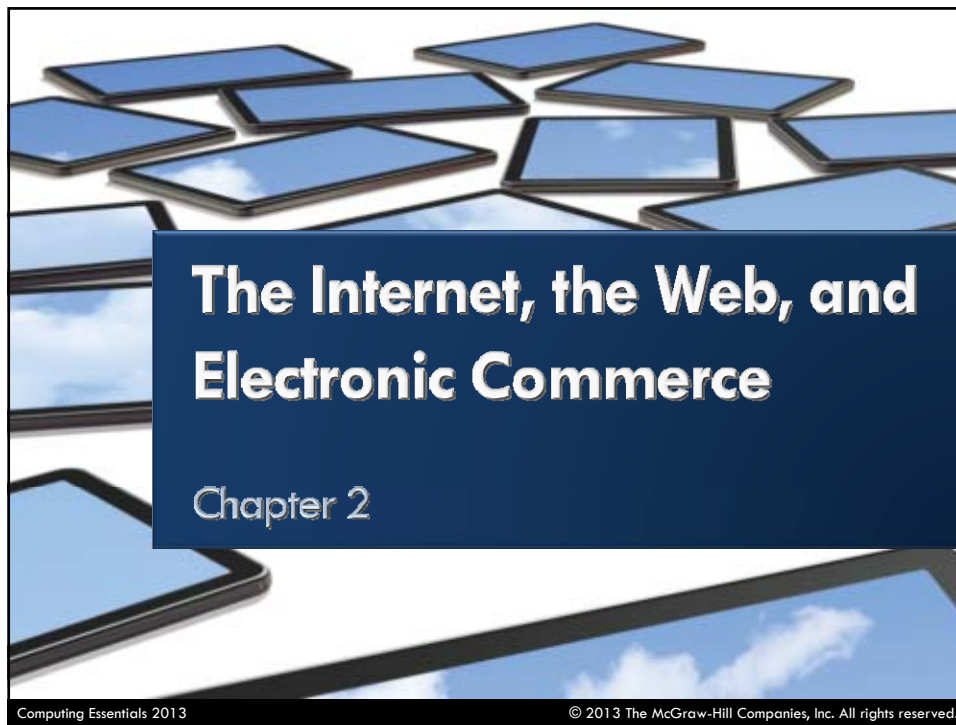




The Internet, the Web, and Electronic Commerce

Competencies (Page 1 of 2)

- Discuss the origins of the [Internet](#) and the [Web](#).
- Describe how to access the Web using providers and browsers.
- Discuss Internet communications, including e-mail, instant messaging, social networking, blogs, microblogs, Webcasts, podcasts, and wikis.

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Competencies (Page 2 of 2)

- Describe search tools, including search engines, Web Directories, metasearch engines, and specialized search engines.
- Evaluate the accuracy of information on the Web.
- Discuss electronic commerce, including B2C, C2C, B2B, and security issues.
- Describe cloud computing, including the three-way interaction of clients, Internet, and service providers.
- Describe Web utilities including plug-ins, filters, file transfer utilities, and Internet security suites.



2-3

Introduction

- The Internet is often referred to as the Information Superhighway because it connects millions of people across the globe.
- Unlike a typical highway, the Internet moves ideas, data, and information through networks.
- The Web provides an easy-to-use, intuitive multimedia interface to connect to the Internet.
- Competent end users need to be aware of the resources available on the Internet and the Web.

