

## Chapter 10: Electronic Commerce

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## What is Electronic Commerce?

- **Electronic Commerce** (e-commerce) or **Electronic Business** (e-business) means shopping on the part of the Internet called the World Wide Web (the Web).
- For decades, banks have been using **Electronic Funds Transfers** (EFT, also called **Wire Transfer**), which are electronic transmissions of account exchange information over private communications networks.
- Businesses also have been engaging in a form of electronic commerce, known as **Electronic Data Interchange** (EDI), for many years.
- Electronic commerce is defined as the use of electronic data transmission to implement or enhance any business process.

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## E-commerce Business Model

- Business to Customer (B2C)
  - ◆ Sale of goods to the public.
  - ◆ E.g. Amazon.com
- Customer to Customer (C2C)
  - ◆ Sale of goods from one consumer to another
  - ◆ E.g. E-bay
- Business to Business (B2B)
  - ◆ Sale of goods from one business to another
  - ◆ E.g. BigBoxX

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## Advantages of Electronic Commerce

- 24 hour service (24 x 7)
- Global presence
- Global reach
- Elimination of the middleman
- Lower carrying costs
- Lower marketing costs
- Two-way communications, compliments and complains / feedback
- Lower salesperson costs
- Lower product display costs

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## Advantages of Electronic Commerce

- Electronic commerce provides buyers with a wider range of choices than traditional commerce, because they can consider many different products and services from a wider variety of seller.
- The costs of handling sales inquiries, providing price quotes, and determining product availability can be reduced by using electronic commerce in the sales support and order-taking processes of a business.
- This wide variety is available to evaluate 24 hours a day, every day. Some buyers prefer a great deal of information to use in deciding on a purchase; others prefer less.

## Advantages of Electronic Commerce (Cont')

- Electronic commerce provides buyers with an easy way to customize the level of detail in the information they obtain about a prospective purchase.
- Instead of waiting days for the mail to bring a catalog or product specification sheet, or even minutes for a fax transmission, buyers can have instant access to detailed information on the Web.
- Some products, such as software, audio clips, or images, can even be delivered via the Internet, which reduces the time buyers must wait to begin enjoying their purchases.
- The benefits of electronic commerce also extend to the general welfare of society.

## Advantages of Electronic Commerce (Cont')

- Electronic payments of tax refunds, public retirement, and welfare support cost less to issue and arrive securely and quickly when transmitted via the Internet.
- Furthermore, electronic payments can be easier to audit and monitor than payments that electronic commerce enables people to work from home, we all benefit from the reduction in commuter-caused traffic and pollution.
- Electronic commerce can make products and services available in remote areas. For example, distance education is making it possible for people to learn skills and earn degrees no matter where they live or which hours they have available for study.

## Disadvantages of Electronic Commerce

- Stem from the newness and rapidly developing pace of the underlying technologies.
- The costs and benefits have been hard to quantify.
- Had trouble recruiting and retaining employees with the technological, design, and business process skills needed to create an effective electronic commerce presence.
- Difficulty of integrating existing databases and transaction-processing software designed for traditional commerce into the software that enables electronic commerce.
- Face cultural and legal impediments to electronic commerce.
- The legal environment in which electronic commerce is conducted is full of unclear and conflicting laws.

## Risks for the Growing Use of Internet

- Misuse of Personal Information
- Virus attack on computer systems
- Online criminal activities
- Hacking

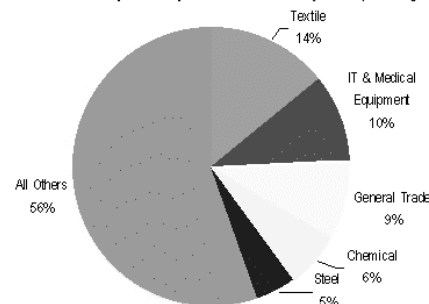
## Revenue Streams in E-commerce

- Direct sales
- Software downloads
- Software rentals
- Advertising
- Backup/Storage

## E-Commerce Market Sectors

- Online banking
- Online trading
- Entertainment
- Media
- Online training

Distribution of B2B Marketplaces in Operation or Announced by Sector (As of August 2000)



## International Electronic Commerce

- The predominant language on the Web is English, once the language barrier is overcome, the technology exists for any business to conduct electronic commerce with any other business or consumers, anywhere in the world.
- The political structures of the world have not kept up with Internet technology: currency conversions, tariffs, import and export restrictions, local business customs, tax and laws of each country in which a trading partner resides can each make international electronic commerce difficult.
- The main technological development that has allowed electronic commerce to grow beyond its beginnings in bank EFT and B2B-EDI is the emergence of the Internet and the Web.

## Economic Forces in E-Commerce

- Reduce Transaction Costs
  - ◆ Businesses and individuals can use electronic commerce to reduce transaction costs by improving information flows and increasing coordination of actions to reduce uncertainty.
- Reduce Cost of Searching for Information
  - ◆ By reducing the cost of searching for information about potential buyers and sellers and increasing the number of potential market participants, electronic commerce can change the attractiveness of vertical integration for many firms.

## Network Organizations

- Many companies and strategic business units operate in an economic structure that exists between markets and hierarchies.
- Firms coordinate their strategies, resources, and skill sets by forming a long-term, stable relationship based on a shared purpose.
- Network organizations are particularly well-suited to technology industries that are information intensive.
- Electronic commerce can make such networks, which rely extensively on information sharing, much easier to construct and maintain.
- These network forms of organizing commerce will become predominant in the near future.
- One interesting role for electronic commerce is in the improvement of existing markets and the creation of completely new markets.

## Example of E-Commerce – Electronic Data Interchange (EDI)

- Electronic data interchange occurs when one business transmits computer-readable data in a standard format to another business.
- Business realized that they were spending a good deal of time and money entering these data into their computers, printing paper forms, and then reentering the data on the other side of the transaction.
- By creating a set of standard formats for transmitting that information electronically, businesses were able to reduce errors, avoid printing and mailing costs, and eliminate the need to reenter the data.

## Extension of the Value Chain Model

- The Internet is said to have extended the Value Chain Model because:
  - ◆ Ties together all suppliers, business partners and customers into a Value Web.
  - ◆ This collection of firms use IT to co-ordinate their value chain.
  - ◆ More customer-driven.
  - ◆ Operates in a less linear function.
  - ◆ Value Chain becomes more flexible and adaptive to change.
  - ◆ Can accelerate time to market by optimizing value chain relationships.
  - ◆ Can deliver products or services at the right price to the right locations.