

電子商務安全

Secure Electronic Commerce

電子商務環境下之零售：產品與服務
(Retailing in Electronic Commerce:
Products and Services)

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Syllabus

- | 週次 | 月／日 | 內容 (Subject/Topics) |
|----|-----------|--|
| 1 | 100/02/18 | 電子商務安全課程簡介
(Course Orientation for Secure Electronic Commerce) |
| 2 | 100/02/25 | 電子商務概論 (Introduction to E-Commerce) |
| 3 | 100/03/04 | 電子市集 (E-Marketplaces) |
| 4 | 100/03/11 | 電子商務環境下之零售：產品與服務
(Retailing in Electronic Commerce: Products and Services) |
| 5 | 100/03/18 | 網路消費者行為、市場研究與廣告
(Online Consumer Behavior, Market Research, and
Advertisement) |
| 6 | 100/03/25 | 電子商務 B2B、B2C、C2C (B2B, B2C, C2C E-Commerce) |
| 7 | 100/04/01 | Web 2.0, Social Network, Social Media |
| 8 | 100/04/08 | 教學行政觀摩日 |
| 9 | 100/04/15 | 行動運算與行動商務 (Mobile Computing and Commerce) |
| 10 | 100/04/22 | 期中考試週 |

Syllabus (cont.)

週次	月／日	內容 (Subject/Topics)
11	100/04/29	電子商務安全 (E-Commerce Security)
12	100/05/06	數位憑證 (Digital Certificate)
13	100/05/13	網路與網站安全 (Network and Website Security)
14	100/05/20	交易安全、系統安全、IC卡安全、電子付款 (Transaction Security, System Security, IC Card Security, Electronic Commerce Payment Systems)
15	100/05/27	行動商務安全 (Mobile Commerce Security)
16	100/06/03	電子金融安全控管機制 (E-Finance Security Control Mechanisms)
17	100/06/10	營運安全管理 (Operation Security Management)
18	100/06/17	期末考試週

Chapter 3

Retailing in Electronic Commerce: Products and Services

Source: Turban et al.,
Introduction to Electronic Commerce,
Third Edition, 2010, Pearson

LEARNING OBJECTIVES

1. Electronic retailing (e-tailing) and its characteristics.
2. Define and describe the primary e-tailing business models.
3. Describe how online travel and tourism services operate and their impact on the industry.
4. Discuss the online employment market, including its participants, benefits, and limitations.
5. Online real estate services.
6. Online stock-trading services.

LEARNING OBJECTIVES

7. Cyberbanking and online personal finance.
8. On-demand delivery of groceries and similar products/services.
9. Delivery of digital products and online entertainment.
10. Discuss various online consumer aids, including comparison-shopping aids.
11. Disintermediation and other B2C strategic issues.

INTERNET MARKETING AND ELECTRONIC RETAILING

- **electronic retailing (e-tailing)**

Retailing conducted online, over the Internet.

- **e-tailers**

Retailers who sell over the Internet.

- **SIZE AND GROWTH OF THE B2C MARKET**

EXHIBIT 3.2 What Sells Well on the Internet?

Category	Description
Travel	Expedia and Travelocity are major players in this category. Online travel agents offer a range of services, including travel booking, hotel reservations, car rentals, and vacation packages.
Computer hardware and software	Dell and Gateway are the major online vendors of computer hardware and software. Computer hardware and software is the largest category of products sold online.
Consumer electronics	Consumer electronics include digital cameras, printers, scanners, and wireless devices. Consumer electronics is the second largest category of products sold online.
Office supplies	B2C and B2B sales of office supplies are increasing rapidly, all over the world, as companies increasingly use the Internet to place orders for stationery and the like.
Sport and fitness goods	Sporting goods sell very well on the Internet. However, it is difficult to measure the exact amount of sales because only a few e-tailers sell sporting goods exclusively online (e.g., <i>fogdog.com</i>).
Books and music (CDs, DVDs)	Amazon.com and Barnesandnoble.com are the major sellers of books. However, hundreds of other e-tailers sell books on the Internet, especially specialized books (e.g., technical books, children's books).
Toys and hobbies	In 2007, online sales of toys dropped again due to toy recalls, specifically those toys made in China (<i>Biz Report 2007</i>).
Health and beauty	A large variety of health and beauty products—from vitamins to cosmetics and fragrances—are sold online by most large retailers and by specialty stores.
Entertainment	This is another area where dozens of products, ranging from tickets to events (e.g., <i>ticketmaster.com</i>) to paid fantasy games (see Section 3.7), are embraced by millions of shoppers worldwide.

