

#### e-commerce

business. technology. society.

eighth edition

Kenneth C. Laudon
Carol Guercio Traver

### Chapter 1

### Introduction to E-commerce

#### Facebook: The New Face of E-commerce?

#### Class Discussion

- Do you use Facebook, and if so, how often?
  What has the experience been like?
- Have you purchased anything based on an advertisement on Facebook or by using a link provided by a friend?
- Are you concerned about the privacy of the information you have posted on Facebook?

#### E-commerce Trends 2011–2012

- Social networking continues to grow
- Expansion of social e-commerce platform
- Mobile platform begins to rival PC platform
- Localization of e-commerce (Groupon)
- Explosive growth in online video viewing
- Continued privacy and security concerns

#### The First 30 Seconds

- First 16 years of e-commerce
  - Just the beginning
  - Rapid growth and change
- Technologies continue to evolve at exponential rates
  - Disruptive business change
  - New opportunities

#### What Is E-commerce?

Use of Internet and Web to transact business

#### More formally:

Digitally enabled commercial transactions between and among organizations and individuals

#### E-commerce vs. E-business

#### **E-business:**

- Digital enabling of transactions and processes within a firm, involving information systems under firm's control
- Does not include commercial transactions involving an exchange of value across organizational boundaries

### Why Study E-commerce?

- E-commerce technology is different, more powerful than previous technologies
- E-commerce brings fundamental changes to commerce
- Traditional commerce:
  - Consumer as passive targets
  - Sales-force driven
  - Fixed prices
  - Information asymmetry

## Unique Features of E-commerce Technology

- 1. Ubiquity
- 2. Global reach
- 3. Universal standards
- 4. Information richness
- 5. Interactivity
- 6. Information density
- 7. Personalization/customization
- 8. Social technology

#### Web 2.0

- User-centered applications and social media technologies
  - User-generated content and communication
  - Highly interactive, social communities
  - Large audiences; yet mostly unproven business models
  - e.g., Twitter, YouTube, Facebook, Second Life, Wikipedia, Digg

#### **Types of E-commerce**

#### Classified by market relationship

- Business-to-Consumer (B2C)
- Business-to-Business (B2B)
- Consumer-to-Consumer (C2C)

#### Classified by technology used

- Peer-to-Peer (P2P)
- Mobile commerce (M-commerce)

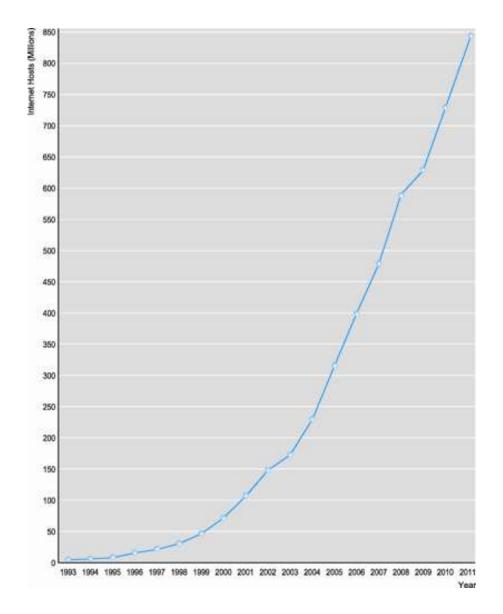
#### The Internet

- Worldwide network of computer networks built on common standards
- Created in late 1960s
- Services include the Web, e-mail, file transfers, etc.
- Can measure growth by looking at number of Internet hosts with domain names

# The Growth of the Internet, Measured by Number of Internet Hosts with Domain Names

Figure 1.2, Page 23

**SOURCE: Internet Systems Consortium, Inc., 2011.** 



#### The Web

- Most popular Internet service
- Developed in early 1990s
- Provides access to Web pages
  - HTML documents that may include text, graphics, animations, music, videos
- Web content has grown exponentially
  - Google reports 1 trillion unique URLs; 120 billion pages indexed

Insight on Technology: Class Discussion

# Spider Webs, Bow Ties, Scale-Free Networks, and the Deep Web

- What is the "small world" theory of the Web?
- What is the significance of the "bow-tie" form of the Web?
- Why does Barabasi call the Web a "scale-free network" with "very connected super nodes"?

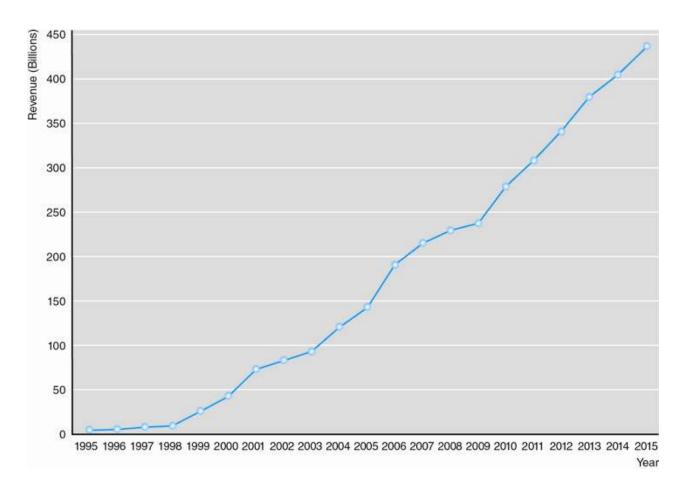
#### **Origins and Growth of E-commerce**

#### Precursors:

- ❖ Baxter Healthcare
- Electronic Data Interchange (EDI)
- French Minitel (1980s videotex system)
- None had functionality of Internet
- 1995: Beginning of e-commerce
  - First sales of banner advertisements
- E-commerce fastest growing form of commerce in United States

#### The Growth of B2C E-commerce

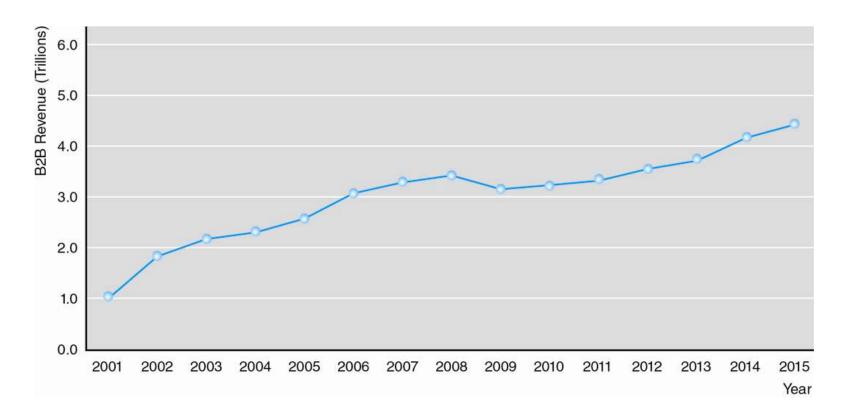
Figure 1.3, Page 25



SOURCES: Based on data from eMarketer, Inc., 2011a; authors' estimates.

#### The Growth of B2B E-commerce

Figure 1.4, Page 28



SOURCES: Based on data from U.S. Census Bureau, 2011b; authors' estimates.

# Technology and E-commerce in Perspective

- The Internet and Web: Just two of a long list of technologies that have greatly changed commerce. Others:
  - Automobiles
  - \* Radio
- E-commerce growth will eventually cap as it confronts its own fundamental limitations.

# Potential Limitations on the Growth of B2C E-commerce

- Expensive technology
- Sophisticated skill set
- Persistent cultural attraction of physical markets and traditional shopping experiences
- Persistent global inequality limiting access to telephones and computers
- Saturation and ceiling effects

#### **E-commerce: A Brief History**

#### ■ 1995–2000: Innovation

- Key concepts developed
- Dot-coms; heavy venture capital investment

#### 2001–2006: Consolidation

Emphasis on business-driven approach

#### 2006—Present: Reinvention

- Extension of technologies
- New models based on user-generated content, social networks, services

Insight on Business: Class Discussion

#### Party Like It's 1999

- What explains the rapid growth in private investment in e-commerce firms in the period 1998–2000? Was this investment irrational?
- What type of Internet investments became popular in late 2008 through early 2010, and why?
- What is the value to investors of a company such as Groupon, which has yet to show profitability?
- Why do you think investors today would be interested in investing in or purchasing e-commerce companies? Would you invest in an e-commerce company today?