2-4

The Internet and the Web

- The Internet is the largest global network, connecting smaller networks worldwide
- The Internet was launched in 1969
 - National computer network
 - US funded project called [ARPANET](#)
- The World Wide Web or WWW was introduced in 1991 at [CERN](#)

2-5

Common Internet Uses

- Communicating
 - e-mail
 - Discussions
- [Online Shopping](#)
- Searching
 - Virtual libraries
- Education or [e-learning](#)
- Entertainment



2-6

Making IT Work for You

iPods and Video from the Internet

- Use the Internet to locate and play movies and television shows
- Transfer video to a digital media player



2-7

Access

- Common way to access the Internet is through a Commercial Internet Service Provider (ISP)
 - Provide a connection for individuals to access the Internet
 - Use telephone lines, cable, and/or wireless connections

2-8

Browsers

- Programs that provide access to Web resources
- Allow you to **surf** the Internet
- Popular Web **browsers** include:
 - Mozilla Firefox
 - Apple Safari
 - Microsoft Internet Explorer
 - Google Chrome
- **Address** or location of the resource must be specified
 - **URL**



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URLs

- Uniform Resource Locator
 - Has at least two parts
 - Protocol
 - Domain name
- Top-level domain (TLD)
 - Identifies the type of organization



Domain	Organization Type
.com	Commercial
.edu	Educational
.gov	Government
.mil	U.S. military
.net	Network

2-10

HTML and Hyperlinks

- Browsers interpret HTML commands
 - Hypertext Markup Language
 - Contained in a document
- Display document as a Web page
- Hyperlinks
 - Connect to other web pages



2-11

Interactive Web Pages

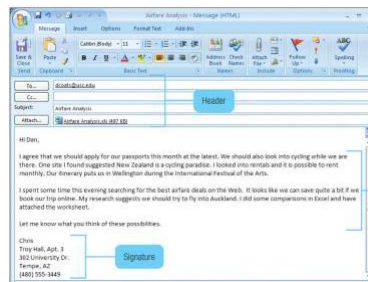
- Interactive Features on Web Pages may be triggered by special programming instructions written in these languages
 - Javascript
 - AJAX
 - Java



2-12

Communication

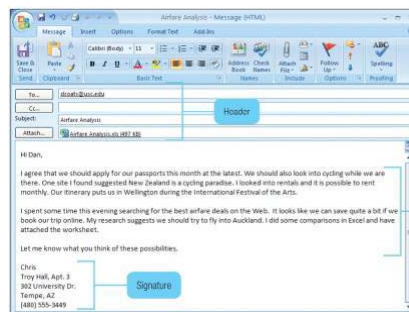
- Most popular Internet activity
 - Electronic Mail (E-Mail)
 - Instant Messaging
 - Social Networking



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E-Mail

- Transmission of electronic messages over the Internet
 - Client-based
 - Web-based - Webmail



Return

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The Internet, the Web, and Electronic Commerce

E-Mail Address Example

The diagram illustrates the components of the email address `dcoats@usc.edu`. A red label 'user name' points to the text 'dcoats'. A purple label 'top-level domain' points to the text 'edu'. A green label 'domain name' points to the text 'usc'. The '@' symbol separates the user name from the domain name.

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The Internet, the Web, and Electronic Commerce

Spam

- Junk and/or unwanted e-mail
- Computer **viruses** or destructive programs are often attached to unsolicited email
 - CAN-SPAM Act
- **Spam blockers** / **spam filters** use a variety of approaches to identify and control spam

Spam Blocker	Site
SPAMfighter	www.spamfighter.com
SpamEater	www.spameater.com
Spam Buster	www.spambuster.com

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Instant Messaging

- Extension of email that provides direct, live communication between two or more people
- **Instant messaging** programs also include:
 - Video conferencing features
 - File sharing
 - Remote assistance
- Most widely used instant messaging services:
 - AOL's Instant Messenger
 - Microsoft's MSN Messenger
 - Yahoo Messenger

[Return](#)

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Social Networking

- Connecting people and organizations that share a common interest or activity
- Three most popular:
 - MySpace
 - Facebook
 - Facebook Profiles
 - Facebook Pages
 - Facebook groups
 - LinkedIn



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Blogs, Microblogs

- Web logs or blogs – personal news pages that are date/time-stamped and arranged with the most recent items shown first
- Microblogs – short status updates that answer the question:
 - What are you doing now?