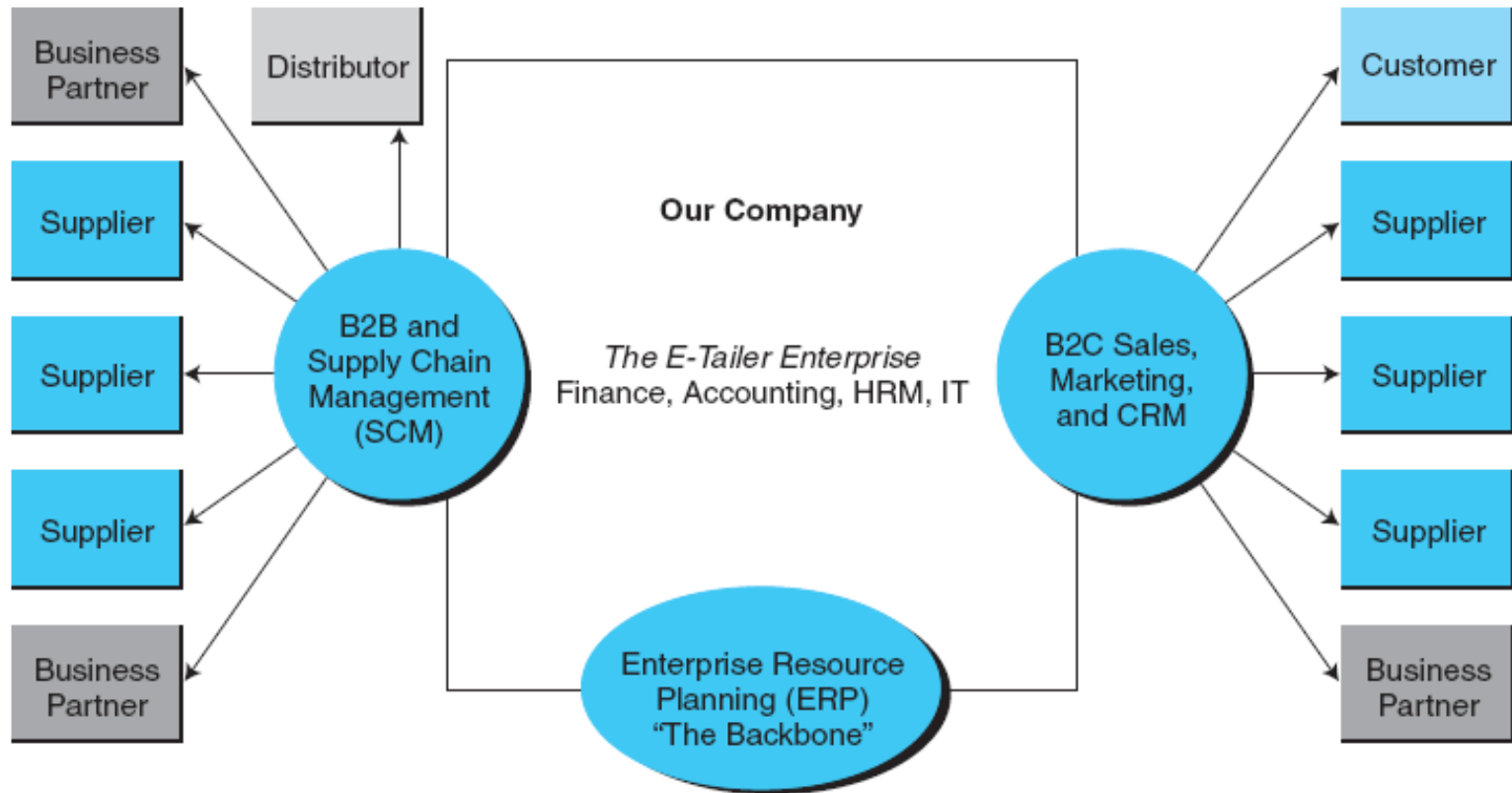
Apparel and clothing	With the possibility of buying customized shirts, pants, and even shoes, the online sale of apparel also is growing. Guaranteed returns policies and improving features on fitting clothing without first trying it on have increased customers' comfort zone for buying apparel online.
Jewelry	Online sales of jewelry are booming. With claims of prices about 40 percent less than would be paid in traditional stores, the trend toward online jewelry sales is likely to continue.
Cars	The sale of cars over the Internet is just beginning (people still like to "kick the tires"), but could be one of the top sellers on the Internet in the near future. Customers like the build-to-order capabilities, but even selling used cars online has advantages and is increasing rapidly. Support services such as financing, warranties, and insurance also are selling well online.
Services	Sales in service industries, especially travel, stock trading, electronic banking, real estate, and insurance, are increasing—more than doubling every year in some cases.
Food and drugs	Innovative delivery solutions help with food sales. Ordering prescription drugs online may save time and money. Many online pharmacies provide information about drug interactions. Some even e-mail alerts when a drug is recalled or a generic equivalent becomes available.
Pet supplies	Pet supplies are a new category in the top-seller list. As family pets become more and more integrated as members of the family, online spending on toys, edible treats, food, pet accessories, and veterinary products and services is soaring.
Others	Many other products, ranging from prescription drugs to custom-made shoes, are offered on the Internet. Many items are specialized or niche products.

