

Contents

1 INTRODUCTION TO E-COMMERCE

38

Learning Objectives 38

Facebook: The New Face of E-commerce? 39

1.1 E-commerce: The Revolution Is Just Beginning 42

The First Thirty Seconds 46

What Is E-commerce? 47

The Difference between E-commerce and E-business 47

Why Study E-commerce? 48

Eight Unique Features of E-commerce Technology 49

Ubiquity 49

Global Reach 51

Universal Standards 51

Richness 51

Interactivity 52

Information Density 52

Personalization/Customization 53

Social Technology: User Content Generation and Social Networking 53

Web 2.0: Play My Version 54

Types of E-commerce 56

Business-to-Consumer (B2C) E-commerce 56

Business-to-Business (B2B) E-commerce 56

Consumer-to-Consumer (C2C) E-commerce 57

Peer-to-Peer (P2P) E-commerce 58

Mobile Commerce (M-commerce) 58

Growth of the Internet and the Web 58

	Origins and Growth of E-commerce	60
	Technology and E-commerce in Perspective	61
	<i>Insight on Technology: Spider Webs, Bow Ties, Scale-Free Networks, and the Deep Web</i>	62
	Potential Limitations on the Growth of B2C E-commerce	65
1.2	<i>E-commerce: A Brief History</i>	67
	E-commerce 1995-2000: Innovation	67
	<i>Insight on Business: 'Noodlenomics' Guides Internet Investment in 2010</i>	71
	E-commerce 2001-2006: Consolidation	73
	E-commerce 2006-Present: Reinvention	73
	Assessing E-commerce: Successes, Surprises and Failures	73
	Predictions for the Future: More Surprises	76
1.3	<i>Understanding E-commerce: Organizing Themes</i>	79
	Technology: Infrastructure	79
	Business: Basic Concepts	81
	Society: Taming the Juggernaut	81
	<i>Insight on Society: Who Really Cares About Online Privacy?</i>	82
	Academic Disciplines Concerned with E-commerce	84
	Technical Approaches	84
	Behavioral Approaches	85
1.4	<i>Case Study: The Pirate Bay: Stealing Media vs. Streaming Media</i>	87
1.5	<i>Review</i>	92
	Key Concepts	92
	Questions	95
	Projects	96

2 E-COMMERCE INFRASTRUCTURE: THE INTERNET AND THE WEB

98

Learning Objectives 98

Wikitude.me 99

2.1	<i>The Internet: Technology Background</i>	102
	The Evolution of the Internet 1961—The Present	103
	The Internet: Key Technology Concepts	104
	Packet Switching	107
	Transmission Control Protocol/Internet Protocol (TCP/IP)	109
	IP Addresses	109
	Domain Names, DNS, and URLs	111
	Client/Server Computing	111
	The New Client: The Emerging Mobile Platform	114

	The Internet “Cloud Computing” Model: Software and Hardware as Service	115
	Other Internet Protocols and Utility Programs	116
	Internet Protocols: HTTP, E-mail Protocols, FTP, Telnet, and SSL	116
	Utility Programs: Ping, Tracert, and Pathping	117
2.2	<i>The Internet Today</i>	119
	The Internet Backbone	119
	Internet Exchange Points	121
	Campus Area Networks	123
	Internet Service Providers	123
	Intranets and Extranets	125
	Who Governs the Internet?	126
2.3	<i>Internet II: The Future Infrastructure</i>	127
	Limitations of the Current Internet	127
	<i>Insight on Society: Government Regulation and Surveillance of the Internet</i>	128
	The Internet2® Project	131
	The Larger Internet II Technology Environment: The First Mile and the Last Mile	133
	Fiber Optics and the Bandwidth Explosion in the First Mile	133
	The Last Mile: Mobile Wireless Internet Access	134
	Benefits of Internet II Technologies	140
	IP Multicasting	141
	Latency Solutions	143
	Guaranteed Service Levels and Lower Error Rates	143
	Declining Costs	143
2.4	<i>The World Wide Web</i>	143
	Hypertext	145
	Markup Languages	147
	Standardized Generalized Markup Language (SGML)	147
	HyperText Markup Language (HTML)	147
	Extensible Markup Language (XML)	148
	Web Servers and Clients	149
	Web Browsers	151
2.5	<i>The Internet and the Web: Features</i>	151
	E-mail	152
	Instant Messaging	152
	Search Engines	152
	Intelligent Agents (Bots)	155

