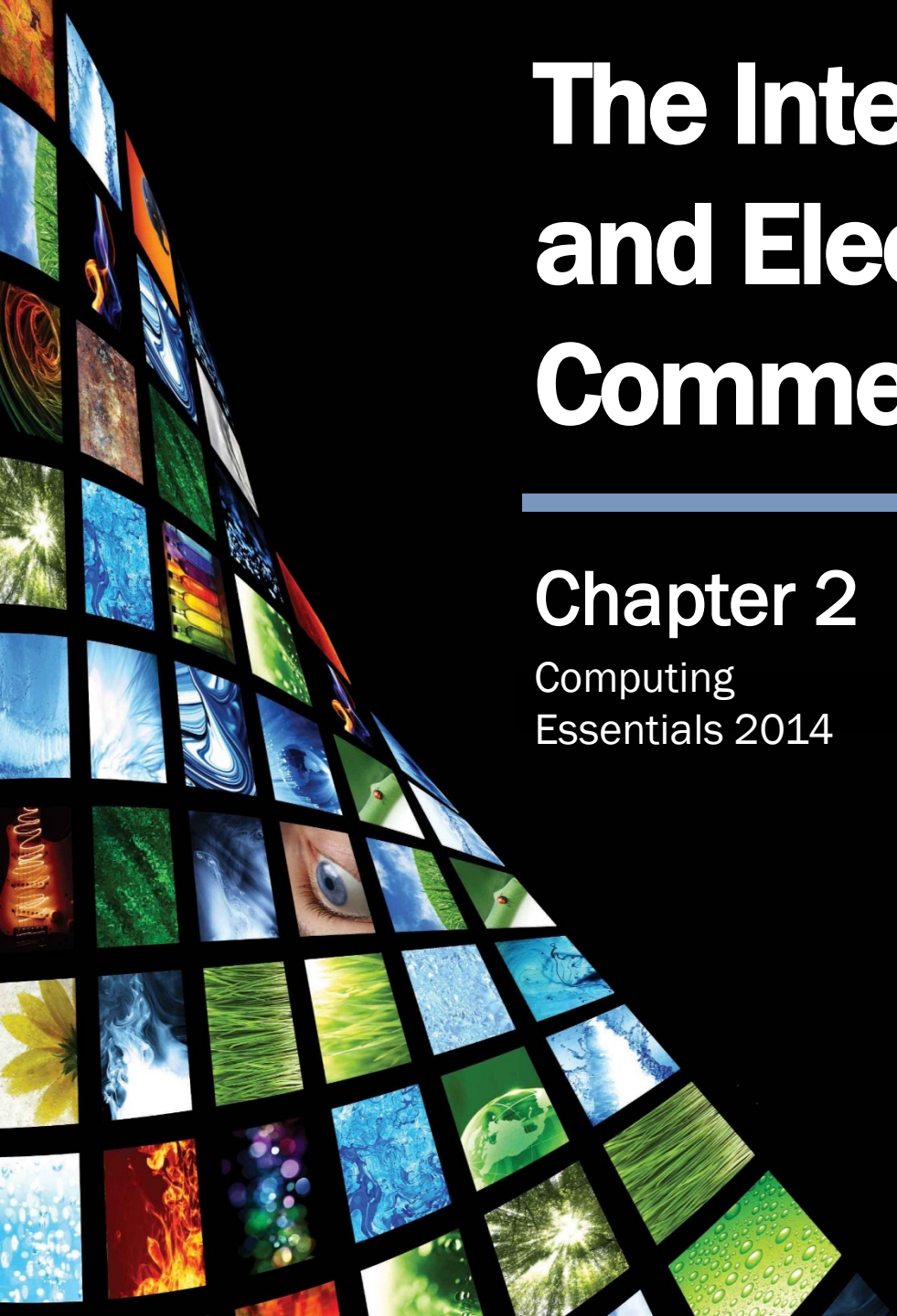


The Internet, the Web, and Electronic Commerce

Chapter 2

Computing
Essentials 2014

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Competencies (Page1 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 email, text messaging, instant messaging, social networking, blogs, microblogs, Webcasts, podcasts, and wikis.

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Competencies (Page 2 of 2)

- Describe search tools, including search 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.