INTERNET MARKETING AND ELECTRONIC RETAILING

- **considered commerce**

Conducting e-commerce where the online channel of a business is integrated with the physical retail business as opposed to being a separate channel.

EXHIBIT 3.4 E-Tailing as an Enterprise EC System



*Facing Supplier/Distributor/
Business Partner*
Objective: Optimize relationships with business partners and reduce cost of goods sold

Internal Operations
Objective: Facilitate integration of internal operations and increase productivity

B2C and Customer-Facing Applications
Objective: Optimize business relationships with customers; increase service effectiveness and sales

INTERNET MARKETING AND ELECTRONIC RETAILING

- **CHARACTERISTICS AND ADVANTAGES OF SUCCESSFUL E-TAILING**
 - Sound business thinking, visionary leadership, thorough competitive analysis and financial analysis, and the articulation of a well-thought-out EC strategy are essential.
 - Ensure appropriate infrastructure, particularly a stable and scalable technology infrastructure to support the online and physical aspects of EC business operations.

E-TAILING BUSINESS MODELS

- **CLASSIFICATION OF MODELS BY DISTRIBUTION CHANNEL**
 1. Direct marketing by mail-order retailers that go online
 2. Direct marketing by manufacturers
 3. Pure-play e-tailers
 4. Click-and-mortar retailers
 5. Internet (online) malls

E-TAILING BUSINESS MODELS

- **direct marketing**

Broadly, marketing that takes place without intermediaries between manufacturers and buyers; in the context of this book, marketing done online between any seller and buyer.

- **Direct Sales by Manufacturers**

- **virtual (pure-play) e-tailers**

Firms that sell directly to consumers over the Internet without maintaining a physical sales channel.

E-TAILING BUSINESS MODELS

- **click-and-mortar retailers**
- Brick-and-mortar retailers that offer a transactional Web site from which to conduct business.
- **brick-and-mortar retailers**
- Retailers who do business in the non-Internet, physical world in traditional brick-and-mortar stores.
- **multichannel business model**
- A business model where a company sells in multiple marketing channels simultaneously (e.g., both physical and online stores).