Online Forums and Chat	156
Streaming Media	157
Cookies	157
Web 2.0 Features and Services	158
Online Social Networks	158
Blogs	158
Really Simple Syndication (RSS)	159
Podcasting	159
Wikis	160
Music and Video Services	160
Internet Telephony	161
Internet Television	161
Telepresence and Video Conferencing	162
Online Software and Web Services: Web Apps, Widgets and Gadgets	163
M-commerce Applications: The Next Big Thing	164
<i>Insight on Technology: Apps for Everything: The App Ecosystem</i>	165
2.6 <i>Case Study: Akamai Technologies: When Demand Exceeds Capacity</i>	168
2.7 <i>Review</i>	172
Key Concepts	172
Questions	176
Projects	176

Learning Objectives	178
<i>Tommy Hilfiger Right-Sizes Its Web Store</i>	179
3.1 <i>Building an E-commerce Web Site: A Systematic Approach</i>	183
Pieces of the Site-Building Puzzle	183
Planning: The Systems Development Life Cycle	184
Systems Analysis/Planning: Identify Business Objectives, System Functionality, and Information Requirements	185
System Design: Hardware and Software Platforms	187
Building the System: In-House versus Outsourcing	187
Build Your Own versus Outsourcing	187
Host Your Own versus Outsourcing	191
<i>Insight on Business: Curly Hair and MotorMouths: Getting Started on the Cheap</i>	192
Testing the System	194
Implementation and Maintenance	194
Factors in Optimizing Web Site Performance	195

	Web Site Budgets	196
3.2	<i>Choosing Software</i>	197
	Simple versus Multi-tiered Web Site Architecture	197
	Web Server Software	199
	Site Management Tools	199
	Dynamic Page Generation Tools	200
	Application Servers	203
	E-commerce Merchant Server Software Functionality	203
	Online Catalog	204
	Shopping Cart	204
	Credit-Card Processing	205
	Merchant Server Software Packages (E-commerce Suites)	205
	Choosing an E-commerce Suite	205
	Building Your Own E-commerce Site: Web Services and Open Source Options	207
3.3	<i>Choosing the Hardware for an E-commerce Site</i>	208
	Right-Sizing Your Hardware Platform: The Demand Side	209
	Right-Sizing Your Hardware Platform: The Supply Side	212
3.4	<i>Other E-commerce Site Tools</i>	215
	Web Site Design: Basic Business Considerations	216
	Tools for Web Site Optimization	217
	Tools for Interactivity and Active Content	218
	Bling for Your Blog: Web 2.0 Design Elements	219
	CGI (Common Gateway Interface)	219
	Active Server Pages (ASP)	220
	Java, Java Server Pages (JSP), and JavaScript	220
	ActiveX and VBScript	221
	ColdFusion	221
	Personalization Tools	222
	The Information Policy Set	222
	<i>Insight on Society: Designing for Accessibility with Web 2.0</i>	223
3.5	<i>Case Study: REI Climbs the Web Mountain</i>	226
3.6	<i>Review</i>	231
	Key Concepts	231
	Questions	234
	Projects	235

Learning Objectives	236
<i>Cyberwar: Mutually Assured Destruction 2.0</i>	237
4.1 The E-commerce Security Environment	240
The Scope of the Problem	241
The Underground Economy Marketplace: The Value of Stolen Information	243
What Is Good E-commerce Security?	244
Dimensions of E-commerce Security	245
The Tension Between Security and Other Values	247
Ease of Use	247
Public Safety and the Criminal Uses of Security	247
4.2 Security Threats in the E-commerce Environment	248
Malicious Code	248
Unwanted Programs	252
Phishing and Identity Theft	254
Hacking and Cybervandalism	256
Credit Card Fraud/Theft	257
Spoofing (Pharming) and Spam (Junk) Web Sites	258
Denial of Service (DoS) and Distributed Denial of Service (dDoS) Attacks	259
Sniffing	259
Insider Attacks	260
Poorly Designed Server and Client Software	260
Mobile Platform Security	261
4.3 Technology Solutions	261
Protecting Internet Communications	262
Encryption	262
Symmetric Key Encryption	263
Public Key Encryption	264
Public Key Encryption Using Digital Signatures and Hash Digests	266
Digital Envelopes	268
Digital Certificates and Public Key Infrastructure (PKI)	269
Limitations to Encryption Solutions	270
<i>Insight on Society: Web Dogs and Anonymity</i>	271
Securing Channels of Communication	273
Secure Sockets Layer (SSL)	273
Secure Hypertext Transfer Protocol (S-HTTP)	275
Virtual Private Networks	275
Protecting Networks	275