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Webcasts, Podcasts, Wikis

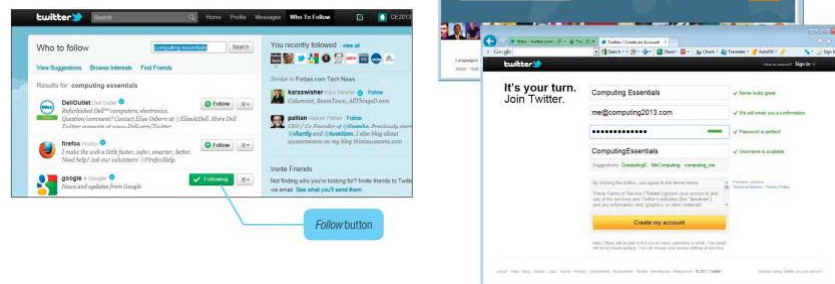
- Webcast – streaming technology for live broadcast of audio and video
- Podcast-audio and video files that can be downloaded to your computer or media player
- Wiki – a specially designed Web site that allows visitors to edit the contents, supports collaborative writing



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Making IT Work for You Twitter

- Microblog to help you stay in touch with friends and family



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Search Tools

- Search Engines
- Web Directories
- Metasearch Engines
- Specialized Search Engines
- Content Evaluation

Search Service	Site
AOL Search	search.aol.com
Ask	www.ask.com
Bing	www.bing.com
Google	www.google.com
Yahoo!	www.yahoo.com

Metasearch Service	Site
Dogpile	www.dogpile.com
Ixquick	www.ixquick.com
MetaCrawler	www.metacrawler.com
Search	www.search.com
Clusty	www.clusty.com

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Search Engines

- Specialized programs to assist in locating information
- Types of searches
 - Keyword search
 - Directory search



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Web Directories

- [Subject directories](#)
- Organize information according to categories or topics
 - Art, games, news
- dir.yahoo.com
- www.dmoz.org

[Return](#)

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Metasearch Engines

- Automatically submit your search request to several engines simultaneously

Metasearch Service	Site
Dogpile	www.dogpile.com
Ixquick	www.ixquick.com
MetaCrawler	www.metacrawler.com
Search	www.search.com
Clusty	www.clusty.com



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Specialized Search Engines

- Subject specific web sites

Topic	Site
Environment	www.eco-web.com
Fashion	www.infomat.com
History	www.historynet.com
Law	www.lawcrawler.com
Medicine	www.medscape.com

[Return](#)

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Content Evaluation

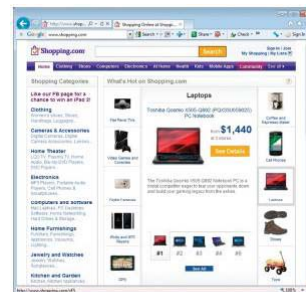
- Not all information on the web is accurate
- Ways to evaluate accuracy of Web information include:
 - Authority
 - Accuracy
 - Objectivity
 - Currency

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Electronic Commerce

- Also known as e-commerce
- Buying and selling of goods over the Internet
 - Business-to-consumer (B2C)
 - Consumer-to consumer (C2C)
 - Web auctions
 - Business-to-business (B2B)



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The Internet, the Web, and Electronic Commerce

Business to Consumer

- Fastest growing type of e-commerce
- Three most widely used B2C applications:
 - Online banking
 - Online stock trading
 - e-trading
 - Shopping

Support	Site
Product comparisons	www.shopping.com
Locating closeouts	www.overstock.com
Finding coupons	www.ebates.com

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The Internet, the Web, and Electronic Commerce

Consumer to Consumer

- Consumer-to-consumer e-commerce (C2C)
- Web auctions
- Similar to traditional auctions
 - Auction house sites
 - Person-to-person auction sites

Organization	Site
Amazon	www.auctions.amazon.com
WeBidz	www.webidz.com
eBay	www.ebay.com
Overstock	auctions.overstock.com

