

**Εθνικό Μετσόβιο Πολυτεχνείο**  
**Σχολή Ηλεκτρολόγων Μηχανικών & Μηχανικών Υπολογιστών**



**Μεταπτυχιακό Πρόγραμμα**  
**Τεχνο-οικονομικά Συστήματα**

**ΜΑΘΗΜΑ: Ηλεκτρονικές Συναλλαγές**

**ΑΝΑΠΤΥΞΗ ΣΥΣΤΗΜΑΤΩΝ ΗΛΕΚΤΡΟΝΙΚΩΝ**  
**ΣΥΝΑΛΛΑΓΩΝ**

ΣΤΑΥΡΟΣ

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# Starting a New Online Business

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- Creating a New Company or Adding an Online Project
  - Step 1: Identify a consumer or business need in the marketplace
  - Step 2: Investigate the opportunity
  - Step 3: Determine the business owner's ability to meet the need

# Starting a New Online Business

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- Online Business Planning

- business plan**

- A written document that identifies a company's goals and outlines how the company intends to achieve the goals and at what cost

- business case**

- A document that is used to justify the investment of internal, organizational resources in a specific application or project

# Starting a New Online Business

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- Initial Funding of a New Online Business

## **angel investor**

A wealthy individual who contributes personal funds and possibly expertise at the earliest stage of business development

## **incubator**

A company, university, or nonprofit organization that supports businesses in their initial stages of development

# Starting a New Online Business

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- Secondary Funding a New Online Business  
**venture capital (VC)**

Money invested in a business by an individual or a group of individuals (venture capitalists) in exchange for equity in the business

- Additional Funding: A Large Partner
- The IPO

# Adding EC Initiatives and Transforming to an E-Business

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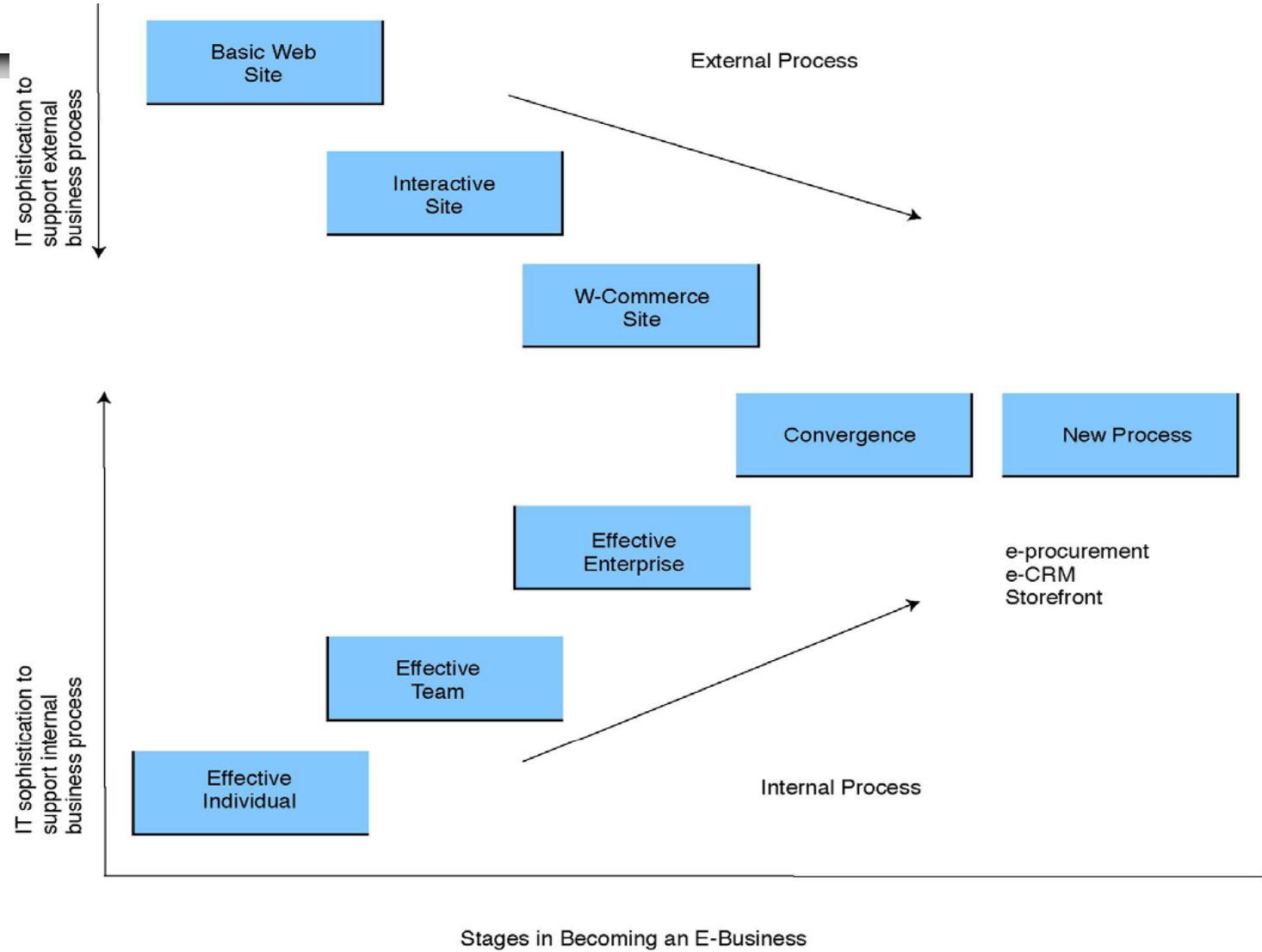
- Adding EC Initiatives to an Existing Business
  - A storefront
  - A portal
  - E-procurement
  - Auctions and reverse auctions
  - Other initiatives