Firewalls	275	
Protecting Servers and Clients	277	
Operating System Security Enhancements	277	
Anti-Virus Software	278	
4.4	<i>Management Policies, Business Procedures, and Public Laws</i>	278
A Security Plan: Management Policies	278	
The Role of Laws and Public Policy	281	
Private and Private-Public Cooperation Efforts	281	
<i>Insight on Technology: Think Your Smartphone is Secure?</i>	282	
Government Policies and Controls on Encryption Software	285	
OECD Guidelines	285	
4.5	<i>Payment Systems</i>	286
Types of Payment Systems	286	
Cash	286	
Checking Transfer	286	
Credit Card	287	
Stored Value	287	
Accumulating Balance	288	
4.6	<i>E-commerce Payment Systems</i>	289
Online Credit Card Transactions	291	
Credit Card E-commerce Enablers	292	
Limitations of Online Credit Card Payment Systems	292	
Digital Wallets	293	
Digital Cash	293	
Online Stored Value Payment Systems	294	
Digital Accumulating Balance Payment Systems	295	
Digital Checking Payment Systems	296	
Mobile Payment Systems	296	
4.7	<i>Electronic Billing Presentment and Payment</i>	297
<i>Insight on Business: Mobile Payment's Future: WavePayMe, TextPayMe</i>	298	
Market Size and Growth	300	
EBPP Business Models	300	
4.8	<i>Case Study: PayPal Has Company</i>	302
4.9	<i>Review</i>	307
Key Concepts	307	
Questions	312	
Projects	313	

Learning Objectives	314
<i>Tweet Tweet: What's Your Business Model?</i>	315
5.1 E-commerce Business Models	319
Introduction	319
Eight Key Elements of a Business Model	319
Value Proposition	320
Revenue Model	320
Market Opportunity	322
Competitive Environment	324
Competitive Advantage	324
Market Strategy	325
Organizational Development	326
Management Team	326
Categorizing E-commerce Business Models: Some Difficulties	327
<i>Insight on Business: Online Grocers: Finding and Executing the Right Model</i>	328
5.2 Major Business-to-Consumer (B2C) Business Models	331
Portal	331
E-tailer	333
<i>Insight on Technology: Can Bing Bong Google?</i>	334
Content Provider	338
Transaction Broker	339
Market Creator	340
Service Provider	340
Community Provider	342
5.3 Major Business-to-Business (B2B) Business Models	343
E-distributor	343
E-procurement	343
Exchanges	345
Industry Consortia	345
Private Industrial Networks	346
5.4 Other E-commerce Business Models	347
Consumer-to-Consumer (C2C) Business Models	347
Peer-to-Peer (P2P) Business Models	348
M-commerce Business Models	348
<i>Insight on Society: Where R U? Not Here!</i>	350
E-commerce Enablers: The Gold Rush Model	352

5.5	<i>How the Internet and the Web Change Business: Strategy, Structure, and Process</i>	352
	Industry Structure	353
	Industry Value Chains	356
	Firm Value Chains	357
	Firm Value Webs	358
	Business Strategy	359
5.6	<i>Case Study: Pandora and the Freemium Business Model</i>	363
5.7	<i>Review</i>	368
	Key Concepts	368
	Questions	370
	Projects	370

