

Contents

Chapter List by Subject Area	xv	C/C++	164
Contributors	xix	<i>Mario Giannini</i>	
Preface	xxvii	Circuit, Message, and Packet Switching	176
Guide to the Internet Encyclopedia	xxxix	<i>Robert H. Greenfield</i>	
Reviewers	887	Click-and-Brick Electronic Commerce	185
Index	895	<i>Charles Steinfield</i>	
 Volume 1		Client/Server Computing	194
Active Server Pages	1	<i>Daniel J. McFarland</i>	
<i>J. Christopher Sandvig</i>		Collaborative Commerce (C-commerce)	204
ActiveX	11	<i>Rodney J. Heisterberg</i>	
<i>Roman Erenshiteyn</i>		Common Gateway Interface (CGI) Scripts	218
ActiveX Data Objects (ADO)	25	<i>Stan Kurkovsky</i>	
<i>Bhushan Kapoor</i>		Computer Literacy	229
Application Service Providers (ASPs)	36	<i>Hossein Bidgoli</i>	
<i>Hans-Arno Jacobsen</i>		Computer Security Incident Response Teams (CSIRTs)	242
Authentication	48	<i>Raymond R. Panko</i>	
<i>Patrick McDaniel</i>		Computer Viruses and Worms	248
Benchmarking Internet	57	<i>Robert Slade</i>	
<i>Vasja Vehovar and Vesna Dolnicar</i>		Conducted Communications Media	261
Biometric Authentication	72	<i>Thomas L. Pigg</i>	
<i>James. L. Wayman</i>		Consumer Behavior	272
Bluetooth™—A Wireless Personal Area Network	84	<i>Mary Finley Wolfinbarger and Mary C. Gilly</i>	
<i>Brent A. Miller</i>		Consumer-Oriented Electronic Commerce	284
Business Plans for E-commerce Projects	96	<i>Henry Chan</i>	
<i>Amy W. Ray</i>		Convergence of Data, Sound, and Video	294
Business-to-Business (B2B) Electronic Commerce	106	<i>Gary J. Krug</i>	
<i>Julian J. Ray</i>		Copyright Law	303
Business-to-Business (B2B) Internet Business Models	120	<i>Gerald R. Ferrera</i>	
<i>Dat-Dao Nguyen</i>		Customer Relationship Management on the Web	315
Business-to-Consumer (B2C) Internet Business Models	129	<i>Russell S. Winer</i>	
<i>Diane M. Hamilton</i>		Cybercrime and Cyberfraud	326
Capacity Planning for Web Services	139	<i>Camille Chin</i>	
<i>Robert Oshana</i>		Cyberlaw: The Major Areas, Development, and Provisions	337
Cascading Style Sheets (CSS)	152	<i>Dennis M. Powers</i>	
<i>Fred Condo</i>		Cyberterrorism	353
		<i>Charles W. Jaeger</i>	
		Databases on the Web	373
		<i>A. Neil Yerkey</i>	