E-TAILING BUSINESS MODELS

- **Retailing in Online Malls**
 - Referring Directories
 - Malls with Shared Services
- **OTHER B2C MODELS AND SPECIAL RETAILING**
 - **Online Group Buying**
- **B2C IN SOCIAL NETWORKS**
 - **Virtual Shopping**

TRAVEL AND TOURISM (HOSPITALITY) SERVICES ONLINE

- **SERVICES PROVIDED**
- **SPECIAL SERVICES ONLINE**
 - Wireless services
 - Direct marketing
 - Alliances and consortia
 - **Travel-Oriented Social Networks**

TRAVEL AND TOURISM (HOSPITALITY) SERVICES ONLINE

- **BENEFITS OF ONLINE TRAVEL SERVICES**
 - Free information
 - Accessible at any time from any place
 - Substantial discounts
- **LIMITATIONS OF ONLINE TRAVEL SERVICES**
 - Many people do not use the Internet
 - The amount of time and the difficulty of using virtual travel agencies can be significant
 - Complex trips or those that require stopovers might not be available online
- **CORPORATE TRAVEL**

EXHIBIT 3.6 Traditional Versus Online Job Markets

Characteristic	Traditional Job Market	Online Job Market
Cost	Expensive, especially in prime space	Can be very inexpensive
Life cycle	Short	Long
Place	Usually local and limited if global	Global
Context updating	Can be complex, expensive	Fast, simple, inexpensive
Space for details	Limited	Large
Ease of search by applicant	Difficult, especially for out-of-town applicants	Quick and easy
Ability of employers to find applicants	May be very difficult, especially for out-of-town applicants	Easy
Matching of supply and demand	Difficult	Easy
Reliability	Material can be lost in mail	High
Communication speed between employees and employers	Can be slow	Fast
Ability of employees to compare jobs	Limited	Easy, fast

EMPLOYMENT PLACEMENT AND THE JOB MARKET ONLINE

- These parties use the Internet job market:
 1. Job seekers
 2. Employers seeking employees
 3. Classified ads
 4. Job agencies
 5. Government agencies and institutions
 - **Online Job Markets on Social Networking**
 - **Global Online Portals**