6

E-COMMERCE MARKETING

372

Learning Objectives 372

Netflix Strengthens and Defends Its Brand 373

6.1 *Consumers Online: The Internet Audience and Consumer Behavior* 376

The Internet Audience 376

Internet Traffic Patterns: The Online Consumer Profile 377

Intensity and Scope of Usage 377

Demographics and Access 377

Type of Internet Connection: Broadband Impacts 379

Community Effects: Social Contagion 381

Lifestyle and Sociological Impacts 382

Media Choices and Multitasking : The Internet versus Other Media Channels 383

Consumer Behavior Models 383

Profiles of Online Consumers 386

The Online Purchasing Decision 386

A Model of Online Consumer Behavior 388

Shoppers: Browsers and Buyers 390

What Consumers Shop for and Buy Online 393

Intentional Acts: How Shoppers Find Vendors Online 394

Why More People Don't Shop Online 394

Trust, Utility, and Opportunism in Online Markets 395

6.2 *Basic Marketing Concepts* 395

Feature Sets 396

Products, Brands, and the Branding Process 397

Segmenting, Targeting, and Positioning 399

	Are Brands Rational?	399	
	Do Brands Last Forever?	401	
	Can Brands Survive the Internet? Brands and Price Dispersion on the Internet	401	
6.3	<i>Internet Marketing Technologies</i>	404	
	The Revolution in Internet Marketing Technologies	404	
	Web Transaction Logs	405	
	Supplementing the Logs: Cookies and Web Bugs	406	
	Databases, Data Warehouses, and Data Mining: Developing Profiles	410	
	<i>Insight on Society: Every Move You Take, Every Click You Make, We'll Be Tracking You</i>	411	
	Databases	413	
	Data Warehouses and Data Mining	414	
	Customer Relationship Management (CRM) Systems	417	
	<i>Insight on Technology: The Long Tail: Big Hits and Big Misses</i>	418	
6.4	<i>B2C and B2B E-commerce Marketing and Branding Strategies</i>	421	
	Market Entry Strategies	421	
	Establishing the Customer Relationship	423	
	Advertising Networks	424	
	Permission Marketing	426	
	Affiliate Marketing	426	
	Viral Marketing in the Web 2.0 Milieu	427	
	Blog Marketing	428	
	Social Network Marketing and Social Shopping	429	
	Mobile Platform Marketing	430	
	Marketing Based on the Wisdom of Crowds	430	
	<i>Insight on Business: Social Network Marketing: Let's Buy Together</i>	431	
	Leveraging Brands	435	
	Customer Retention: Strengthening the Customer Relationship	436	
	Personalization and One-to-One Marketing	436	
	Customization and Customer Co-Production	438	
	Transactive Content	438	
	Customer Service	439	
	Net Pricing Strategies	440	
	Free and Freemium	442	
	Versioning	443	
	Bundling	444	
	Dynamic Pricing and Flash Marketing	445	
	Channel Strategies: Managing Channel Conflict	446	
6.5	<i>Case Study: Building a Brand: ExchangeHunterJumper.com</i>	448	
6.6	<i>Review</i>	453	

Key Concepts 453

Questions 456

Projects 457

7 E-COMMERCE ADVERTISING

458

Learning Objectives 458

Video Ads: Shoot, Click, Buy 459

7.1 Marketing Communications 462

Online Advertising 464

Display Ads: Banners and Pop-Ups 465

Rich Media 468

Video Ads 469

Search Engine Advertising: Paid Search Engine Inclusion and Placement 470

Mobile Advertising: iAd and AdMob 477

Sponsorships 477

Referrals (Affiliate Relationship Marketing) 478

E-mail Marketing and the Spam Explosion 478

Online Catalogs 481

Social Marketing: Blogs, Social Networks and Games 483

Blog Advertising 484

Social Network Advertising 484

Game Advertising 485

Insight on Society: Marketing to Children of the Web in the Age of Social Networks 486

Behavioral Targeting: Getting Personal 489

Mixing Offline and Online Marketing Communications 493

7.2 Understanding the Costs and Benefits of Online Marketing Communications 494

Online Marketing Metrics: Lexicon 494

Insight on Business: Are the Very Rich Different from You and Me? 496

How Well Does Online Advertising Work? 502

The Costs of Online Advertising 504

Software for Measuring Online Marketing Results 506

7.3 The Web Site as a Marketing Communications Tool 506

Domain Names 507

Search Engine Optimization 508

Insight on Technology: It's 10 P.M. Do You Know Who Is On Your Web Site? 509

Web Site Functionality 512

7.4 Case Study: Instant Ads: Real-Time Marketing on Exchanges 516

7.5 Review 520

Key Concepts	520
Questions	522
Projects	523

Learning Objectives	524
<i>Discovering Law and Ethics in a Virtual World</i>	525
8.1 <i>Understanding Ethical, Social, and Political Issues in E-commerce</i>	528
A Model For Organizing the Issues	529
Basic Ethical Concepts: Responsibility, Accountability, and Liability	531
Analyzing Ethical Dilemmas	533
Candidate Ethical Principles	534
8.2 <i>Privacy and Information Rights</i>	535
Information Collected at E-commerce Sites	536
Social Networks and Privacy	538
Profiling and Behavioral Targeting	539
The Internet and Government Invasions of Privacy:	
E-commerce Surveillance	543
Legal Protections	544
Informed Consent	546
The FTC's Fair Information Practices Principles	547
The European Data Protection Directive	550
Private Industry Self-Regulation	550
Privacy Advocacy Groups	552
The Emerging Privacy Protection Business	552
Technological Solutions	552
<i>Insight on Business: Chief Privacy Officers</i>	553
<i>Insight on Technology: The Privacy Tug of War: Advertisers vs Consumers</i>	558
8.3 <i>Intellectual Property Rights</i>	561
Types of Intellectual Property Protection	562
Copyright: The Problem of Perfect Copies and Encryption	562
Look and Feel	563
Fair Use Doctrine	563
The Digital Millennium Copyright Act of 1998	564
Patents: Business Methods and Processes	567
E-commerce Patents	568
Patent Reform	571
Trademarks: Online Infringement and Dilution	572
Trademarks and the Internet	572
Cybersquatting and Brandjacking	573