Data Compression	384	Electronic Procurement	645
<i>Chang-Su Kim and C.-C. Jay Kuo</i>		<i>Robert H. Goffman</i>	
Data Mining in E-commerce	400	E-mail and Instant Messaging	660
<i>Sviatoslav Braynov</i>		<i>Jim Grubbs</i>	
Data Warehousing and Data Marts	412	E-marketplaces	671
<i>Chuck Kelley</i>		<i>Paul R. Prabhaker</i>	
Denial of Service Attacks	424	Encryption	686
<i>E. Eugene Schultz</i>		<i>Ari Juels</i>	
Developing Nations	434	Enhanced TV	695
<i>Nanette S. Levinson</i>		<i>Jim Krause</i>	
DHTML (Dynamic HyperText Markup Language)	444	Enterprise Resource Planning (ERP)	707
<i>Craig D. Knuckles</i>		<i>Zinovy Radovitsky</i>	
Digital Communication	457	E-systems for the Support of Manufacturing Operations	718
<i>Robert W. Heath Jr., and Atul A. Salvekar</i>		<i>Robert H. Lowson</i>	
Digital Divide	468	Extensible Markup Language (XML)	732
<i>Jaime J. Dávila</i>		<i>Rich Dorfman</i>	
Digital Economy	477	Extensible Stylesheet Language (XSL)	755
<i>Nirvikar Singh</i>		<i>Jesse M. Heines</i>	
Digital Identity	493	Extranets	793
<i>Drummond Reed and Jerry Kindall</i>		<i>Stephen W. Thorpe</i>	
Digital Libraries	505	Feasibility of Global E-business Projects	803
<i>Cavan McCarthy</i>		<i>Peter Raven and C. Patrick Fleenor</i>	
Digital Signatures and Electronic Signatures	526	File Types	819
<i>Raymond R. Panko</i>		<i>Jennifer Lagier</i>	
Disaster Recovery Planning	535	Firewalls	831
<i>Marco Cremonini and Pierangela Samarati</i>		<i>James E. Goldman</i>	
Distance Learning (Virtual Learning)	549	Fuzzy Logic	841
<i>Chris Dede, Tara Brown-L'Bahy, Diane Ketelhut, and Pamela Whitehouse</i>		<i>Yan-Qing Zhang</i>	
Downloading from the Internet	561	Volume 2	
<i>Kuber Maharjan</i>		Game Design: Games for the World Wide Web	1
E-business ROI Simulations	577	<i>Bruce R. Maxim</i>	
<i>Edwin E. Lewis</i>		Gender and Internet Usage	12
E-government	590	<i>Ruby Roy Dholakia, Nikhilesh Dholakia, and Nir Kshetri</i>	
<i>Shannon Schelin and G. David Garson</i>		Geographic Information Systems (GIS) and the Internet	23
Electronic Commerce and Electronic Business	601	<i>Haluk Cetin</i>	
<i>Charles Steinfield</i>		Global Diffusion of the Internet	38
Electronic Data Interchange (EDI)	613	<i>Nikhilesh Dholakia, Ruby Roy Dholakia, and Nir Kshetri</i>	
<i>Matthew K. McGowan</i>		Global Issues	52
Electronic Funds Transfer	624	<i>Babita Gupta</i>	
<i>Roger Gate and Alec Nacamuli</i>			
Electronic Payment	635		
<i>Donal O'Mahony</i>			

Groupware <i>Pierre A. Balthazard and Richard E. Potter</i>	65	Internet Relay Chat (IRC) <i>Paul L. Witt</i>	311
Guidelines for a Comprehensive Security System <i>Margarita Maria Lenk</i>	76	Internet Security Standards <i>Raymond R. Panko</i>	320
Health Insurance and Managed Care <i>Etienne E. Pracht</i>	89	Internet2 <i>Linda S. Bruenjes, Carolyn J. Siccama, and John LeBaron</i>	334
Health Issues <i>David Lukoff and Jayne Gackenbach</i>	104	Intranets <i>William T. Schiano</i>	346
History of the Internet <i>John Sherry and Colleen Brown</i>	114	Intrusion Detection Techniques <i>Peng Ning and Sushil Jajodia</i>	355
HTML/XHTML (HyperText Markup Language/Extensible HyperText Markup Language) <i>Mark Michael</i>	124	Inventory Management <i>Janice E. Carrillo, Michael A. Carrillo, and Anand Paul</i>	368
Human Factors and Ergonomics <i>Robert W. Proctor and Kim-Phuong L. Vu</i>	141	Java <i>Judith C. Simon and Charles J. Campbell</i>	379
Human Resources Management <i>Dianna L. Stone, Eduardo Salas, and Linda C. Isenhour</i>	150	JavaBeans and Software Architecture <i>Nenad Medvidovic and Nikunj R. Mehta</i>	388
Information Quality in Internet and E-business Environments <i>Larry P. English</i>	163	JavaScript <i>Constantine Roussos</i>	401
Integrated Services Digital Network (ISDN): Narrowband and Broadband Services and Applications <i>John S. Thompson</i>	180	JavaServer Pages (JSP) <i>Frederick Pratter</i>	415
Intelligent Agents <i>Daniel Dajun Zeng and Mark E. Nissen</i>	192	Knowledge Management <i>Ronald R. Tidd</i>	431
Interactive Multimedia on the Web <i>Borko Furht and Oge Marques</i>	204	Law Enforcement <i>Robert Vaughn and Judith C. Simon</i>	443
International Cyberlaw <i>Julia Alpert Gladstone</i>	216	Law Firms <i>Victoria S. Dennis and Judith C. Simon</i>	457
International Supply Chain Management <i>Gary LaPoint and Scott Webster</i>	233	Legal, Social, and Ethical Issues <i>Kenneth Einar Himma</i>	464
Internet Architecture <i>Graham Knight</i>	244	Library Management <i>Clara L. Sitter</i>	477
Internet Censorship <i>Julie Hersberger</i>	264	Linux Operating System <i>Charles Abzug</i>	486
Internet Etiquette (Netiquette) <i>Joseph M. Kayany</i>	274	Load Balancing on the Internet <i>Jianbin Wei, Cheng-Zhong Xu, and Xiaobo Zhou</i>	499
Internet Literacy <i>Hossein Bidgoli</i>	286	Local Area Networks <i>Wayne C. Summers</i>	515
Internet Navigation (Basics, Services, and Portals) <i>Pratap Reddy</i>	298	Machine Learning and Data Mining on the Web <i>Qiang Yang</i>	527
		Managing a Network Environment <i>Haniph A. Latchman and Jordan Walters</i>	537