# Adding EC Initiatives and Transforming to an E-Business

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- Transformation to an E-Business
  - What is organizational transformation?
  - How an organization can be transformed into an e-business
  - Software tools for facilitating transformation to e-business

# Roadmap to Becoming an E-Business



# Building or Acquiring a Web Site

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- Classification of Web Sites

- informational Web site**

- A Web site that does little more than provide information about the business and its products and services

- interactive Web site**

- A Web site that provides opportunities for the customers and the business to communicate and share information

# Building or Acquiring a Web Site

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- Classification of Web Sites

- attractors**

- Web site features that attract and interact with visitors in the target stakeholder group

- transactional Web site**

- A Web site that sells products and services

- collaborative Web site**

- A site that allows business partners to collaborate

# Building or Acquiring a Web Site

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- Building a Web Site
  - Step 1—Select a Web host
  - Step 2—Register a domain name
  - Step 3—Create and manage content
  - Step 4—Design the Web site
  - Step 5—Construct the Web site and test
  - Step 6—Market and promote the Web site

# Web Site Hosting and Obtaining a Domain Name

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- Web Hosting Options

- storebuilder service**

- A hosting service that provides disk space and services to help small and micro businesses build a Web site quickly and cheaply

- ISP hosting service**

- A hosting service that provides an independent, stand-alone Web site for small and medium-sized businesses

# Web Site Hosting and Obtaining a Domain Name

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- A Pure Hosting Service

## **Web hosting service**

A dedicated Web site hosting company that offers a wide range of hosting services and functionality to businesses of all sizes

# Web Site Hosting and Obtaining a Domain Name

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- A Pure Hosting Service

## **mirror site**

An exact duplicate of an original Web site that is physically located on a Web server on another continent

## **co-location**

A Web server owned and maintained by the business is placed in the hands of a Web hosting service that manages the server's connection to the Internet

# Web Site Hosting and Obtaining a Domain Name

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- Web Hosting Options

## **self-hosting**

When a business acquires the hardware, software, staff, and dedicated telecommunications services necessary to set up and manage its own Web site

# Web Site Hosting and Obtaining a Domain Name

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- Registering a Domain Name

- domain name**

- A name-based address that identifies an Internet-connected server

- domain name registrar**

- A business that assists prospective Web site owners with finding and registering the domain name of their choice