Cyberpiracy	573
Metatagging	575
Keywording	576
Linking	576
Framing	577
Challenge: Balancing the Protection of Property with Other Values	578
8.4 Governance	578
Who Governs E-commerce and the Internet?	579
Can the Internet Be Controlled?	580
Public Government and Law	581
Taxation	582
Net Neutrality	584
8.5 Public Safety and Welfare	585
Protecting Children	585
Cigarettes, Gambling, and Drugs: Is the Web Really Borderless?	587
<i>Insight on Society: The Internet Drug Bazaar</i>	588
8.6 Case Study: The Google Book Settlement: Is It Fair?	592
8.7 Review	596
Key Concepts	596
Questions	600
Projects	600

9

ONLINE MEDIA

602

Learning Objectives	602
<i>Information Wants to Be Expensive</i>	603
9.1 Online Content	607
Content Audience and Market: Where Are the Eyeballs and the Money?	607
Media Utilization	607
Internet and Traditional Media: Cannibalization Versus Complementarity	609
Media Revenues	610
Two Models of the Digital Content Delivery: Paid and User-Generated Content	611
Free or Fee: Attitudes About Paying for Content and the Tolerance for Advertising	614
Media Industry Structure	612
Media Convergence: Technology, Content, and Industry Structure	615
Technological Convergence	615
Content Convergence	615
Industry Convergence	617

Online Content Revenue Models and Business Processes	618
Making a Profit with Online Content: From Free to Fee	620
Key Challenges Facing Content Producers and Owners	622
Technology	622
Cost	622
Distribution Channels and Cannibalization	623
Digital Rights Management (DRM)	623
9.2 The Online Publishing Industry	624
<i>Insight on Business: Who Owns Your Files?</i>	625
Online Newspapers	628
Audience Size and Growth	629
Newspaper Business Models	630
Convergence	632
Challenges: Disruptive Technologies	633
Books: The Evolution of E-books	634
E-books	635
Book Audience Size and Growth	638
E-book Industry Revenue Models	639
Convergence	639
<i>Insight on Society: The Future of Books</i>	643
9.3 The Online Entertainment Industry	645
Online Entertainment Audience Size and Growth	647
Online Traditional Entertainment	647
User-Generated Content: Where Does It Fit?	648
Content	649
Online Entertainment Industry Revenue Models	649
Convergence	649
<i>Insight on Technology: Hollywood Meets the Internet: Round 3</i>	653
9.4 Case Study: Google and YouTube Together: Pass the Popcorn While This Ad Plays	655
9.5 Review	659
Key Concepts	659
Questions	664
Projects	665

10 SOCIAL NETWORKS AND COMMUNITIES

666

Learning Objectives	666
<i>Social Network Fever Spreads to the Professions</i>	667
10.1 Social Networks and Online Communities	669

What Is an Online Social Network?	670
The Difference Between Social Networks and Portals	671
The Growth of Social Networks and Online Communities	671
Turning Social Networks Into Businesses	673
Types of Social Networks and Their Business Models	673
Social Network Features and Technologies	675
The Future of Social Networks	675
10.2 Online Auctions	676
<i>Insight on Technology: Social Operating Systems: Google vs. Facebook</i>	677
Defining and Measuring the Growth of Auctions and Dynamic Pricing	679
Why Are Auctions So Popular? Benefits and Costs of Auctions	681
Benefits of Auctions	681
Risks and Costs of Auctions for Consumers and Businesses	682
Market-Maker Benefits: Auctions as an E-commerce Business Model	683
Types and Examples of Auctions	684
Internet Auction Basics	684
Types of Auctions	686
When to Use Auctions (and for What) in Business	691
Seller and Consumer Behavior at Auctions	693
Seller Profits: Arrival Rate, Auction Length, and Number of Units	693
Auction Prices: Are They the Lowest?	693
Consumer Trust in Auctions	695
When Auction Markets Fail: Fraud and Abuse in Auctions	695
<i>Insight on Society: Swoopo: Online Auction or Game of Chance?</i>	696
10.3 E-commerce Portals	698
The Growth and Evolution of Portals	698
Types of Portals: General Purpose and Vertical Market	700
<i>Insight on Business: The Transformation of AOL</i>	701
Portal Business Models	706
10.4 Case Study: eBay: Is the Party Over?	708
10.5 Review	711
Key Concepts	711
Questions	716
Projects	717