Managing the Flow of Materials Across the Supply Chain	551	Online Stalking	812
<i>Matthias Holweg and Nick Rich</i>		<i>David J. Loundy</i>	
Marketing Communication Strategies	562	Open Source Development and Licensing	819
<i>Judy Strauss</i>		<i>Steven J. Henry</i>	
Marketing Plans for E-commerce Projects	574	Organizational Impact	832
<i>Malu Roldan</i>		<i>John A. Mendonca</i>	
Medical Care Delivery	586	Volume 3	
<i>Steven D. Schwartzberg</i>		Passwords	1
Middleware	603	<i>Jeremy Rasmussen</i>	
<i>Robert Simon</i>		Patent Law	14
Mobile Commerce	614	<i>Gerald Bluhm</i>	
<i>Mary J. Cronin</i>		Peer-to-Peer Systems	25
Mobile Devices and Protocols	627	<i>L. Jean Camp</i>	
<i>Julie R. Mariga and Benjamin R. Pobanz</i>		Perl	34
Mobile Operating Systems and Applications	635	<i>David Stotts</i>	
<i>Julie R. Mariga</i>		Personalization and Customization Technologies	51
Multimedia	642	<i>Sviatoslav Braynov</i>	
<i>Joey Bargsten</i>		Physical Security	64
Multiplexing	664	<i>Mark Michael</i>	
<i>Dave Whitmore</i>		Politics	84
Nonprofit Organizations	675	<i>Paul Gronke</i>	
<i>Dale Nesbary</i>		Privacy Law	96
Online Analytical Processing (OLAP)	685	<i>Ray Everett-Church</i>	
<i>Joseph Morabito and Edward A. Stohr</i>		Propagation Characteristics of Wireless Channels	124
Online Auctions	699	<i>P. M. Shankar</i>	
<i>Gary C. Anders</i>		Prototyping	135
Online Auction Site Management	709	<i>Eric H. Nyberg</i>	
<i>Peter R. Wurman</i>		Public Accounting Firms	145
Online Banking and Beyond: Internet-Related Offerings from U.S. Banks	720	<i>C. Janie Chang and Annette Nellen</i>	
<i>Siaw-Peng Wan</i>		Public Key Infrastructure (PKI)	156
Online Communities	733	<i>Russ Housley</i>	
<i>Lee Sproull</i>		Public Networks	166
Online Dispute Resolution	745	<i>Dale R. Thompson and Amy W. Apon</i>	
<i>Alan Gaitenby</i>		Radio Frequency and Wireless Communications	177
Online News Services (Online Journalism)	755	<i>Okechukwu C. Ugweje</i>	
<i>Bruce Garrison</i>		Real Estate	192
Online Public Relations	769	<i>Ashok Deo Bardhan and Dwight Jaffee</i>	
<i>Kirk Hallahan</i>		Research on the Internet	201
Online Publishing	784	<i>Paul S. Piper</i>	
<i>Randy M. Brooks</i>		Return on Investment Analysis for E-business Projects	211
Online Religion	798	<i>Mark Jeffery</i>	
<i>T. Matthew Ciolek</i>			