#### **Early Visions of E-commerce**

#### Computer scientists:

 Inexpensive, universal communications and computing environment accessible by all

#### **Economists:**

- Nearly perfect competitive market; friction-free commerce
- Lowered search costs, disintermediation, price transparency, elimination of unfair competitive advantage

#### Entrepreneurs:

 Extraordinary opportunity to earn far above normal returns on investment—first mover advantage

#### **Assessing E-commerce**

#### Many early visions not fulfilled

- Friction-free commerce
  - Consumers less price sensitive
  - Considerable price dispersion
- Perfect competition
  - Information asymmetries persist
- Intermediaries have not disappeared
- First mover advantage
  - Fast-followers often overtake first movers

#### **Predictions for the Future**

- Technology will propagate through all commercial activity
- Prices will rise to cover the real cost of doing business
- E-commerce margins and profits will rise to levels more typical of all retailers
- Cast of players will change
  - Traditional Fortune 500 companies will play dominant role
  - New startup ventures will emerge with new products, services
- Number of successful pure online stores will remain smaller than integrated offline/online stores
- Regulatory activity worldwide will grow
- Cost of energy will have an influence

# Understanding E-commerce: Organizing Themes

#### Technology:

 Development and mastery of digital computing and communications technology

#### Business:

New technologies present businesses with new ways of organizing production and transacting business

#### Society:

Intellectual property, individual privacy, public welfare policy

### The Internet and the Evolution of Corporate **Computing**

**Figure 1.8, Page 82** 

#### COMPUTER TECHNOLOGY

Mainframe Computers 1950 - 1975



Minicomputers 1970 - 1980



Personal Computers 1980 - Present



Local Area Networks Client/Server Computing 1980 - Present



Enterprise-wide Computing 1990 - Present



Internet and Web Mobile digital platform 1995 - Present



BUSINESS APPLICATION

Transaction automation Payroll Accounts receivable

**Business function automation** Marketing Human resources Design

Desktop automation Word processing Spreadsheets Databases

Workgroup automation Document sharing Project management Messaging, e-mail

Enterprise-wide automation Resource planning systems Integrated finance-manufacturing systems Human resource planning

Industrial system automation Supply chain management Customer relationship management Channel management systems Web and cloud services

#### Insight on Society: Class Discussion

#### Online Privacy: Is the Age of Privacy Over?

- Why are social network sites interested in collecting user information?
- What types of privacy invasion are described in the case? Which is the most privacy-invading, and why?
- Is e-commerce any different than traditional markets with respect to privacy? Don't merchants always want to know their customer?
- How do you protect your privacy on the Web?

# Academic Disciplines Concerned with E-commerce

- Technical approach
  - Computer science
  - Management science
  - Information systems

- Behavioral approach
  - Information systems
  - Economics
  - Marketing
  - Management
  - Finance/accounting
  - Sociology

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### Chapter 5

**Business Models for E-commerce** 

#### Tweet Tweet: What's Your Business Model?

#### Class Discussion

- What characteristics or benchmarks can be used to assess the business value of a company such as Twitter?
- Have you used Twitter to communicate with friends or family? What are your thoughts on this service?
- What are Twitter's most important assets?
- Which of the various methods described for monetizing Twitter's assets do you feel might be most successful?

#### **E-commerce Business Models**

#### Business model

Set of planned activities designed to result in a profit in a marketplace

#### Business plan

Describes a firm's business model

#### E-commerce business model

Uses/leverages unique qualities of Internet and Web

#### 8 Key Elements of a Business Model

- 1. Value proposition
- 2. Revenue model
- 3. Market opportunity
- 4. Competitive environment
- 5. Competitive advantage
- Market strategy
- 7. Organizational development
- 8. Management team

#### 1. Value Proposition

- "Why should the customer buy from you?"
- Successful e-commerce value propositions:
  - Personalization/customization
  - Reduction of product search, price discovery costs
  - Facilitation of transactions by managing product delivery

### 2. Revenue Model

"How will the firm earn revenue, generate profits, and produce a superior return on invested capital?"

## Major types:

- Advertising revenue model
- Subscription revenue model
- Transaction fee revenue model
- Sales revenue model
- \* Affiliate revenue model

## 3. Market Opportunity

- "What marketspace do you intend to serve and what is its size?"
  - Marketspace: Area of actual or potential commercial value in which company intends to operate
  - Realistic market opportunity: Defined by revenue potential in each market niche in which company hopes to compete
- Market opportunity typically divided into smaller niches

## 4. Competitive Environment

# "Who else occupies your intended marketspace?"

- Other companies selling similar products in the same marketspace
- Includes both direct and indirect competitors

## Influenced by:

- Number and size of active competitors
- Each competitor's market share
- Competitors' profitability
- Competitors' pricing

## 5. Competitive Advantage

- "What special advantages does your firm bring to the marketspace?"
  - Is your product superior to or cheaper to produce than your competitors'?

#### Important concepts:

- Asymmetries
- First-mover advantage, complementary resources
- Unfair competitive advantage
- Leverage
- Perfect markets

## 6. Market Strategy

- "How do you plan to promote your products or services to attract your target audience?"
  - Details how a company intends to enter market and attract customers
  - Best business concepts will fail if not properly marketed to potential customers

## 7. Organizational Development

- "What types of organizational structures within the firm are necessary to carry out the business plan?"
- Describes how firm will organize work
  - Typically, divided into functional departments
  - As company grows, hiring moves from generalists to specialists

## 8. Management Team

- "What kind of backgrounds should the company's leaders have?"
- A strong management team:
  - Can make the business model work
  - Can give credibility to outside investors
  - Has market-specific knowledge
  - Has experience in implementing business plans

Insight on Business: Class Discussion

## Is Groupon's Business Model Sustainable?

- What is the value of Groupon to merchants?
  What types of merchants benefit the most?
- What is the value of Groupon to investors? Is Groupon overvalued?
- **■** What obstacles does Groupon face?
- Does Google Offers present a threat to Groupon's business model?

## **Categorizing E-commerce Business Models**

- No one correct way
- We categorize according to:
  - ❖ E-commerce sector (e.g. B2B)
  - E-commerce technology (e.g. m-commerce)
- Similar business models appear in more than one sector
- Some companies use multiple business models (e.g. eBay)

#### **B2C Business Models: Portal**

- Search plus an integrated package of content and services
- Revenue models:
  - Advertising, referral fees, transaction fees, subscriptions

#### Variations:

- Horizontal/General
- Vertical/Specialized (Vortal)
- Search

### **B2C Models: E-tailer**

- Online version of traditional retailer
- Revenue model: Sales
- Variations:
  - ❖ Virtual merchant
  - ❖ Bricks-and-clicks
  - Catalog merchant
  - Manufacturer-direct
- Low barriers to entry

#### **B2C Models: Content Provider**

## Digital content on the Web

News, music, video

#### Revenue models:

Subscription; pay per download (micropayment); advertising; affiliate referral fees

#### Variations:

- Content owners
- Syndication
- Web aggregators

#### **B2C Models: Transaction Broker**

- Process online transactions for consumers
  - Primary value proposition—saving time and money
- Revenue model:
  - Transaction fees
- Industries using this model:
  - Financial services
  - Travel services
  - Job placement services

Insight on Technology: Class Discussion

#### **Battle of the Titans: Music in the Cloud**

- Have you purchased music online or subscribed to a music service? What was your experience?
- What revenue models do cloud music services use?
- Do cloud music services provide a clear advantage over download and subscription services?
- Of the cloud services from Google, Amazon, and Apple, which would you prefer to use and why?

#### **B2C Models: Market Creator**

Create digital environment where buyers and sellers can meet and transact

### **Examples:**

- Priceline
- ❖ eBay
- Revenue model: Transaction fees

#### **B2C Models: Service Provider**

#### Online services

e.g., Google—Google Maps, Gmail, etc.