Learning Objectives	718
<i>Blue Nile Sparkles For Your Cleopatra</i>	719
11.1 The Online Retail Sector	723
The Retail Industry	724
Online Retailing	726
E-commerce Retail: The Vision	726
The Online Retail Sector Today	727
Multi-channel Integration	729
11.2 Analyzing the Viability of Online Firms	730
Strategic Analysis	731
Financial Analysis	732
11.3 E-commerce in Action: E-tailing Business Models	733
Virtual Merchants	734
E-commerce in Action: Amazon.com	734
Multi-channel Merchants: Brick-and-Clicks	742
Catalog Merchants	744
Manufacturer-Direct	745
Common Themes in Online Retailing	746
11.4 The Service Sector: Offline and Online	748
<i>Insight on Technology: Using the Web to Shop 'Till You Drop</i>	749
What Are Services?	751
Categorizing Service Industries	751
Knowledge and Information Intensity	752
Personalization and Customization	752
11.5 Online Financial Services	752
Financial Services Industry Trends	753
Online Financial Consumer Behavior	755
Online Banking and Brokerage	755
Multi-channel vs. Pure Online Financial Services Firms	757
Financial Portals and Account Aggregators	758
Online Mortgage and Lending Services	759
Online Insurance Services	760
Online Real Estate Services	761
11.6 Online Travel Services	763
Why Are Online Travel Services So Popular?	763
<i>Insight on Society: Hotel Tax Battle: The Online Travel Industry vs Local Government</i>	764

The Online Travel Market	766
Online Travel Industry Dynamics	766
<i>Insight on Business: Zipcars</i>	767
11.7 Online Career Services	770
It's Just Information: The Ideal Web Business?	771
Online Recruitment Industry Trends	773
11.8 Case Study: Open Table: Your Reservation Is Waiting	775
11.9 Review	779
Key Concepts	779
Questions	786
Projects	787

12

B2B E-COMMERCE

790

Learning Objectives	790
<i>Volkswagen Builds Its B2B Net Marketplace</i>	791
12.1 B2B E-commerce and Supply Chain Management	794
Defining and Measuring the Growth of B2B Commerce	795
The Evolution of B2B Commerce	795
The Growth of B2B E-commerce 2009–2013	797
Industry Forecasts	798
Potential Benefits of B2B E-commerce	799
The Procurement Process and the Supply Chain	799
Types of Procurement	800
The Role of Existing Legacy Computer Systems	801
Trends in Supply Chain Management and Collaborative Commerce	803
Supply Chain Simplification	803
Electronic Data Interchange (EDI)	803
Supply Chain Management Systems	806
Collaborative Commerce	807
<i>Insight on Technology: RFID Autoidentification: Making Your Supply Chain Visible</i>	808
Main Types of Internet-based B2B Commerce	811
12.2 Net Marketplaces	812
The Variety and Characteristics of Net Marketplaces	812
Types of Net Marketplaces	812
E-distributors	814
E-procurement	815
Exchanges	816
Industry Consortia	819
The Long-Term Dynamics of Net Marketplaces	821

12.3	<i>Private Industrial Networks</i>	823
	What Are Private Industrial Networks?	823
	Characteristics of Private Industrial Networks	824
	Private Industrial Networks and Collaborative Commerce	825
	<i>Insight on Business: Wal-Mart Develops a Private Industrial Network</i>	826
	Implementation Barriers	828
	Industry-Wide Private Industrial Networks	829
	The Long-Term Dynamics of Private Industrial Networks	830
12.4	<i>Case Study: Elemica: Cooperation, Collaboration, and Community</i>	831
12.5	<i>Review</i>	836
	Key Concepts	836
	Questions	841
	Projects	841
	<i>References</i>	843
	<i>Index</i>	859
	<i>Credits</i>	899