Risk Management in Internet-Based Software Projects	229	Travel and Tourism	459
<i>Roy C. Schmidt</i>		<i>Daniel R. Fesenmaier, Ulrike Gretzel, Yeong-Hyeon Hwang, and Youcheng Wang</i>	
Rule-Based and Expert Systems	237	Universally Accessible Web Resources: Designing for People with Disabilities	477
<i>Robert J. Schalkoff</i>		<i>Jon Gunderson</i>	
Secure Electronic Transactions (SET)	247	Unix Operating System	494
<i>Mark S. Merkow</i>		<i>Mark Shacklette</i>	
Secure Sockets Layer (SSL)	261	Usability Testing: An Evaluation Process for Internet Communications	512
<i>Robert J. Boncella</i>		<i>Donald E. Zimmerman and Carol A. Akerelrea</i>	
Securities Trading on the Internet	274	Value Chain Analysis	525
<i>Marcia H. Flicker</i>		<i>Brad Kleindl</i>	
Software Design and Implementation in the Web Environment	286	Video Compression	537
<i>Jeff Offutt</i>		<i>Immanuel Freedman</i>	
Software Piracy	297	Video Streaming	554
<i>Robert K. Moniot</i>		<i>Herbert Tuttle</i>	
Speech and Audio Compression	307	Virtual Enterprises	567
<i>Peter Kroon</i>		<i>J. Cecil</i>	
Standards and Protocols in Data Communications	320	Virtual Private Networks: Internet Protocol (IP) Based	579
<i>David E. Cook</i>		<i>David E. McDysan</i>	
Storage Area Networks (SANs)	329	Virtual Reality on the Internet: Collaborative Virtual Reality	591
<i>Vladimir V. Riabov</i>		<i>Andrew Johnson and Jason Leigh</i>	
Strategic Alliances	340	Virtual Teams	600
<i>Patricia Adams</i>		<i>Jamie S. Switzer</i>	
Structured Query Language (SQL)	353	Visual Basic	608
<i>Erick D. Slazinski</i>		<i>Dennis O. Owen</i>	
Supply Chain Management	365	Visual Basic Scripting Edition (VBScript)	620
<i>Gerard J. Burke and Asoo J. Vakharia</i>		<i>Timothy W. Cole</i>	
Supply Chain Management and the Internet	374	Visual C++ (Microsoft)	635
<i>Thomas D. Lairson</i>		<i>Blayne E. Mayfield</i>	
Supply Chain Management Technologies	387	Voice over Internet Protocol (IP)	647
<i>Mark Smith</i>		<i>Roy Morris</i>	
Supply Networks: Developing and Maintaining Relationships and Strategies	398	Web-Based Training	661
<i>Robert H. Lowson</i>		<i>Patrick J. Fahy</i>	
Taxation Issues	413	Webcasting	674
<i>Annette Nellen</i>		<i>Louisa Ha</i>	
TCP/IP Suite	424	Web Content Management	687
<i>Prabhaker Mateti</i>		<i>Jian Qin</i>	
Telecommuting and Telework	436	Web Hosting	699
<i>Ralph D. Westfall</i>		<i>Doug Kaye</i>	
Trademark Law	448	Web Quality of Service	711
<i>Ray Everett-Church</i>		<i>Tarek Abdelzaher</i>	

Web Search Fundamentals <i>Raymond Wisman</i>	724	Wireless Application Protocol (WAP) <i>Lillian N. Cassel</i>	805
Web Search Technology <i>Clement Yu and Weiyi Meng</i>	738	Wireless Communications Applications <i>Mohsen Guizani</i>	817
Web Services <i>Akhil Sahai, Sven Graupner, and Wooyoung Kim</i>	754	Wireless Internet <i>Magda El Zarki, Geert Heijenk and Kenneth S. Lee</i>	831
Web Site Design <i>Robert E. Irie</i>	768	Wireless Marketing <i>Pamela M. H. Kwok</i>	850
Wide Area and Metropolitan Area Networks <i>Lynn A. DeNoia</i>	776	XBRL (Extensible Business Reporting Language): Business Reporting with XML	863
Windows 2000 Security <i>E. Eugene Schultz</i>	792	<i>J. Efrim Boritz and Won Gyun No</i>	