## Value proposition

Valuable, convenient, time-saving, low-cost alternatives to traditional service providers

#### Revenue models:

Sales of services, subscription fees, advertising, sales of marketing data

## **B2C Models: Community Provider**

- Provide online environment (social network) where people with similar interests can transact, share content, and communicate
  - e.g., Facebook, LinkedIn, Twitter
- Revenue models:
  - Typically hybrid, combining advertising, subscriptions, sales, transaction fees, affiliate fees

#### **B2B Business Models**

- Net marketplaces
  - ❖ E-distributor
  - ❖ E-procurement
  - Exchange
  - Industry consortium
- Private industrial network

#### **B2B Models: E-distributor**

- Version of retail and wholesale store, MRO goods and indirect goods
- Owned by one company seeking to serve many customers
- Revenue model: Sales of goods
- e.g., Grainger.com

## **B2B Models: E-procurement**

- Creates digital markets where participants transact for indirect goods
  - B2B service providers, application service providers (ASPs)
- Revenue model:
  - Service fees, supply-chain management, fulfillment services
- e.g., Ariba

## **B2B Models: Exchanges**

- Independently owned vertical digital marketplace for direct inputs
- Revenue model: Transaction, commission fees
- Create powerful competition between suppliers
- Tend to force suppliers into powerful price competition; number of exchanges has dropped dramatically

## **B2B Models: Industry Consortia**

- Industry-owned vertical digital marketplace open to select suppliers
- More successful than exchanges
  - Sponsored by powerful industry players
  - Strengthen traditional purchasing behavior
- Revenue model: Transaction, commission fees
- e.g., Exostar

#### **Private Industrial Networks**

- Digital network
- Used to coordinate communication among firms engaged in business together
- Typically evolve out of company's internal enterprise system
- e.g., Walmart's network for suppliers

#### **Other E-commerce Business Models**

- Consumer-to-consumer (C2C)
  - eBay, Craigslist
- Peer-to-peer (P2P)
  - The Pirate Bay, Cloudmark
- M-commerce:
  - Extends existing e-commerce business models to service mobile workforce, consumers
  - Unique features include mobility, cameras to scan product codes, GPS

Insight on Society: Class Discussion

## Foursquare: Check In/Check Out

- Why should you care if companies track your location via cell phone?
- Are privacy concerns the only shortcoming of location-based mobile services?
- Should business firms be allowed to call cell phones with advertising messages based on location?

## E-commerce Enablers: The Gold Rush Model

- E-commerce infrastructure companies have profited the most:
  - Hardware, software, networking, security
  - E-commerce software systems, payment systems
  - Media solutions, performance enhancement
  - CRM software
  - Databases
  - Hosting services, etc.

# How the Internet and the Web Change Business

- E-commerce changes industry structure by changing:
  - Basis of competition among rivals
  - Barriers to entry
  - Threat of new substitute products
  - Strength of suppliers
  - Bargaining power of buyers

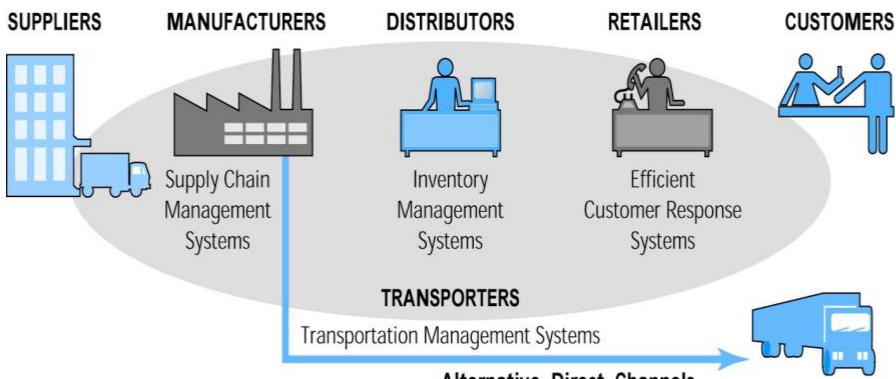
## **Industry Value Chains**

- Set of activities performed by suppliers, manufacturers, transporters, distributors, and retailers that transform raw inputs into final products and services
- Internet reduces cost of information and other transactional costs
- Leads to greater operational efficiencies, lowering cost, prices, adding value for customers

# E-commerce and Industry Value

Figure 5.4, Page 364

**Chains** 



**Alternative Direct Channels** e.g., The Web

#### Firm Value Chains

- Activities that a firm engages in to create final products from raw inputs
- Each step adds value
- Effect of Internet:
  - Increases operational efficiency
  - Enables product differentiation
  - Enables precise coordination of steps in chain

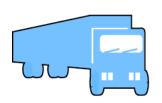
### **E-commerce and Firm Value Chains**

Figure 5.5, Page 365

Administration
Human Resources
Information Systems
Procurement
Finance/Accounting

#### SECONDARY ACTIVITIES

#### PRIMARY ACTIVITIES



Inbound Logistics



**Operations** 



Outbound Logistics



Sales and Marketing



After Sales Service

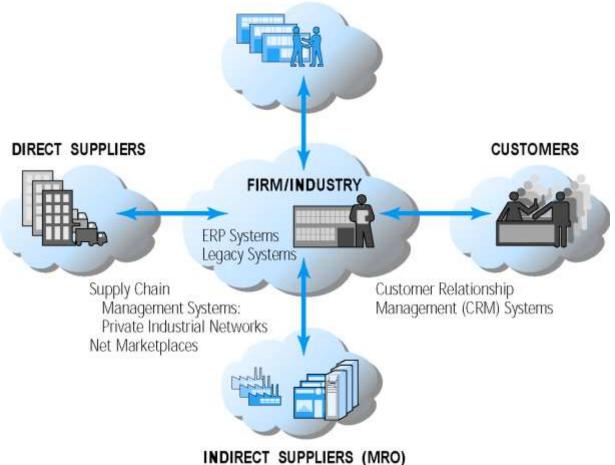
#### Firm Value Webs

- Networked business ecosystem
- Uses Internet technology to coordinate the value chains of business partners
- Coordinates a firm's suppliers with its own production needs using an Internet-based supply chain management system

#### Internet-enabled Value Web

**Figure 5.6, Page 366** 

#### STRATEGIC ALLIANCE AND PARTNER FIRMS



## **Business Strategy**

- Plan for achieving superior long-term returns on the capital invested in a business firm
- Four generic strategies
  - Differentiation
  - Cost
  - Scope
  - Focus

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# Chapter 6

E-commerce Marketing: Social, Mobile, Local

#### **Netflix: The Next Blockbuster?**

Class Discussion

- What was Netflix's first business model? Why did this model not work and what new model did it develop?
- Why is Netflix attractive to customers?
- What is Netflix's "recommender system"?
- How does Netflix use data mining?
- Has Netflix's changes in business model damaged its brand permanently?

# Consumers Online: The Internet Audience and Consumer Behavior

- Around 73% (86 million) U.S. households have Internet access in 2011
- Growth rate has slowed
- Intensity and scope of use both increasing
- Some demographic groups have much higher percentages of online usage than others
  - Gender, age, ethnicity, community type, income, education

# The Internet Audience and Consumer Behavior (cont.)

- Broadband vs. dial-up audiences, new mobile audience
- Internet purchasing affected by neighborhood
- Lifestyle and sociological impacts
  - Use of Internet by children, teens
  - Use of Internet as substitute for other social activities

#### Media choices

- Traditional media competes with Internet for attention
- Television viewing has increased with Internet usage

#### **Consumer Behavior Models**

## Study of consumer behavior

\*Attempts to explain what consumers purchase and where, when, how much and why they buy

#### Consumer behavior models

- Predict wide range of consumer decisions
- Based on background demographic factors and other intervening, more immediate variables

#### A General Model of Consumer Behavior



**Figure 6.1, Page 393** 

**SOURCE:** Adapted from Kotler and Armstrong, 2009.

## **Background Demographic Factors**

- Culture: Affects entire nations
- Subculture
  - Subsets formed around major social differences (ethnicity, age, lifestyle, geography)
- Social networks and communities
  - Direct reference groups
  - Indirect reference groups
  - Opinion leaders
  - Lifestyle groups
- Psychological profile

# **The Online Purchasing Decision**

## Psychographic research

- Combines demographic and psychological data
- Divides market into various groups based on social class, lifestyle, and/or personality characteristics