The Referral Power of Social Networks in Job Matching

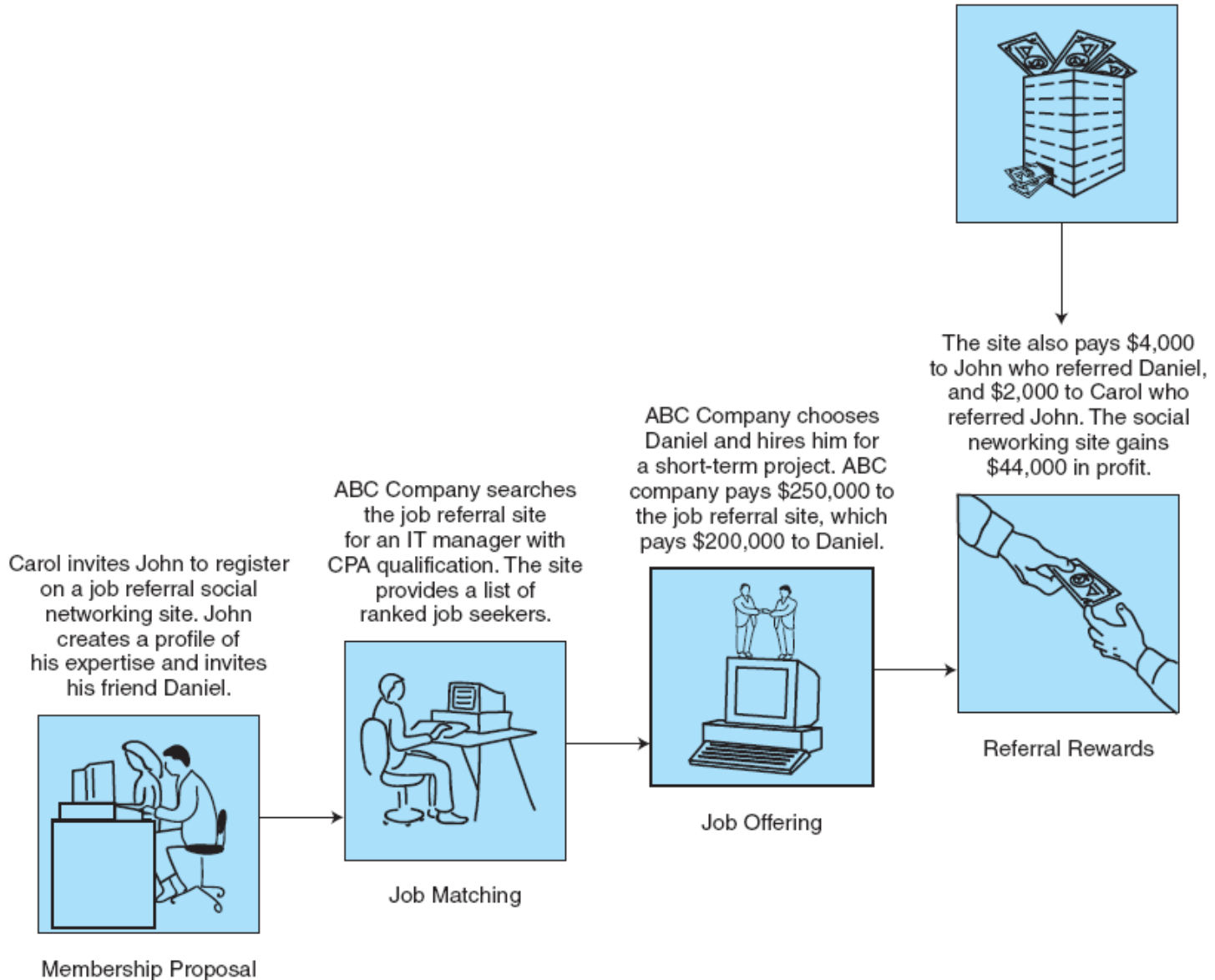


EXHIBIT 3.8 Advantages of the Electronic Job Market for Job Seekers and Employers

Advantages for Job Seekers

- Can find information on a large number of jobs worldwide
- Can communicate quickly with potential employers
- Can market themselves directly to potential employers (e.g., *quintcareers.com*)
- Can write and post résumés for large-volume distribution (e.g., Personal Search Agent at *careerbuilder.com*, *brassring.com*)
- Can search for jobs quickly from any location
- Can obtain several support services at no cost (e.g., *hotjobs.yahoo.com* and *monster.com* provide free career-planning services)
- Can assess their market value (e.g., *wageweb.com* and *rileyguide.org* look for salary surveys)

