the manufacturing sector. The problems are indeed serious. Electronic markets could provide a partial solution by promising customers more convenience and merchants greater efficiency

and interactivity with suppliers to revitalize the troubled retailing sector. . 9.

2 E-commerce and Marketing Electronic commerce is forcing companies to rethink the existing ways of doing target marketing (isolating and focusing on a segment of the population), relationship marketing (building and sustaining a long-term relationship with existing and potential 7 customers), and even event marketing (setting up a virtual booth where interested people come and visit). Consider the case of conventional direct marketers, who devote some 25 percent of their revenues to such costs as printing and postages for catalogs.

Interactive marketing could help cut such expenses and may even deliver better results. Interactive marketing is accomplished in electronic markets via interactive multimedia catalogs that give the same look and feel as a shopping channel. Users find moving images more appealing than still images and listening more appealing than reading text on screen. Those are two powerful reasons why every text-based and still-picture-based interactive experimental-based service has ever generated anywhere near the volume of retail merchandise orders that televised shopping channels have achieved.

Maximum public acceptance will require that interactive catalog services have a more entertaining visual appearance than traditional text-intensive catalogs have had. Ideally, an interactive shopping program should produce full-motion demonstrations of selected products, but such a practical and economical technology has yet to be developed. 1. 10 INCENTIVES FOR ENGAGING IN E-COMMERCE A basic fact of Internet retailing is that all retail

websites are created equal as far as the "location, location, location" imperative of success in retailing is concerned.

No site is any closer to its web customers and competitors offering similar goods and services may be only a mouse click away. This makes it vital that businesses find ways to build customer satisfaction, loyalty, and relationships, so customers keep coming back to their web stores. Thus, the key to e-commerce success is to optimize several key factors such as selection and value, performance and service efficiency, the look and feel of the site, advertising and incentives to purchase, personal attention, immunity relationships, and security and reliability.

The incentives for engaging in e-commerce are listed as follows: Selection and Value. Attractive product selections, competitive prices, satisfaction guarantees, and customer support after the sale. Performance and Service. Fast, easy navigation, shopping, and purchasing, and prompt shipping and delivery. Look and Feel. Attractive web storefront, website shopping areas, multimedia product catalog pages, and shopping features. Advertising and Incentives. Targeted web-page advertising and e-mail promotions, discounts and special offers, including advertising at affiliate sites. Personal Attention. Personal web pages, personalized product recommendations, web advertising, and e-mail notices, and interactive support for all customers.