### Stages in consumer decision process:

- Awareness of need
- Search for more information
- Evaluation of alternatives
- Actual purchase decision
- Post-purchase contact with firm

# The Consumer Decision Process and Supporting Communications

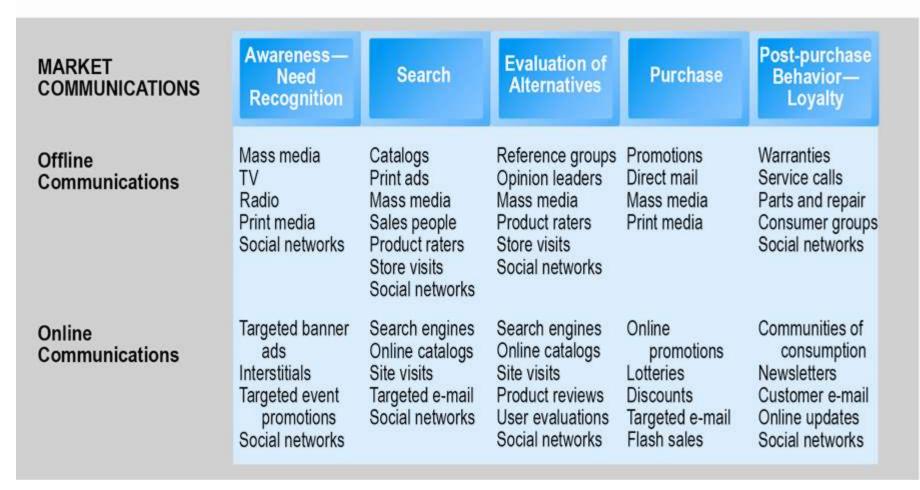
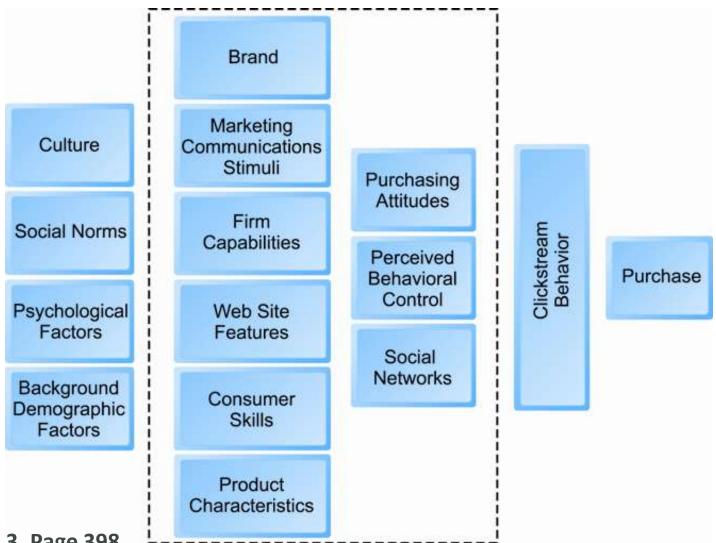


Figure 6.2, Page 397

### **A Model of Online Consumer Behavior**

- Decision process similar for online and offline behavior
- General online behavior model
  - Consumer skills
  - Product characteristics
  - Attitudes toward online purchasing
  - Perceptions about control over Web environment
  - Web site features: latency, usability, security
- Clickstream behavior

#### **A Model of Online Consumer Behavior**



**Figure 6.3, Page 398** 

## A Model of Online Consumer Behavior (cont.)

#### Clickstream factors include:

- Number of days since last visit
- Speed of clickstream behavior
- Number of products viewed during last visit
- Number of pages viewed
- Supplying personal information
- Number of days since last purchase
- Number of past purchases

### Clickstream marketing

Developed dynamically as customers use Internet

## **Shoppers: Browsers and Buyers**

- Shoppers: 87% of Internet users
  - ❖ 73% buyers
  - 15% browsers (purchase offline)
- One-third of offline retail purchases influenced by online activities
- Online traffic also influenced by offline brands and shopping
- E-commerce and traditional commerce are coupled: Part of a continuum of consuming behavior

#### **Online Shoppers and Buyers**



# What Consumers Shop for and Buy Online

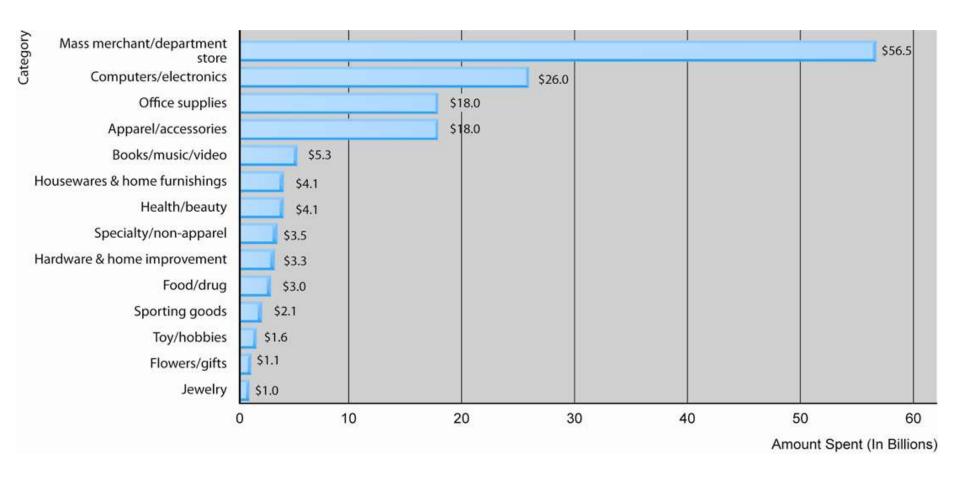
### Big ticket items

- Travel, computer hardware, electronics
- Consumers now more confident in purchasing costlier items

## Small ticket items (\$100 or less)

- Apparel, books, office supplies, software, etc.
- Sold by first movers on Web
  - Physically small items
  - High margin items

#### **What Consumers Buy Online**



**Figure 6.5, Page 403** 

SOURCES: Based on data from Internet Retailer, 2011.

## **How Consumers Shop**

### How shoppers find online vendors

- ❖ Search engines—59%
- ❖ Marketplaces (Amazon, eBay)—28%
- ❖ Direct to retail sites—10%
- ♦ Other methods—3%

## Online shoppers are highly intentional

- Look for specific products, companies, services
- StumbleUpon
- Recommender systems

TABLE 6.7	.7 WHY INTERNET USERS DO NOT BUY ONLINE	
Want to see and touch before buying		34%
Concerns about pesonal financial information		31%
Delivery costs are too high		30%
Concerns that returns will be a hassle		26%
Prefer to research online, then buy in a store		24%
No need to buy products online		23%
Can't speak to a sales assistant in person		14%

# Trust, Utility, and Opportunism in Online Markets

- Two most important factors shaping decision to purchase online:
  - Utility:
    - Better prices, convenience, speed
  - Trust:
    - Asymmetry of information can lead to opportunistic behavior by sellers
    - Sellers can develop trust by building strong reputations for honesty, fairness, delivery

## **Basic Marketing Concepts**

## Marketing

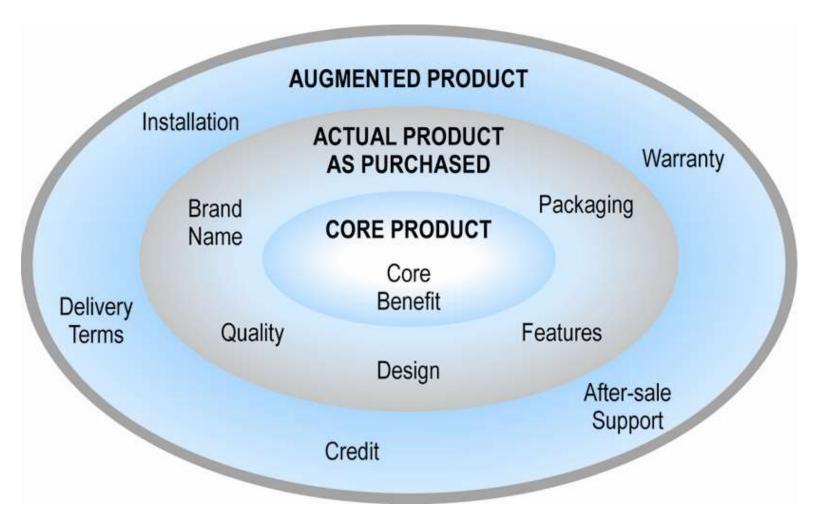
- Strategies and actions to establish relationship with consumer and encourage purchases
- Addresses competitive situation of industries and firms
- Seeks to create unique, highly differentiated products or services that are produced or supplied by one trusted firm
  - Unmatchable feature set
  - Avoidance of becoming commodity