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

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 interface to Internet resources that has become an everyday tool.
- Competent end users need to be aware of the resources available on the Internet and the Web and how to access them.

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

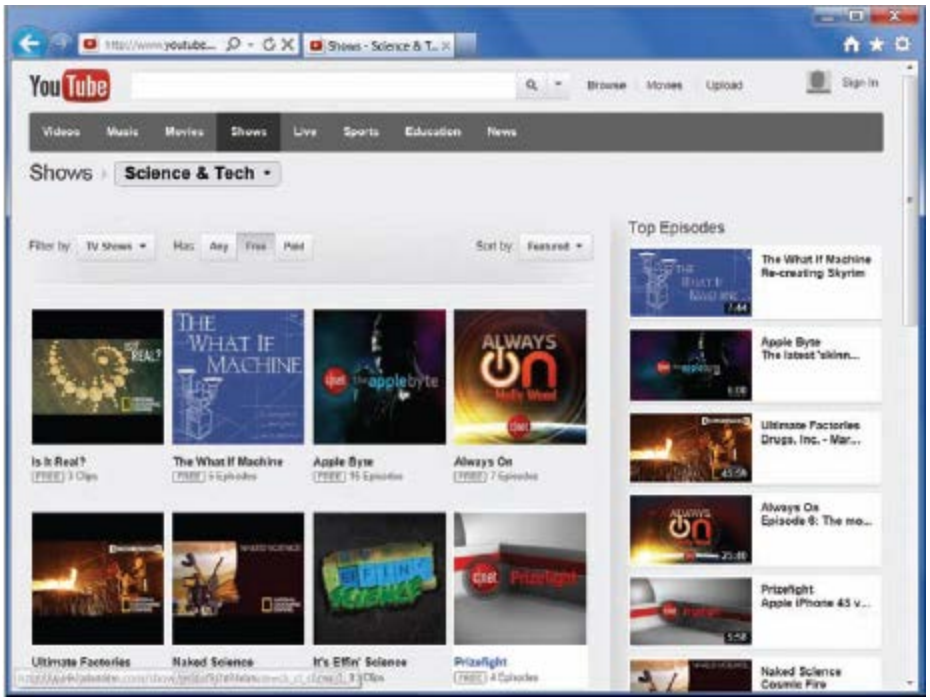
The Internet and the Web

- The Internet is a large global network, connecting smaller networks worldwide
- The Internet was launched in 1969
  - US funded project to develop a national computer network
  - ARPANET (Advanced Research Project Agency Network)
- The World Wide Web or WWW was introduced in 1991 at CERN