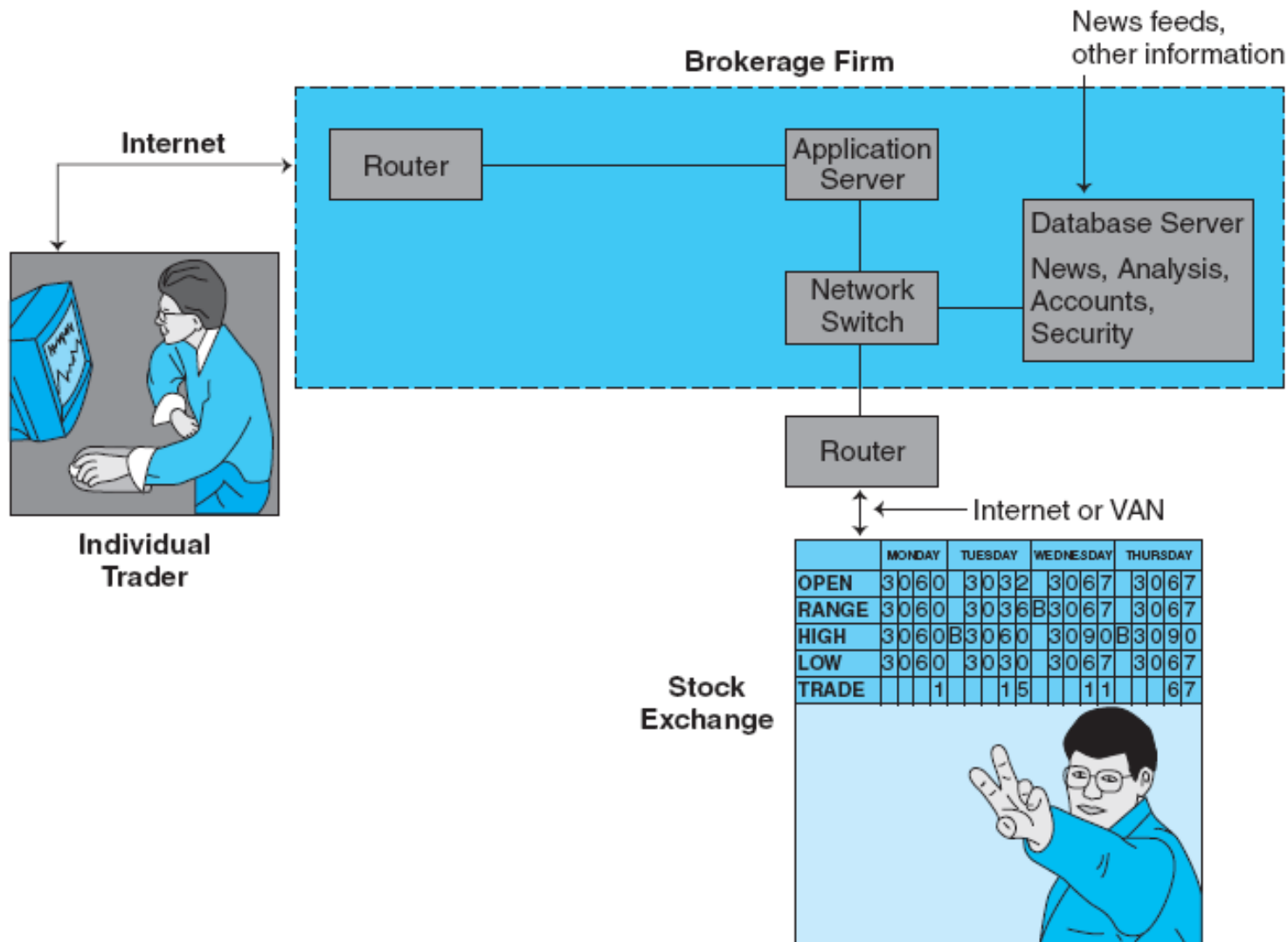
Advantages for Employers

- Can learn how to use their voice effectively in an interview (*greatvoice.com*)
- Can access newsgroups that are dedicated to finding jobs (and keeping them)
- Can advertise to a large number of job seekers
- Can save on advertisement costs
- Can reduce application-processing costs by using electronic application forms
- Can provide greater equal opportunity for job seekers
- Increased chance of finding highly skilled employees
- Can describe positions in great detail
- Can conduct interviews online (using video teleconferencing)
- Can arrange for testing online
- Can view salary surveys for recruiting strategies

REAL ESTATE, INSURANCE, AND STOCK TRADING ONLINE

- **REAL ESTATE ONLINE**
 - **Zillow, Craigslist, and Other Web 2.0 Real Estate Services**
- **INSURANCE ONLINE**
- **ONLINE STOCK TRADING**
 - **The Risk of Trading in an Online Stock Account**

EXHIBIT 3.9 Online Electronic Stock Trading



BANKING AND PERSONAL FINANCE ONLINE

- **electronic (online) banking or e-banking**

Various banking activities conducted from home or the road using an Internet connection; also known as cyberbanking, virtual banking, online banking, and home banking.