#### **Feature Sets**

## Three levels of product or service

- Core product
  - e.g., cell phone
- Actual product
  - Characteristics that deliver core benefits
  - e.g., wide screen that connects to Internet
- Augmented product
  - Additional benefits
  - Basis for building the product's brand
  - e.g., product warranty

#### **Feature Set**



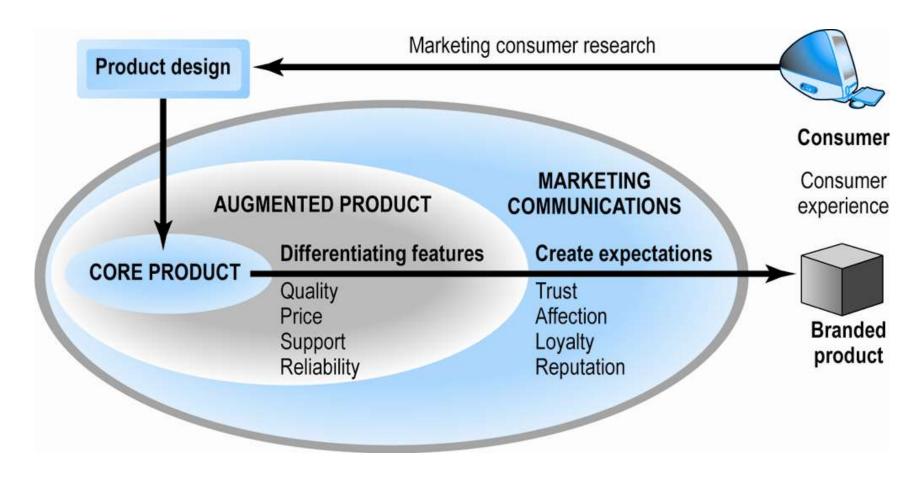
**Figure 6.6, Page 406** 

# Products, Brands, and the Branding Process

#### Brand:

- Expectations consumers have when consuming, or thinking about consuming, a specific product
- Most important expectations: Quality, reliability, consistency, trust, affection, loyalty, reputation
- Branding: Process of brand creation
- Closed loop marketing
- Brand strategy
- Brand equity

# Marketing Activities: from Products to Brands



**Figure 6.7, Page 407** 

## Segmenting, Targeting, and Positioning

- Major ways used to segment, target customers
  - Behavioral
  - Demographic
  - Psychographic
  - Technical
  - Contextual
  - Search
- Within segment, product is positioned and branded as a unique, high-value product, especially suited to needs of segment customers

#### **Are Brands Rational?**

### For consumers, a qualified yes:

Brands introduce market efficiency by reducing search and decision-making costs

### For business firms, a definite yes:

- A major source of revenue
- Lower customer acquisition cost
- Increased customer retention
- Successful brand constitutes a long-lasting (though not necessarily permanent) unfair competitive advantage

# Can Brands Survive the Internet? Brands and Price Dispersion

Early postulation: "Law of One Price"—end of brands

#### Instead:

- Consumers still pay premium prices for differentiated products
- ❖ E-commerce firms rely heavily on brands to attract customers and charge premium prices
- Substantial price dispersion
- Large differences in price sensitivity for same product
- "Library effect"

# The Revolution in Internet Marketing Technologies

#### Three broad impacts:

- Scope of marketing communications broadened
- Richness of marketing communications increased
- Information intensity of marketplace expanded

#### Internet marketing technologies:

- Web transaction logs
- Tracking files
- Databases, data warehouses, data mining
- Advertising networks
- Customer relationship management systems

## **Web Transaction Logs**

- Built into Web server software
- Record user activity at Web site
- Webtrends: Leading log analysis tool
- Provides much marketing data, especially combined with:
  - Registration forms
  - Shopping cart database
- Answers questions such as:
  - What are major patterns of interest and purchase?
  - ❖ After home page, where do users go first? Second?

## **Tracking Files**

- Allow users browsing activities to be tracked as they move from site to site
- Four types of tracking files
  - Cookies
    - Small text file placed by Web site
    - Allows Web marketers to gather data
  - Flash cookies
  - Beacons ("bugs")
  - Apps

Insight on Society: Class Discussion

# Every Move You Make, Every Click You Make, We'll Be Tracking You

- Are beacons innocuous? Or are they an invasion of personal privacy?
- Do you think your Web browsing should be known to marketers?
- What are the Privacy Foundation guidelines for Web beacons?
- Should online shopping be allowed to be a private activity?

#### **Databases**

- Database: Stores records and attributes
- Database management system (DBMS):
  - Software used to create, maintain, and access databases
- SQL (Structured Query Language):
  - Industry-standard database query and manipulation language used in a relational database
- Relational database:
  - ❖ Represents data as two-dimensional tables with records organized in rows and attributes in columns; data within different tables can be flexibly related as long as the tables share a common data element

#### A Relational Database View of E-commerce Customers

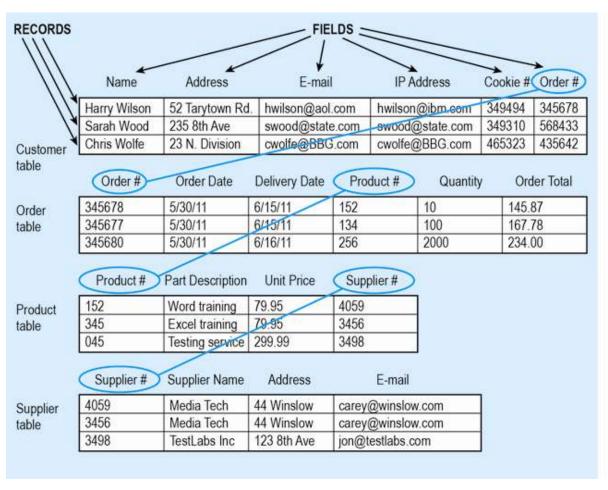


Figure 6.9, Page 421

## **Data Warehouses and Data Mining**

#### Data warehouse:

Collects firm's transactional and customer data in single location for offline analysis by marketers and site managers

#### Data mining:

- Analytical techniques to find patterns in data, model behavior of customers, develop customer profiles
  - Query-driven data mining
  - Model-driven data mining
  - Rule-based data mining
  - Collaborative filtering

Insight on Technology: Class Discussion

## The Long Tail: Big Hits and Big Misses

- What are "recommender systems"? Give an example you have used.
- What is the "Long Tail" and how do recommender systems support sales of items in the Long Tail?
- How can human editors, including consumers, make recommender systems more helpful?