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Common Internet Uses

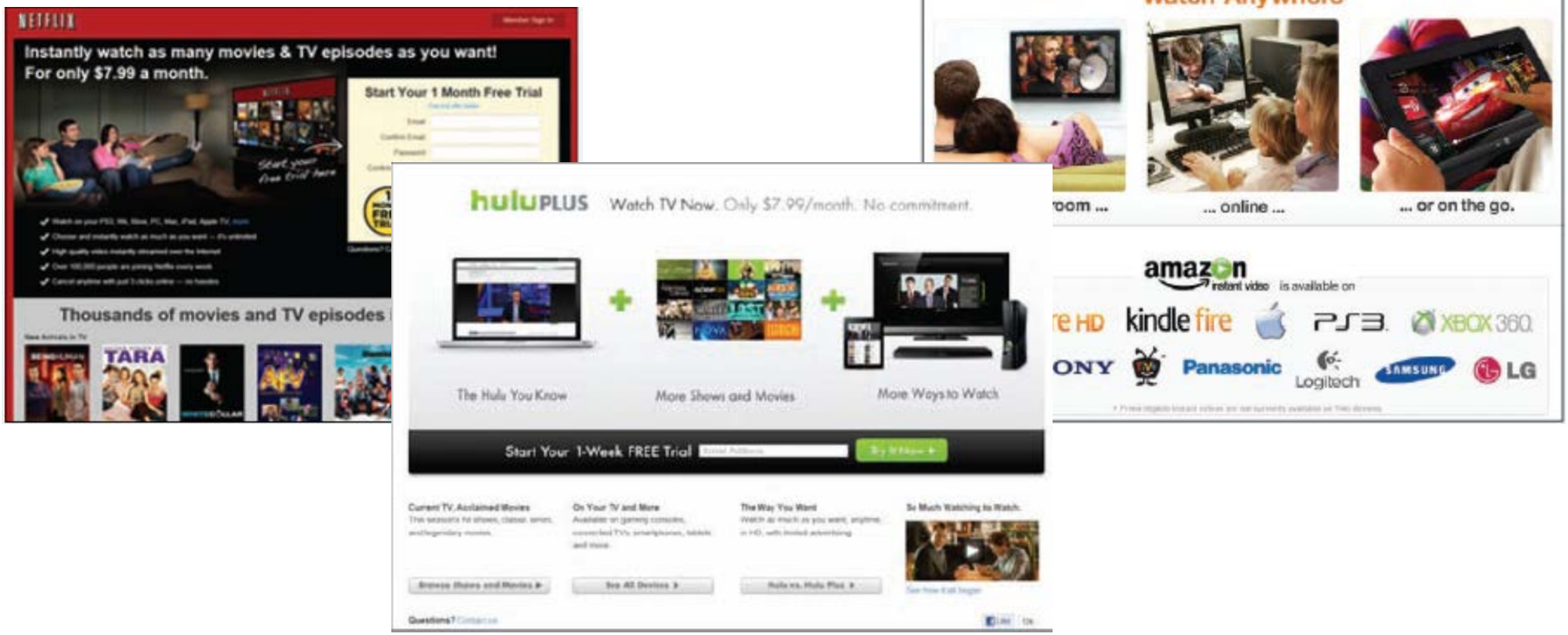
- Communicating
  - e-mail, photos, videos
  - Discussions
- Online Shopping
- Searching
  - Virtual libraries
- Education or e-learning
- Entertainment



© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Making IT Work for You ~ Online Entertainment

- Use the Internet to locate and play movies and television shows
- Netflix, Hulu, Amazon Prime



© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

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

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Browsers

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

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

URLs

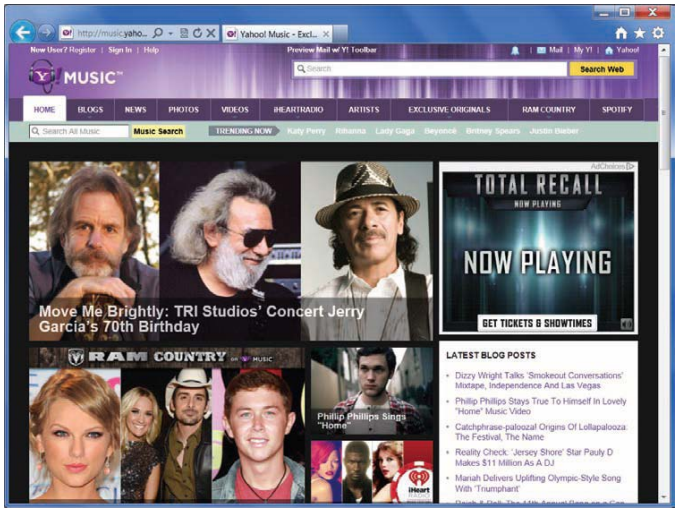
- **Uniform Resource Locator**
  - Has at least two parts
    - Protocol
    - Domain name
- **Top-level domain (TLD)**
  - Identifies the type of organization

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

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

HTML and Hyperlinks

- **Browsers interpret HTML commands**
  - Hypertext Markup Language
- **Display document as a Web page**
- **Hyperlinks**
  - Connect to other web pages
    - Text files
    - Graphic images
    - Audio and Video Clips



© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Interactive Web Sites

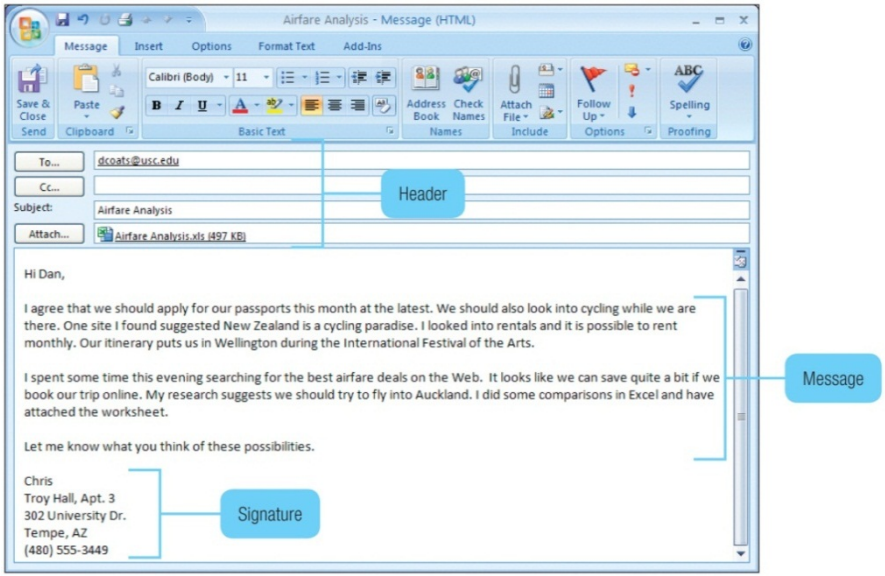
- Technologies used to provide highly interactive and animated websites
  - Cascading Style Sheets (CSS)
  - JavaScript
  - AJAX
  - Applets
- Mobile Browsers

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Communication

- Communication is the most popular Internet activity
- E-mail
  - Transmission of electronic messages over the Internet
  - Client-based
  - Web-based – Webmail

E-Mail Address



© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

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

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Messaging

- **Text messaging / texting**
  - Short electronic message
- **Instant messaging**
  - Extension of email that provides direct, live communication between two or more people
    - Most programs include video conferencing features, file sharing and remote assistance

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Social Networking

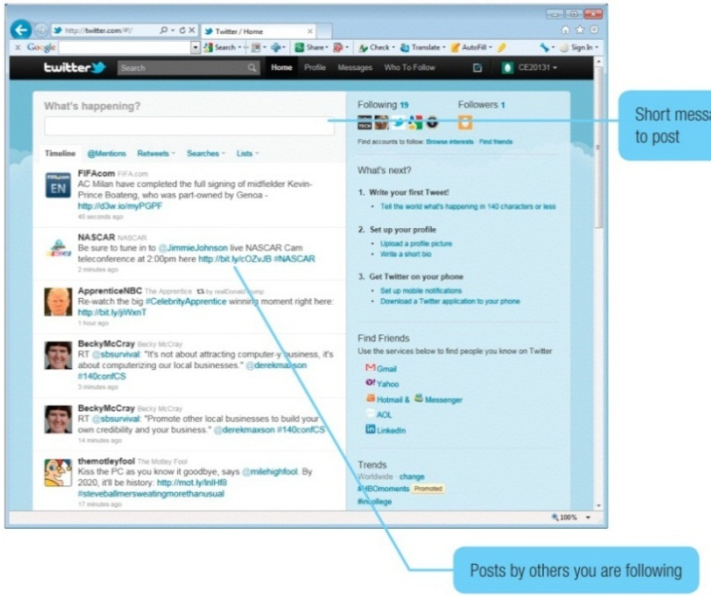
- Connecting people and organizations that share a common interest or activity
- Three most popular:
  - Facebook
    - Facebook Profiles
    - Facebook Pages
    - Facebook groups
  - Google+
    - Circles
    - Hangouts
    - Sparks
  - LinkedIn
    - Business-oriented

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

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?



© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

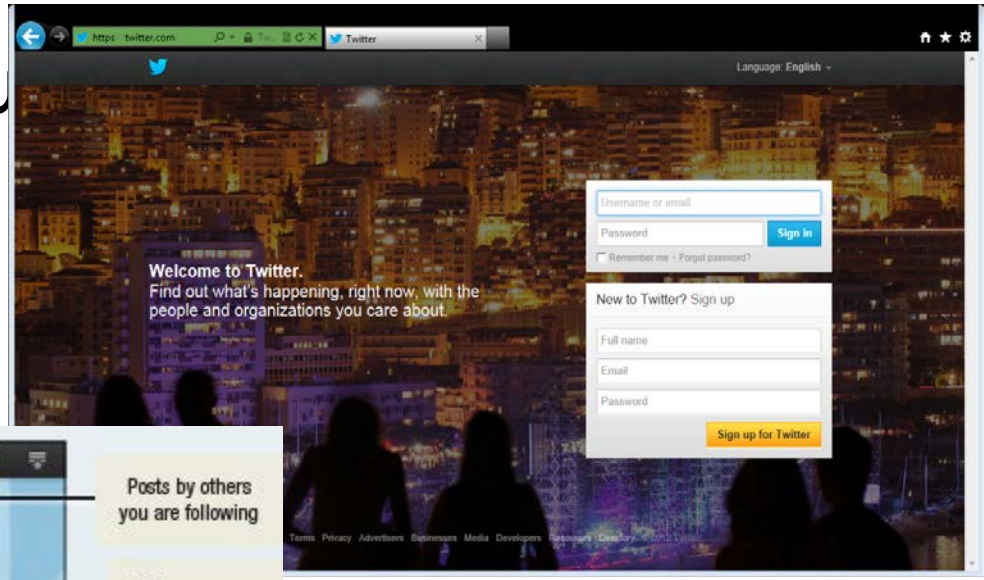
Webcasts, Podcasts, Wikis

- 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

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Making IT Work for You ~ Twitter

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



© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Search Tools

- Search Engines
- Specialized Search Engines
- Content Evaluation

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

Figure 2-14 Search engines

Topic	Site
Environment	www.ecoearth.info
Fashion	www.shopstyle.com
History	www.historynet.com
Law	www.findlaw.com
Medicine	www.webmd.com

Figure 2-15 Select specialized search engines

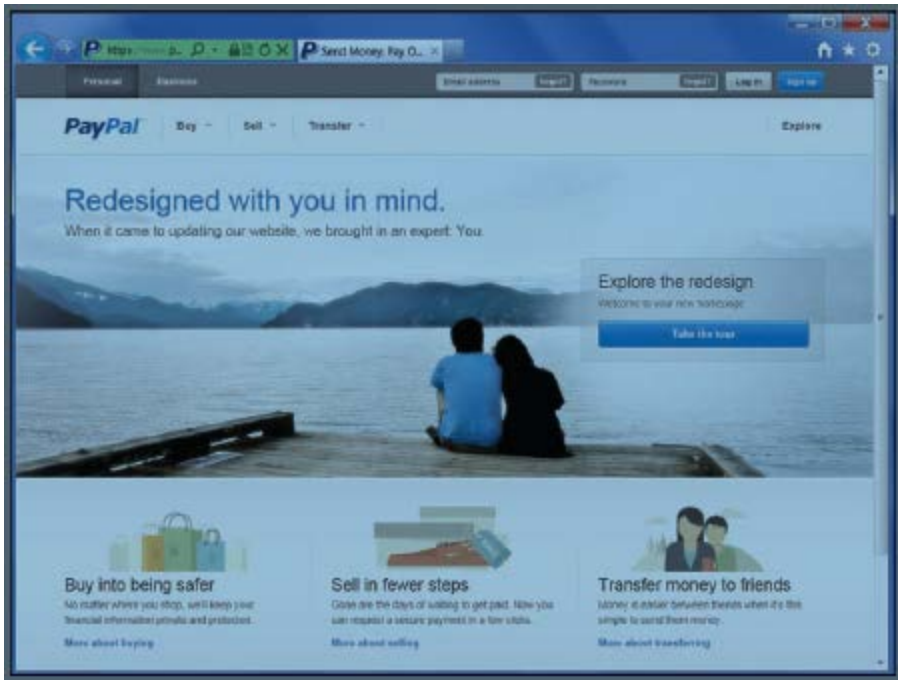
© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Security

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

Organization	Site
Amazon	payments.amazon.com
Google	wallet.google.com
Serve	www.serve.com
PayPal	www.paypal.com