BANKING AND PERSONAL FINANCE ONLINE

- **HOME BANKING CAPABILITIES**
- **VIRTUAL BANKS**
- **INTERNATIONAL AND MULTIPLE-CURRENCY BANKING**

EXHIBIT 3.10 Online Banking Applications

Application Type	Information/Services Provided
Informational	General bank information and history Financial education information Employment information Interest rate quotes Financial calculators Current bank and local news
Administrative	Account information access Opening of new account online Applications for services Moving all banking online Personal finance software applications
Transactional	Account transfer capabilities Transfer funds housed at different financial institutions Bill-pay services Corporate services (e.g., cash management, treasury) Online insurance services Online brokerage services Real-time funds transfer Online trust services
Portal	Links to financial information Links to community information Links to local business Links to nonlocal businesses (and/or advertisers)
Others	Wireless capabilities Search function

BANKING AND PERSONAL FINANCE ONLINE

- **ONLINE FINANCIAL TRANSACTION IMPLEMENTATION ISSUES**
 - **Securing Financial Transactions**
 - **Imaging Systems**
 - **Fees Online Versus Fees for Offline Services**
 - **Risks**
- **ONLINE BILLING AND BILL PAYING**
 - **Taxes**

ON-DEMAND DELIVERY OF PRODUCTS, DIGITAL ITEMS, ENTERTAINMENT, AND GAMING

- **ON-DEMAND DELIVERY OF PRODUCTS**

- **e-grocer**

A grocer that takes orders online and provides deliveries on a daily or other regular schedule or within a very short period of time.

- **on-demand delivery service**

Express delivery made fairly quickly after an online order is received.

EXHIBIT 3.11 Distribution of Digital Versus Physical Products

Type of Product	Physical Distribution	Digital Distribution
Software	Boxed, shrink-wrapped	FTP, direct download, e-mail
Newspapers, magazines	Home delivery, postal mail	Display on Web, "e-zines"
Greeting cards	Retail stores	E-mail, URL link to recipient
Images (e.g., clip art, graphics)	CD-ROM, magazines	Web site display, downloadable
Movies	DVD, VHS, NTSB, PAL	MPEG3, streaming video, RealNetworks, AVI, QuickTime, etc.
Music	CD, cassette tape	MP3, WAV, RealAudio downloads, wireless devices, iTunes

ON-DEMAND DELIVERY OF PRODUCTS, DIGITAL ITEMS, ENTERTAINMENT, AND GAMING

- **ONLINE ENTERTAINMENT**
 - **Adult Entertainment**
 - **Internet Gaming**
 - **Online Dating Services**

EXHIBIT 3.12 Examples of Online Entertainment and Services

Online Entertainment

Web browsing
Internet gaming
Fantasy sports games
Single and multiplayer games
Adult entertainment
Card games
Social networking sites
Participatory Web sites
Movies, TV online
Live events
Virtual worlds (trading, creating, etc.)

Entertainment-Related Services

Event ticketing
Restaurant reservations
Information retrieval
Retrieval of audio and video entertainment

ONLINE PURCHASE-DECISION AIDS

- **shopping portals**

Gateways to e-storefronts and e-malls; may be comprehensive or niche oriented.

ONLINE PURCHASE-DECISION AIDS

- **shopping robots (shopping agents or shopbots)**

Tools that scout the Web on behalf of consumers who specify search criteria.

- **"Spy" Services**
- **Wireless Shopping Comparisons**

ONLINE PURCHASE-DECISION AIDS

- **BUSINESS RATINGS SITES**
- **TRUST VERIFICATION SITES**
 - **Recommendations from Other Shoppers and Friends**
 - **referral economy**

The effect upon sales of consumers receiving a referral or recommendation from other consumers.
- **OTHER SHOPPING TOOLS**

ISSUES IN E-TAILING AND LESSONS LEARNED

- **disintermediation**

The removal of organizations or business process layers responsible for certain intermediary steps in a given supply chain.