# **Customer Relationship Management (CRM) Systems**

- Record all contact that customer has with firm
- Generate customer profile available to everyone in firm with need to "know the customer"
- Customer profiles can contain:
  - Map of the customer's relationship with the firm
  - Product and usage summary data
  - Demographic and psychographic data
  - Profitability measures
  - Contact history
  - Marketing and sales information

#### A Customer Relationship Management System

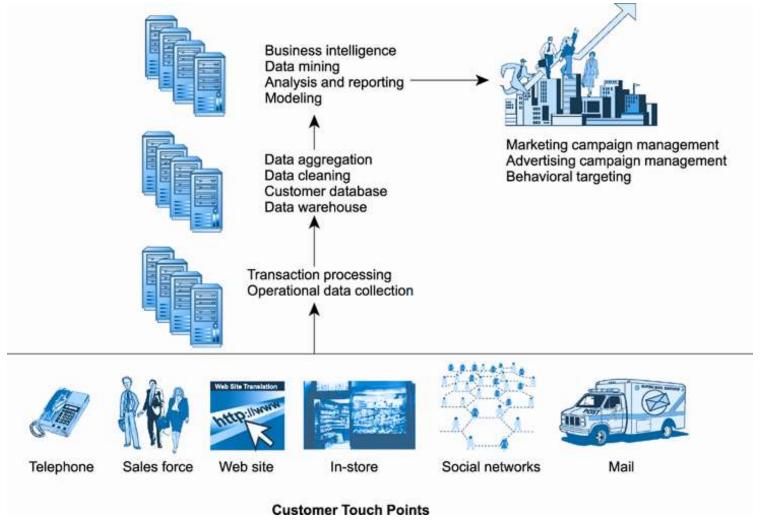


Figure 6.10, Page 427

#### **Generic Market Entry Strategies**

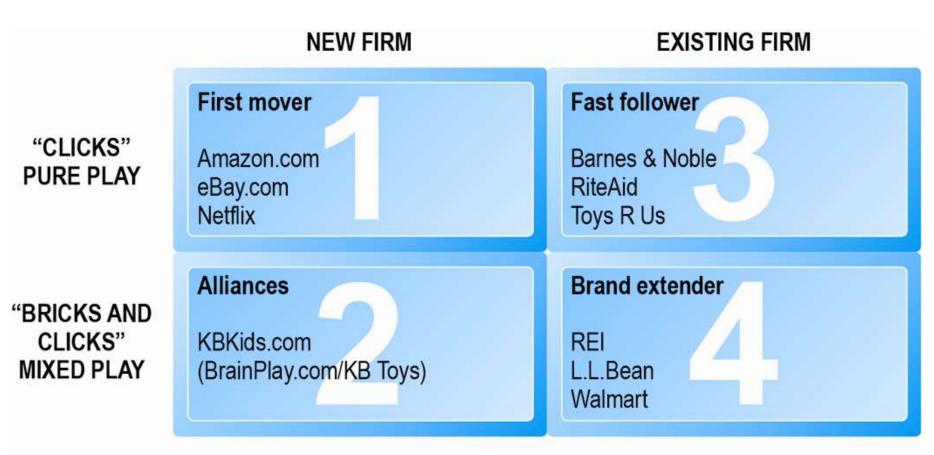


Figure 6.11, Page 429

## **Establishing the Customer Relationship**

- Advertising networks
  - Ad server selects appropriate ad based on cookies, Web bugs, backend user profile databases
- Advertising exchanges
  - Auction ad slots over many advertising networks
- Permission marketing
- Affiliate marketing

## How an Advertising Network Such as DoubleClick Works

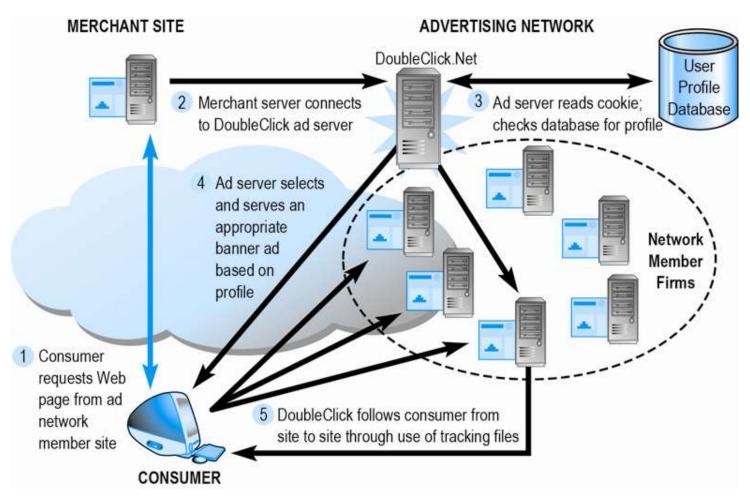


Figure 6.12, Page 432

## **Establishing the Customer Relationship**

- Viral marketing
- Blog marketing
- Social network marketing
  - Driven by social e-commerce
    - Social sign-on
    - Collaborative shopping
    - Network notification
    - Social search (recommendation)
- Mobile marketing

Insight on Business: Class Discussion

## Social Network Marketing: Let's Buy Together

- Why do social networks represent such a promising opportunity for marketers?
- What are some of the new types of marketing that social networks have spawned?
- What are some of the risks of social network marketing? What makes it dangerous?
- Have you ever responded to marketing messages on Facebook or another network?

## **Establishing the Customer Relationship**

- Social marketing and wisdom of crowds
  - Large aggregates produce better estimates and judgments, e.g.,
    - "Like" button
    - Folksonomies
    - Social tagging
- Mobile platform marketing
- Local marketing
- Brand leveraging

#### **Customer Retention**

- Mass marketing
- Direct marketing
- Micromarketing
- Personalized, one-to-one marketing
  - Segmenting market on precise and timely understanding of individual's needs
  - Targeting specific marketing messages to these individuals
  - Positioning product vis-à-vis competitors to be truly unique

#### Personalization

- Can increase consumers sense of control, freedom
- Can also result in unwanted offers or reduced anonymity

#### The Mass Market-Personalization Continuum

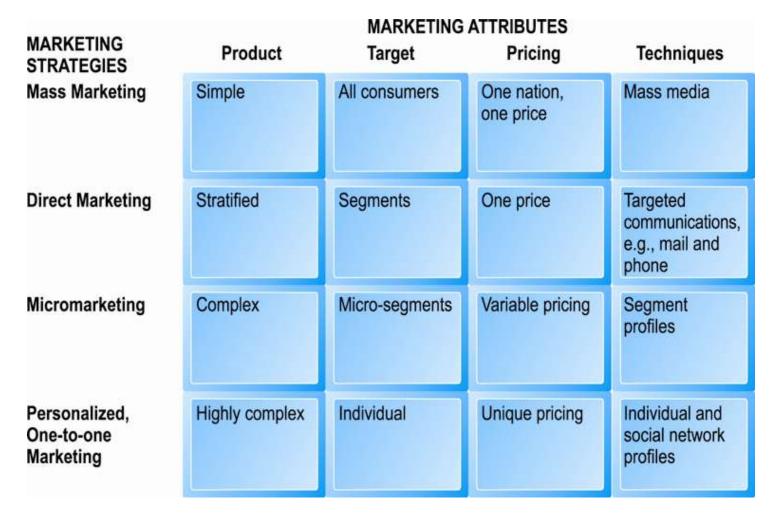


Figure 6.13, Page 445

## Other Customer Retention Marketing Techniques

#### Customization

Customizing product to user preferences

#### Customer co-production

Customer interactively involved in product creation

#### Customer service

- FAQs
- Real-time customer service chat systems
- Automated response systems

## **Net Pricing Strategies**

### Pricing

- Integral part of marketing strategy
- Traditionally based on:
  - Fixed cost
  - Variable costs
  - Demand curve

#### Price discrimination

Selling products to different people and groups based on willingness to pay

## **Net Pricing Strategies** (cont.)

#### Free and freemium

Can be used to build market awareness

#### Versioning

 Creating multiple versions of product and selling essentially same product to different market segments at different prices

#### Bundling

Offers consumers two or more goods for one price

#### Dynamic pricing:

- Auctions
- Yield management
- Flash marketing

## **Channel Management Strategies**

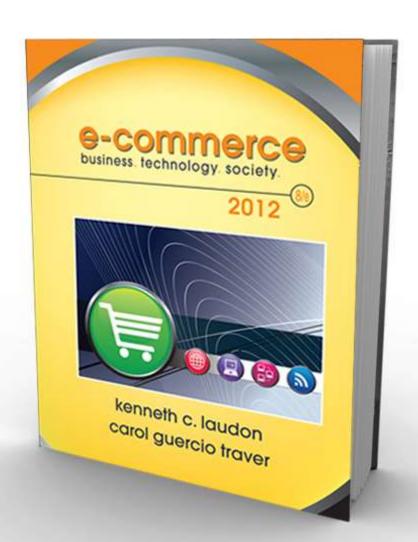
#### Channels:

Different methods by which goods can be distributed and sold

#### Channel conflict:

- When new venue for selling products or services threatens or destroys existing sales venues
- e.g., online airline/travel services and traditional offline travel agencies
- Some manufacturers are using partnership model to avoid channel conflict

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## e-commerce

business. technology. society.

eighth edition

Kenneth C. Laudon
Carol Guercio Traver

## Chapter 7

## **E-commerce Advertising**

#### Video Ads: Shoot, Click, Buy

Class Discussion

- What advantages do video ads have over traditional banner ads?
- Where do sites such as YouTube fit in to a marketing strategy featuring video ads?
- What are some of the challenges and risks of placing video ads on the Web?
- Do you think Internet users will ever develop "blindness" toward video ads as well?