# **Content Creation, Delivery, and Management**

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## **content**

The text, images, sound, and video that make up a Web page

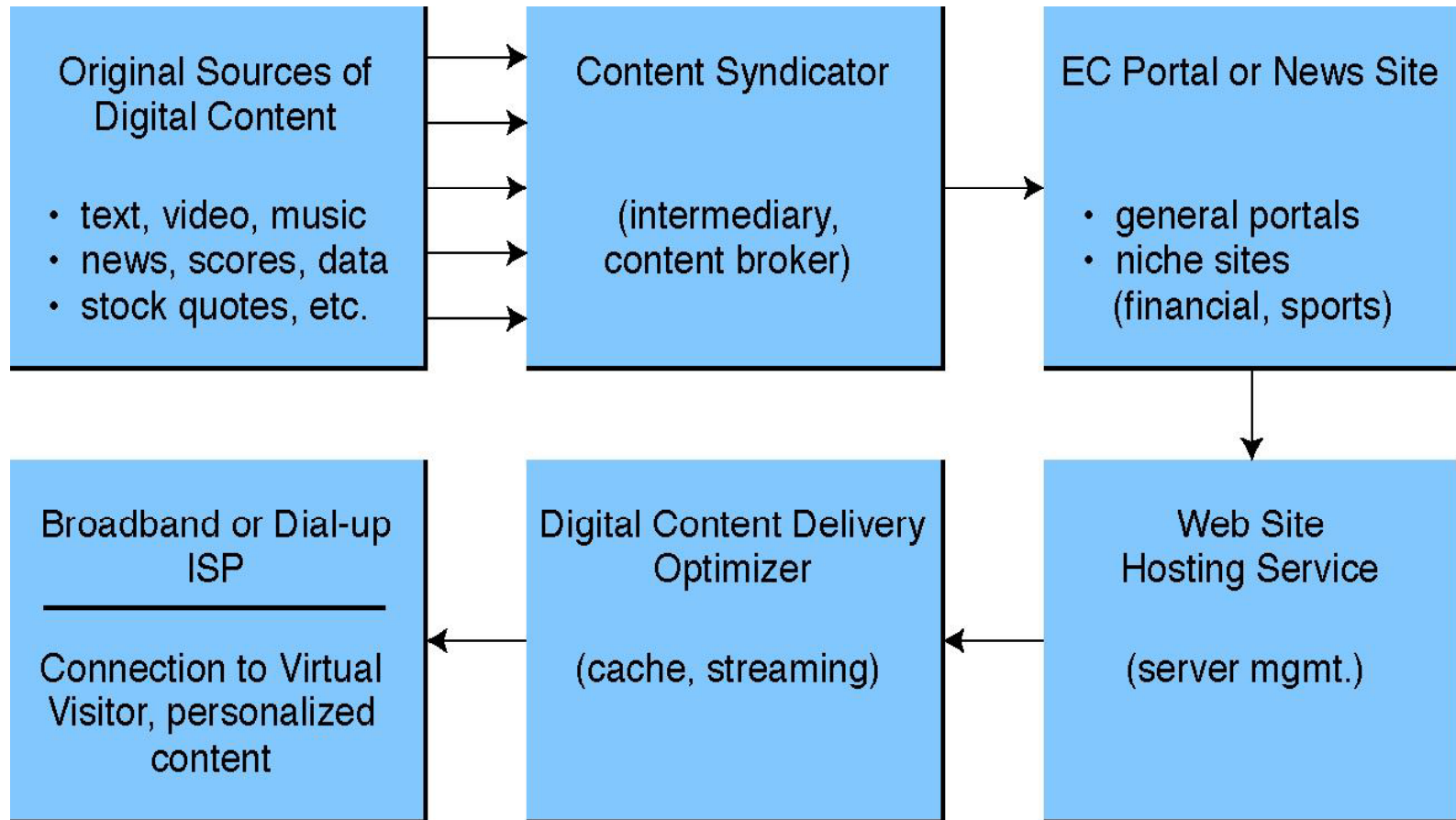
## **dynamic Web content**

Content that is updated infrequently

## **commodity content**

Information that is widely available and generally free to access on the Web

# Digital Content Delivery Life Cycle



# Content Creation, Delivery, and Management

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- Content Creation and Acquisition
  - cross-selling**  
Offering similar or related products and services to increase sales
  - up-selling**  
Offering an upgraded version of the product in order to boost sales and profit
  - Promotion (e.g., coupon, rebate, discount)
  - Comment (e.g., reviews, testimonials expert advice)