- **reintermediation**

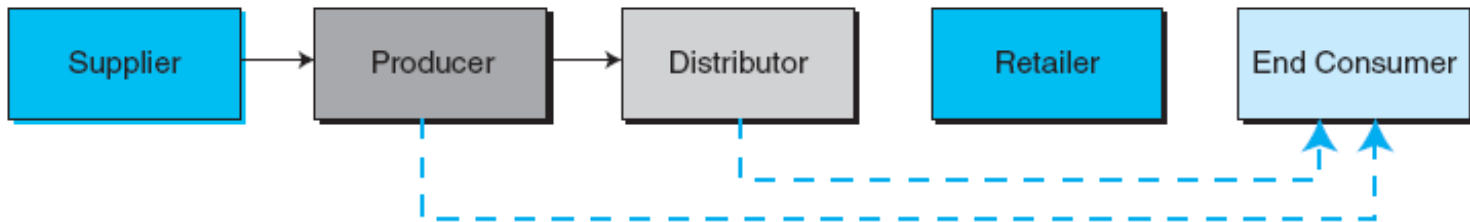
The process whereby intermediaries (either new ones or those that had been disintermediated) take on new intermediary roles.

EXHIBIT 3.13 Disintermediation and Reintermediation in the B2C Supply Chain

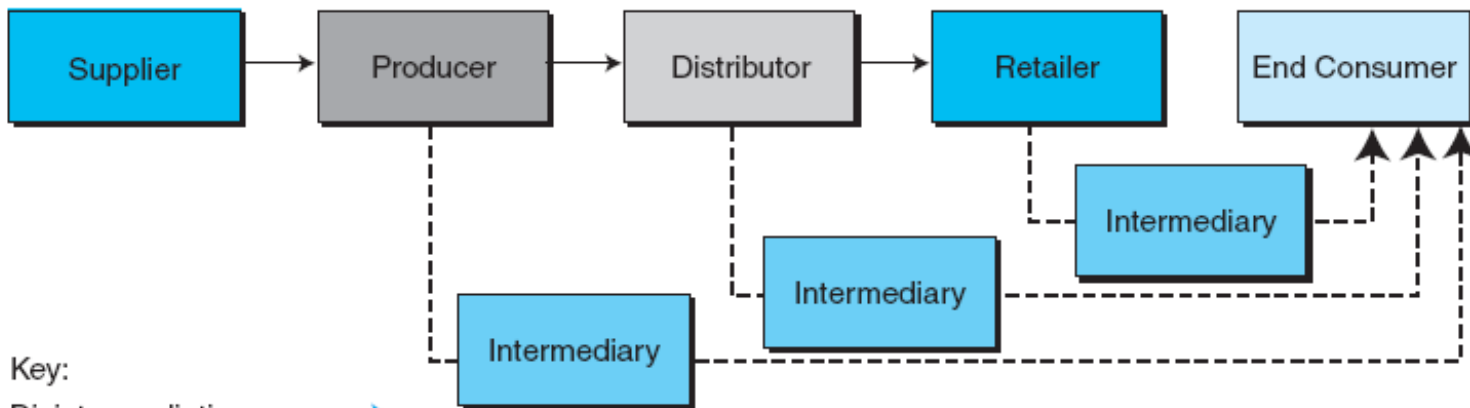
A. Simple Traditional Supply Chain



B. Supply Chain, with Examples of Disintermediation



C. Supply Chain, with Examples of Reintermediation



Key:

Disintermediation

Reintermediation

ISSUES IN E-TAILING AND LESSONS LEARNED

- **channel conflict**

Situation in which an online marketing channel upsets the traditional channels due to real or perceived damage from competition.

- **DETERMINING THE RIGHT PRICE**

- **PRODUCT AND SERVICE CUSTOMIZATION
AND PERSONALIZATION**

- **FRAUD AND OTHER ILLEGAL ACTIVITIES**

ISSUES IN E-TAILING AND LESSONS LEARNED

- **LESSONS LEARNED FROM FAILURES AND LACK OF SUCCESS**
 - Speak with one voice
 - Leverage the multi-channels
 - Empower the customer

MANAGERIAL ISSUES

1. What are the limitations of e-tailing?
2. How should we introduce wireless shopping?
3. Do we have ethics and privacy guidelines?
4. How will intermediaries act in cyberspace?
5. Should we try to capitalize on social networks?

References

- Turban et al., Introduction to Electronic Commerce, Third Edition, 2010, Pearson