## **Marketing Communications**

#### Two main purposes:

- Sales—promotional sales communications
- Branding—branding communications

#### Online marketing communications

- Takes many forms
- Online ads, e-mail, public relations, Web sites

## **Online Advertising**

- **\$31.3** billion in 2011
- Advantages:
  - Internet is where audience is moving
  - Ad targeting
  - Greater opportunities for interactivity

#### Disadvantages:

- Cost vs. benefit
- How to adequately measure results
- Supply of good venues to display ads

#### **Online Advertising from 2003–2015**

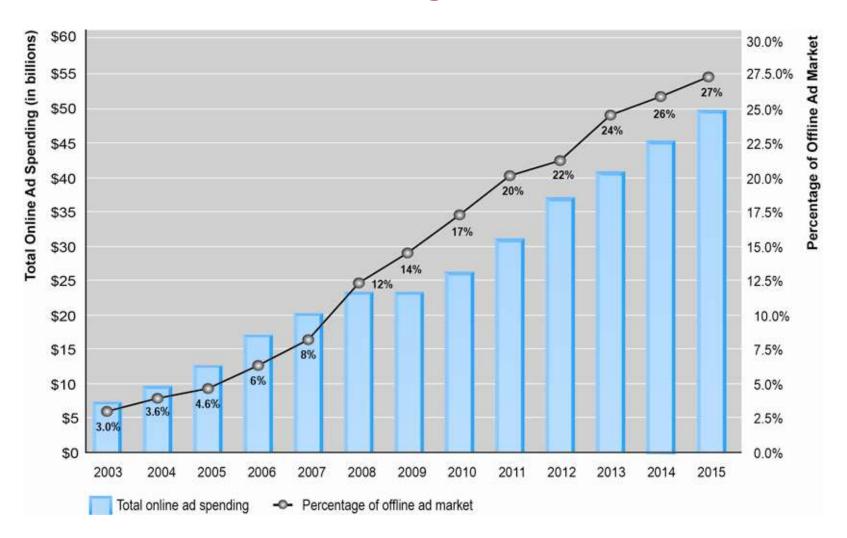


Figure 7.1, Page 472

SOURCES: Based on data from eMarketer, Inc., 2011a

#### **Forms of Online Advertisements**

- Display ads
- Rich media
- Video ads
- Search engine advertising
- Mobile and local advertising
- Referrals
- E-mail marketing
- Online catalogs
- Social network, blog, app, and game advertising

## **Display Ads**

#### Banner ads

- Rectangular box linking to advertiser's Web site
- IAB guidelines
  - e.g., full banner is 468 x 60 pixels, 13K

## Pop-up ads

- Appear without user calling for them
- Provoke negative consumer sentiment
- Twice as effective as normal banner ads
- Pop-under ads: Open beneath browser window

#### **Rich Media Ads**

- Use Flash, DHTML, Java, JavaScript
- About 5% of all online advertising expenditures
- Tend to be more about branding
- Boost brand awareness by 10%
- Interstitials
- Superstitials

#### **Video Ads**

- Fastest growing form of online advertising
- IAB standards
  - Linear video ad
  - Non-linear video ad
  - ❖ In-banner video ad
  - In-text video ad
- Ad placement
  - Advertising networks
  - Advertising exchanges
  - Banner swapping

## **Search Engine Advertising**

- 46% of online ad spending in 2011
- Types:
  - Paid inclusion or rank
    - Inclusion in search results
    - Sponsored link areas
  - Keyword advertising
    - e.g., Google AdWords
  - Network keyword advertising (context advertising)
    - e.g., Google AdSense

## Search Engine Advertising (cont.)

- Nearly ideal targeted marketing
- Social search
  - ❖ Google's +1, Facebook's Like

#### Issues:

- Disclosure of paid inclusion and placement practices
- Link farms
- Content farms
- Click fraud

## **Mobile and Local Advertising**

- 91 million users access Internet from smartphones, tablets
  - Messaging
    - Especially effective for local advertising
  - Display ads
  - Search
  - Video
- Local advertising
  - Enabled by mobile platform
  - ♦ 60% of mobile advertising

## **Sponsorships and Referrals**

### Sponsorships

❖ Paid effort to tie advertiser's name to particular information, event, and venue in a way that reinforces brand in positive yet not overtly commercial manner

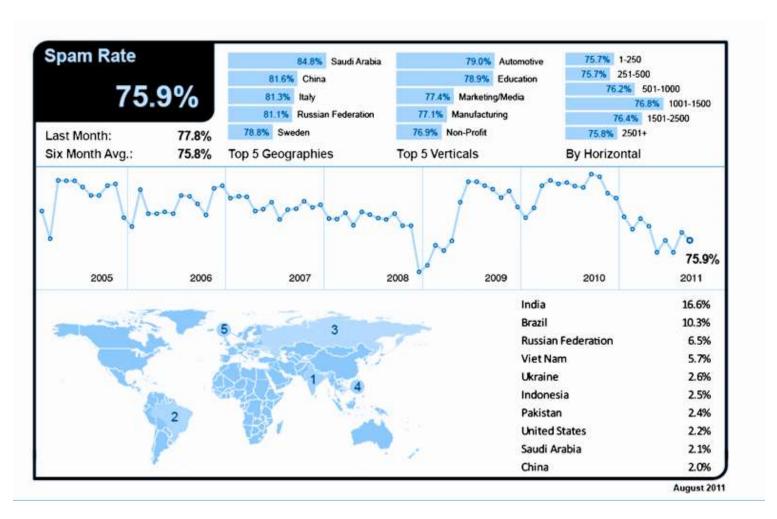
#### Referrals

- Affiliate relationship marketing
- ❖ Permits firm to put logo or banner ad on another firm's Web site from which users of that site can click through to affiliate's site

# E-mail Marketing and the Spam Explosion

- Direct e-mail marketing
  - Low cost, primary cost is purchasing addresses
- Spam: Unsolicited commercial e-mail
  - ❖ Approximately 75% of all e-mail
  - Efforts to control spam:
    - Technology (filtering software)
    - Government regulation (CAN-SPAM and state laws)
    - Voluntary self-regulation by industries (DMA)
    - Volunteer efforts

#### Percentage of E-mail That Is Spam



## **Online Catalogs**

- Equivalent of paper-based catalogs
- Graphics-intense; use increasing with increase in broadband use
- Two types:
  - Full-page spreads, e.g., Landsend.com
  - Grid displays, e.g., Amazon.com
- In general, online and offline catalogs complement each other

## **Social Advertising**

### Social advertising

- Uses social graph to promote message
- Many-to-many model

#### Social network advertising

- Social network sites are advertising platforms
  - Corporate Facebook pages
  - Twitter ads
    - Promoted tweets
    - Promoted trends
    - Promoted accounts

## **Social Advertising**

#### Blog advertising

- Blogs difficult to monetize
  - Audience size
  - Subject matter
  - Search engines have difficulty indexing

#### Game advertising

- In-game billboard display ads
- Branded virtual goods
- Sponsored banners
- Downloadable "advergames"

Insight on Society: Class Discussion

# Marketing to Children of the Web in the Age of Social Networks

- Why is online marketing to children a controversial practice?
- What is the Children's Online Privacy Protection Act (COPPA) and how does it protect the privacy of children?
- How do companies verify the age of online users?
- Should companies be allowed to target marketing efforts to children under the age of 13?

## **Behavioral Targeting**

- Interest-based advertising (behavioral targeting)
- Social marketing
- Personal information sold to third party advertisers, who deliver ads based on profile
  - Search engine queries, browsing history, offline data
- Ad exchanges
  - Enable advertisers to retarget ads at users as they browse
  - 16% online ads are targeted

# Mixing Offline and Online Marketing Communications

- Most successful marketing campaigns incorporate both online and offline tactics
- Offline marketing
  - Drive traffic to Web sites
  - Increase awareness and build brand equity
- Consumer behavior increasingly multichannel
  - ♦ 60% consumers research online before buying offline

Insight on Business: Class Discussion

## Are the Very Rich Different from You and Me?

- Why have online luxury retailers had a difficult time translating their brands and the look and feel of luxury shops into Web sites?
- Why did Neiman Marcus' first effort fail?
- Why did Tiffany's first effort fail?
- Visit the Armani Web site. What do you find there?