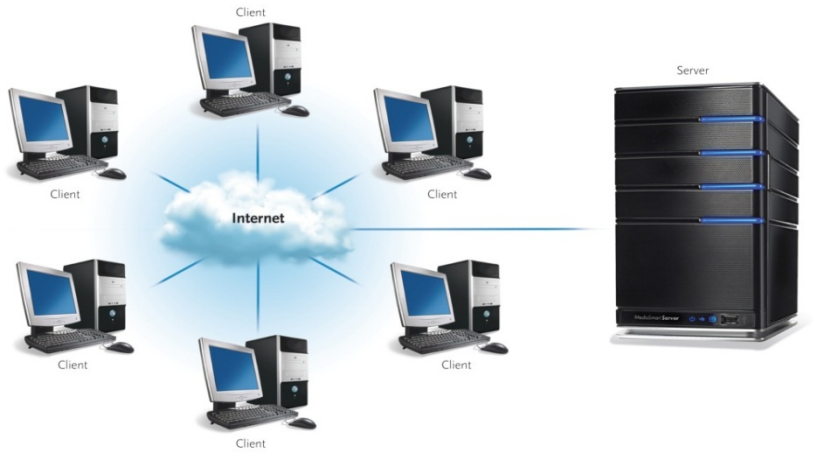
Figure 2-18 Digital cash providers



© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Cloud Computing

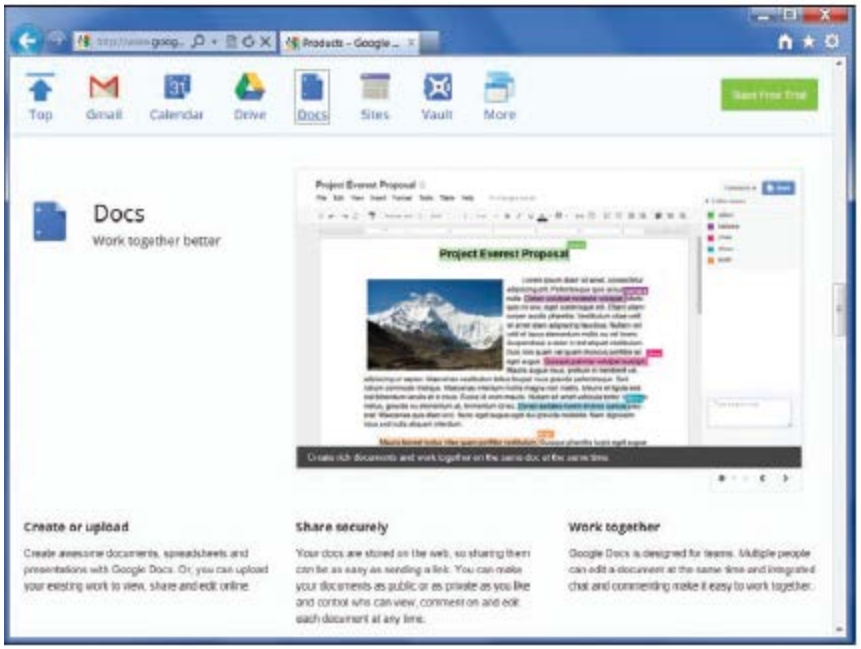
- Shifts computing activities from users' desktops to computers on the Internet
- Frees end-users from owning, maintaining, and storing software programs and data
- Three basic components:
  - Clients (end-users)
  - Service providers
  - The Internet



© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Cloud Computing: Web-based Service

- Google Apps



© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

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

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

A Look to the Future

- Car's Dashboard as a power, Internet-connected computing device
  - Safety and diagnostic features are already there
  - Potential distractions?

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Open-Ended Questions (Page 1 of 3)

- Discuss the Internet, including its origins, the three generations of the web, and the most common uses.
- Describe how to access the Internet. What are the providers? Define browsers and discuss URLs, HTML, JavaScript, AJAX, Applets, and mobile browsers.
- Discuss Internet communications, including client-based and web-based email, instant and text messaging, social networking, blogs, microblogs, webcasts, podcasts, and wikis.

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

Open-Ended Questions (Page 2 of 3)

- Define search tools including search services. Discuss search engines and 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.

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.

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

© 2014 by McGraw-Hill Education. This proprietary material solely for authorized instructor use. Not authorized for sale or distribution in any manner. This document may not be copied, scanned, duplicated, forwarded, distributed, or posted on a website, in whole or part.