# Content Creation, Delivery, and Management

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- **Creating Content:**  
Content is usually created by the site's owners and developers
- **Buying Content:**  
Content that is acquired from outside sources should be supplemental content, not primary content

# Content Creation, Delivery, and Management

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- Buying from a Syndicator

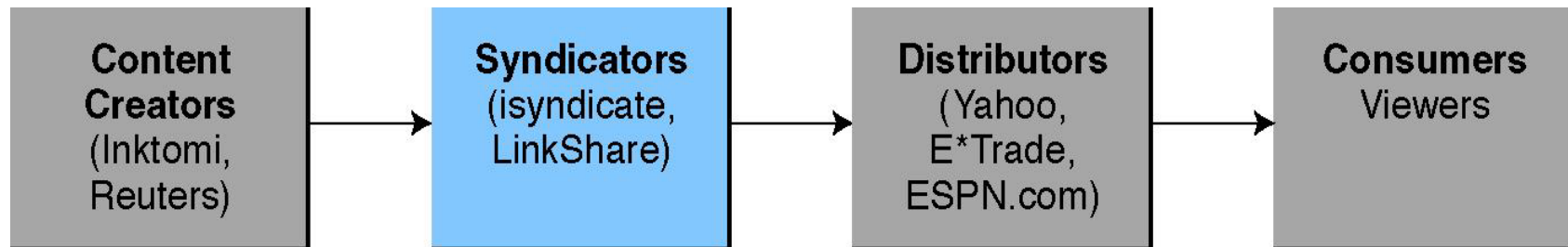
## **syndication**

The sale of the same good (e.g., digital content) to many customers, who then integrate it with other offerings and resell it or give it away free

## **RSS (“Rich Site Summary,” “RDF site summary,” or “Really Simple Syndication”)**

An XML format for syndicating Web content

# The Syndication Supply Chain



# Content Creation, Delivery, and Management

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- Content Creation and Acquisition
  - Content Providers and Networks

## **premium content**

Content not available elsewhere on the Web

# Content Creation, Delivery, and Management

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- Content Creation and Acquisition
  - Representative Content-Related Vendors
    - Content Delivery Networks

## **personalized content**

Web content that is prepared to match the needs and expectations of the individual visitor

# Content Creation, Delivery, and Management

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- Content Creation and Acquisition
  - Delivering Content by E-Newsletter  
**e-newsletter**  
A collection of short, informative articles sent at regular intervals by e-mail to individuals who have an interest in the newsletter's topic
  - Writing Effective Content  
Delivering effective content involves not only what is said, but how it is said

# Content Creation, Delivery, and Management

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- **content management**

The process of adding, revising, and removing content from a Web site to keep content fresh, accurate, compelling, and credible

- Content Testing
- Measuring Content Quality
- Pitfalls of Content Management
- Content Removal
- Content Management Software

# Content Creation, Delivery, and Management

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- Catalog Content and Its Management
  - For buyers who aggregate suppliers' catalogs on their own Web sites, content management begins with engaging suppliers and then collecting, standardizing, classifying, hosting, and continually updating their catalog data
- Translation of Content to Other Languages
  - The primary problems with language customization are cost and speed

# Content Creation, Delivery, and Management

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- Content Maximization and Streaming Services
  - Many companies provide media-rich content, such as video clips, music, or Flash media, in an effort to reach their target audience with an appealing marketing message
  - These and other content providers are concerned about the download time from the user's perspective