### **Online Marketing Metrics: Lexicon**

#### Measuring audience size or market share

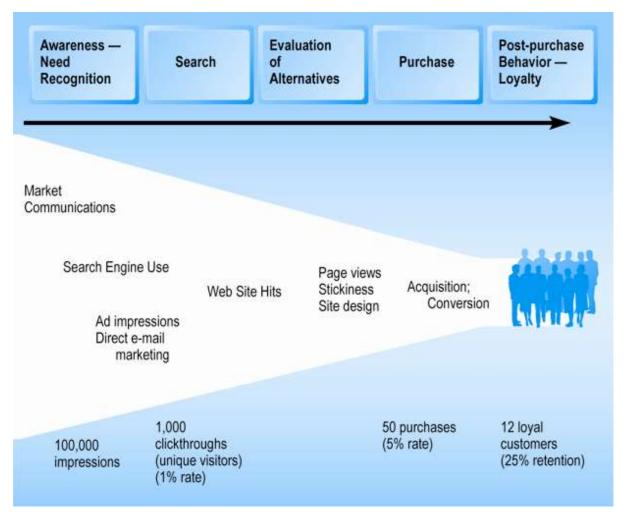
- Impressions
- Click-through rate (CTR)
- View-through rate (VTR)
- Hits
- Page views
- Stickiness (duration)
- Unique visitors
- Loyalty
- Reach
- Recency

### Online Marketing Metrics (cont.)

- Conversion of visitor to customer
  - Acquisition rate
  - Conversion rate
  - Browse-to-buy-ratio
  - View-to-cart ratio
  - Cart conversion rate
  - Checkout conversion rate
  - Abandonment rate
  - Retention rate
  - Attrition rate

- Social networking
  - User insights
  - Interaction insights
- E-mail metrics
  - Open rate
  - Delivery rate
  - Click-through rate (e-mail)
  - Bounce-back rate

#### **An Online Consumer Purchasing Model**

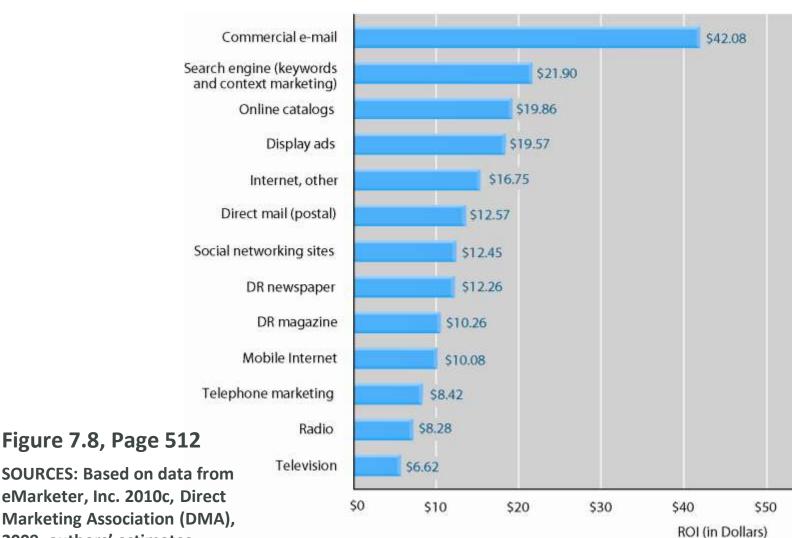


**Figure 7.7, Page 509** 

## How Well Does Online Advertising Work?

- Ultimately measured by ROI on ad campaign
- Highest click-through rates: Search engine ads, permission e-mail campaigns
- Rich media, video interaction rates high
- Online channels compare favorably with traditional
- Most powerful marketing campaigns use multiple channels, including online, catalog, TV, radio, newspapers, stores

#### **Comparative Returns on Investment**



2009, authors' estimates.

### The Costs of Online Advertising

#### Pricing models

- Barter
- Cost per thousand (CPM)
- Cost per click (CPC)
- Cost per action (CPA)

#### Online revenues only

- Sales can be directly correlated
- Both online/offline revenues
  - Offline purchases cannot always be directly related to online campaign
- In general, online marketing more expensive on CPM basis, but more effective

#### **Web Site Activity Analysis**





Total visits	24,134
Engagement rate	16.7%
Total shoppers	4,031
Abandonment rate	97.4%
Conversion rate	0.4%
Total buyers	103

#### Shopping Cart Executive Summary - Help Card

Abandonment rate — The percentage of shoppers who did not become buyers. This includes both cart abandoners and checkout abandoners.

Conversion rate — Percentage of visitors who became buyers.

Engagement rate — Percentage of visitors who become shoppers.

Total buyers — Number of buyers who visited your site. Buyers are visitors who reached a page that you configured as an order complete page.

**Total shoppers** — Number of shoppers who visited your site. A shopper is a visitor who reached a page that you configured as a **shopping page**.

Total visits — Number of times a visitor came to your site.

**Figure 7.9, Page 515** 

Insight on Technology: Class Discussion

## It's 10 P.M. Do You Know Who Is On Your Web Site?

- What are some of the services offered by Adobe's SiteCatalyst?
- Why would you as a webmaster be interested in these services?
- Why is site analysis and customer tracking so important to online marketing?
- How did National Geographic use SiteCatalyst to its benefit?

## The Web Site as a Marketing Communications Tool

- Web site as extended online advertisement
- Domain name: An important role
- Search engine optimization:
  - Search engines registration
  - Keywords in Web site description
  - Metatag and page title keywords
  - Links to other sites

### **Web Site Functionality**

- Main factors in effectiveness of interface
  - Utility
  - Ease of use
- Top factors in credibility of Web sites
  - Design look
  - Information design/structure
  - Information focus
- Organization is important for first-time users, but declines in importance
  - Information content becomes major factor attracting further visits

# Factors in the Credibility of Web Sites

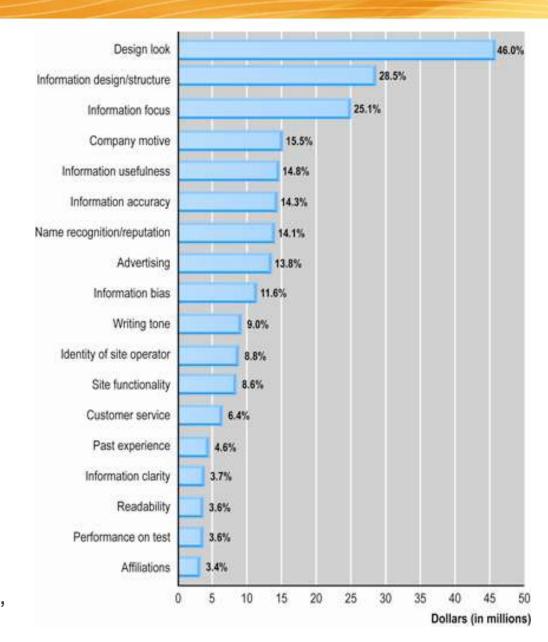


Figure 7.10, Page 521

SOURCE: Based on data from Fogg, et al., 2003.

	SITE DESIGN FEATURES THAT IMPACT ONLINE HASING
DESIGN FEATURE	DESCRIPTION
Compelling experience	Provide interactivity, entertainment, human interest; site is fun to use.
Editorial content	Provide helpful content, opinions, and features on subjects of interest to visitors in order to increase stickiness.
Fast download times	Quicker is better; if longer, provide amusement.
Easy product list navigation	Consumers can easily find the products they want.
Few clicks to purchase	The shorter the click list, the greater the chance of a sale.
Customer choice agents	Recommendation agents/configurators help the consumer make quick, correct choices.
Responsiveness	Personal e-mail response; 1-800 phone capability shown on Web site.

#### **Table 7.9, Page 522**

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