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Business to Business

- Involves the sale of a product or service from one business to another (B2B)
- Primarily a manufacturer supplier relationship

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Security

- Payment methods must be fast, reliable, and secure
- Three options
 - Checks
 - Credit card
 - Digital cash

Organization	Site
ECash	www.ecash.com
Google	checkout.google.com
Internet Cash	www.internetcash.com
PayPal	www.paypal.com



2-32

Cloud Computing

- Shifts computing activities from users' desktops to computers on the Internet
- Frees end-users from owning, maintaining, and storing software programs and data
- Three basic components:
 - Clients (end-users)
 - Service providers
 - The Internet



2-33

Web Utilities

- Specialized utility programs that make using the Internet & Web safer and easier
 - [Plug-Ins](#)
 - [Filters](#)
 - [File Transfer Utilities](#)
 - [Internet Security Suites](#)



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The Internet, the Web, and Electronic Commerce

Plug-Ins

- Programs that automatically start and operate as part of your browser
- Provide an enhanced browsing experience by enabling special file formats and multimedia elements
 - Acrobat Reader
 - Flash
 - QuickTime
 - RealPlayer
 - Silverlight

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The Internet, the Web, and Electronic Commerce

Filters

- Programs that block access to selected sites and can set time limits
- Monitor total time spent on the Internet and at individual web sites
 - CyberPatrol
 - Cybersitter
 - iProtectYou Pro Web Filter
 - Net Nanny
 - Safe Eyes Platinum

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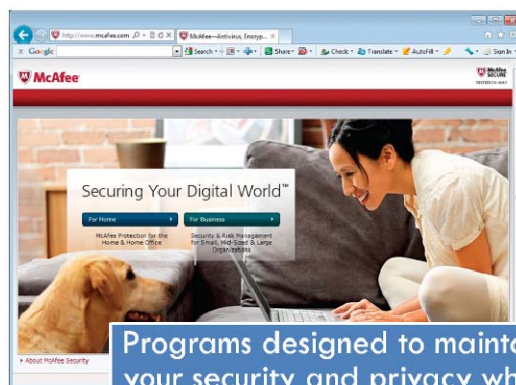
File Transfer Utilities

- Programs that help you upload and download files to and from the Internet
- Three popular types of programs
 - File transfer protocol (FTP) and secure file transfer protocol (SFTP)
 - Web-based file transfer services
 - Bit-Torrent

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Internet Security Suites



Programs designed to maintain your security and privacy while on the web

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Careers In IT - Webmasters

- Develop and maintain websites and resources
- Backup of company website
- Update and develop new resources
- Work with the marketing department to increase site traffic and monitor the flow of customer interactions



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A Look to the Future Web-Accessible Refrigerators

- “Smart” appliances in homes will have their own Web page
- Refrigerators know what food they contain
- Appliance could send an e-mail list to the grocery store for restocking
- Downsides?



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The Internet, the Web, and Electronic Commerce

Open-Ended Questions (Page 1 of 3)

- Discuss the Internet, including its origins and most common uses. What activities have you participated in? Which one do you think is the most popular?
- Describe how to access the Internet. What are the providers? Define browsers and discuss URLs, HTML, JavaScript, Applets, and mobile browsers.
- Discuss Internet communications, including e-mail, instant messaging, social networking, blogs, microblogs, Webcasts, podcasts, and wikis.

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The Internet, the Web, and Electronic Commerce

Open-Ended Questions (Page 2 of 3)

- Define search tools including search services. Discuss search engines, Web directories, metasearch engines, specialized search engines. Describe how to evaluate the content of a web site.
- Describe electronic commerce, including business-to-consumer, consumer-to-consumer, and business-to-business e-commerce, and security.

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Open-Ended Questions (Page 3 of 3)

- What is cloud computing? Describe the three basic components of cloud computing.
- What are Web utilities? Discuss plug-ins, filters, file transfer utilities, and Internet security suites

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