E-Commerce

Note: In addition to the following main points, the students should refer to the detailed study material which has already been e-mailed to them.

• E-commerce

- Use of the Internet and Web to transact business
- Digitally enabled transactions
- Eight unique features of e-commerce technology

1. Ubiquity

- Internet/Web technology available everywhere: anytime and from any place; work, home, etc.
- 2. Global reach
 - The technology reaches across national boundaries, around the Earth

3. Universal standards

• One set of technology standards: Internet standards

4. Richness

• Supports video, audio, and text messages

5. Interactivity

• The technology works through interaction with the user

6. Information density

• Vast increases in information density—the total amount and quality of information available to all market participants

7. Personalization/Customization:

- Technology permits modification of messages, goods
- 8. Social technology
 - The technology promotes user content generation and social networking

• Digital markets reduce

- Information asymmetry
- o Search costs
- Transaction costs
- Menu costs

• Digital markets enable

- Price discrimination
- Dynamic pricing
- Disintermediation

• Digital goods

- Goods that can be delivered over a digital network e.g., Music, video, software, e-newspapers, e-books
- Cost of producing first unit: almost entire cost of product while marginal cost of producing 2nd unit is almost zero
- o Costs of delivery over the Internet very low
- Marketing costs remain the same; pricing highly variable
- Industries with digital goods are undergoing revolutionary changes

• Internet business models

- Pure-play models
- Clicks-and-mortar models

Social Networks

- Online meeting place
- Social shopping sites
- Can provide ways for corporate clients to target customers through banner ads and pop-up ads
- Online marketplace
 - Provides a digital environment where buyers and sellers can meet, search for products, display products, and establish prices for those products
- Content provider
 - Providing digital content, such as digital news, music, photos, or video, over the Web

• Online syndicators:

 Aggregate content from multiple sources, package for distribution, and resell to third-party Web sites

• Service provider

- Provides Web 2.0 applications such as photo sharing and interactive maps, and services such as data storage
- Portal
 - "Supersite" that provides comprehensive entry point for huge array of resources and services on the Internet

• Virtual storefront:

• Sells physical products directly to consumers or to individual businesses

• Information broker:

- Provides product, pricing, and availability information to individuals and businesses
- Transaction broker:
 - Saves users money and time by processing online sales transactions and generating a fee for each transaction

• Types of Electronic Commerce

- Business-to-consumer (B2C)
- Business-to-business (B2B)
- Consumer-to-consumer (C2C)
- Mobile commerce (m-commerce)

• Interactive marketing and personalization

- Web sites are bountiful source of details about customer behavior, preferences, buying patterns used to tailor promotions, products, services, and pricing
- Clickstream tracking tools: Collect data on customer activities at Web sites used to create personalized Web pages
- Collaborative filtering: Compares customer data to other customers to make product recommendation

- Blogs
 - Personal web pages that contain series of entries by author and links to related Web pages
 - Have increasing influence in politics, news
 - Corporate blogs: New channels for reaching customers, introducing new products and services
 - Blog analysis by marketers
- Customer self-service
 - Web sites and e-mail to answer customer questions or to provide customers with product information
 - o Reduces need for human customer-support expert

B2B e-commerce: New efficiencies and relationships

- Electronic data interchange (EDI)
 - Computer-to-computer exchange of standard transactions such as invoices, purchase orders
 - Major industries have EDI standards that define structure and information fields of electronic documents for that industry

• More companies increasingly moving away from private networks to Internet for linking to other firms

 E.g., Procurement: Businesses can now use Internet to locate most low-cost supplier, search online catalogs of supplier products, negotiate with suppliers, place orders, etc.

• Private industrial networks (private exchanges)

- Large firm using extranet to link to its suppliers, distributors and other key business partners
- Owned by buyer
- Permits sharing of:
 - Or Product design and development
 - ♦ Marketing
 - ◊ Production scheduling and inventory management
 - ♦ Unstructured communication (graphics and e-mail)

• Net marketplaces (e-hubs)

- Single market for many buyers and sellers
- Industry-owned or owned by independent intermediary
- Generate revenue from transaction fees, other services
- Use prices established through negotiation, auction, RFQs, or fixed prices
- May focus on direct or indirect goods
- May support long-term contract purchasing or short-term spot purchasing
- May serve vertical or horizontal marketplaces

• Exchanges

- Independently owned third-party Net marketplaces
- Connect thousands of suppliers and buyers for spot purchasing
- Typically provide vertical markets for direct goods for single industry (food, electronics)
- Proliferated during early years of e-commerce; many have failed
 Competitive bidding drove prices down and did not offer long-term
 relationships with buyers or services to make lowering prices worthwhile

• M-commerce services and applications

- Although m-commerce represents a part of e-commerce transactions, revenue has been steadily growing
- Location-based services
- Banking and financial services
- Wireless Advertising
- o Games and entertainment

• Electronic payment systems

- Digital wallet
 - Stores credit card and owner identification information and enters the shopper's name, credit card number, and shipping information automatically when invoked to complete a purchase

• Accumulated balance digital payment systems

- Used for micropayments (\$10 or less)
- Accumulating debit balance that is paid periodically on credit card or telephone bills

• Stored value payment systems

- Enable online payments based on value stored in online digital account
- May be merchant platforms or peer-to-peer (PayPal)

• Digital checking

 Extend functionality of existing checking accounts to be used for online payments

o Electronic billing presentment and payment systems

Paying monthly bills through electronic fund transfers or credit cards