# Web Site Design

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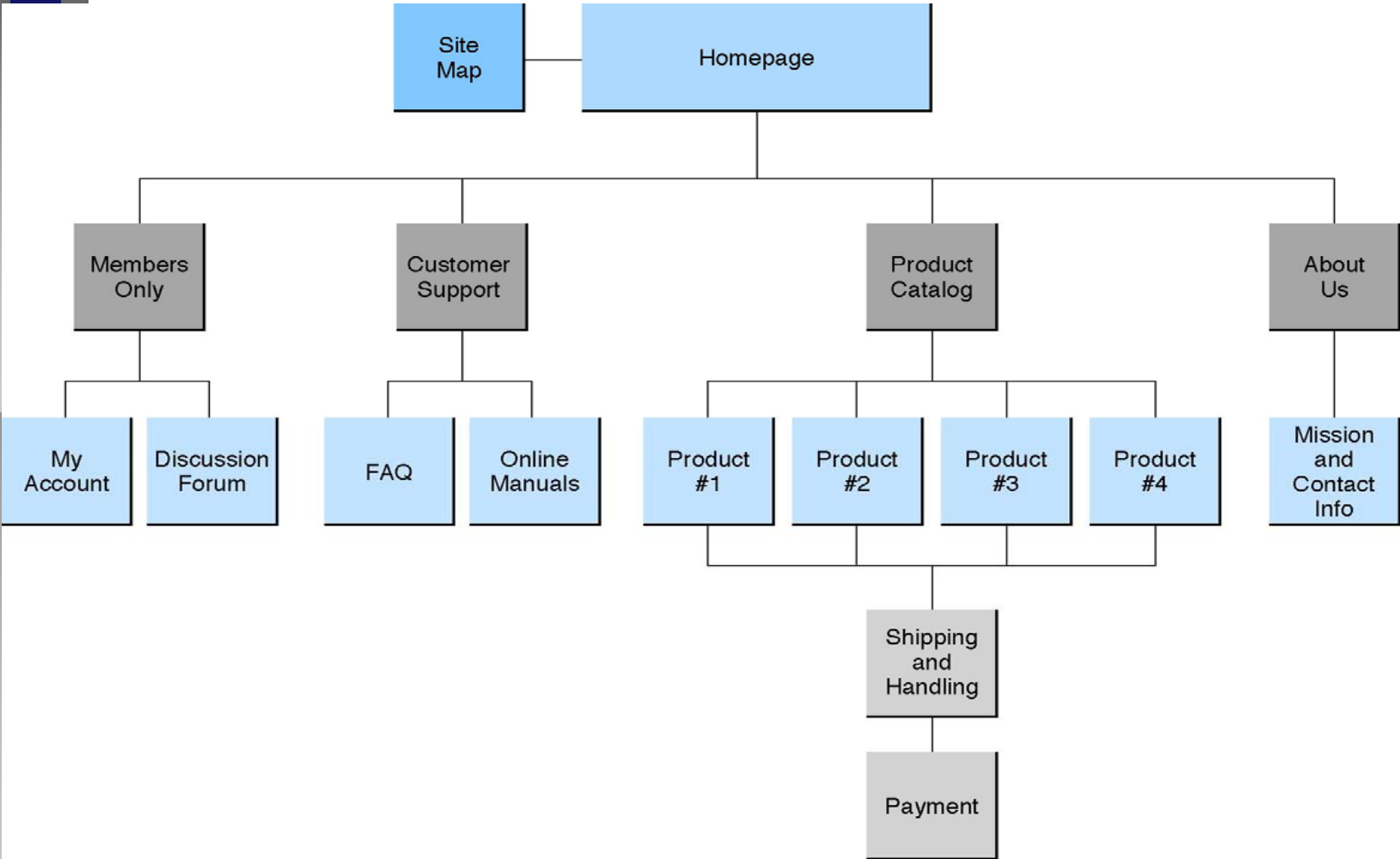
## **information architecture**

How the site and its Web pages are organized, labeled, and navigated to support browsing and searching throughout the Web site

## **deep linking**

Entry into a Web site via the site's interior pages, not the homepage, typically through search engines or external links

# A Simple Hierarchical Web Site Structure



# Web Site Design



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## **site navigation**

Aids that help visitors find the information they need quickly and easily

# Web Site Design

- Site Map and Navigation

## **frame**

An HTML element that divides the browser window into two or more separate windows

## A Generic Navigation Bar

Home

Products

Support

Community

Guided Tour

About Us

# Web Site Design

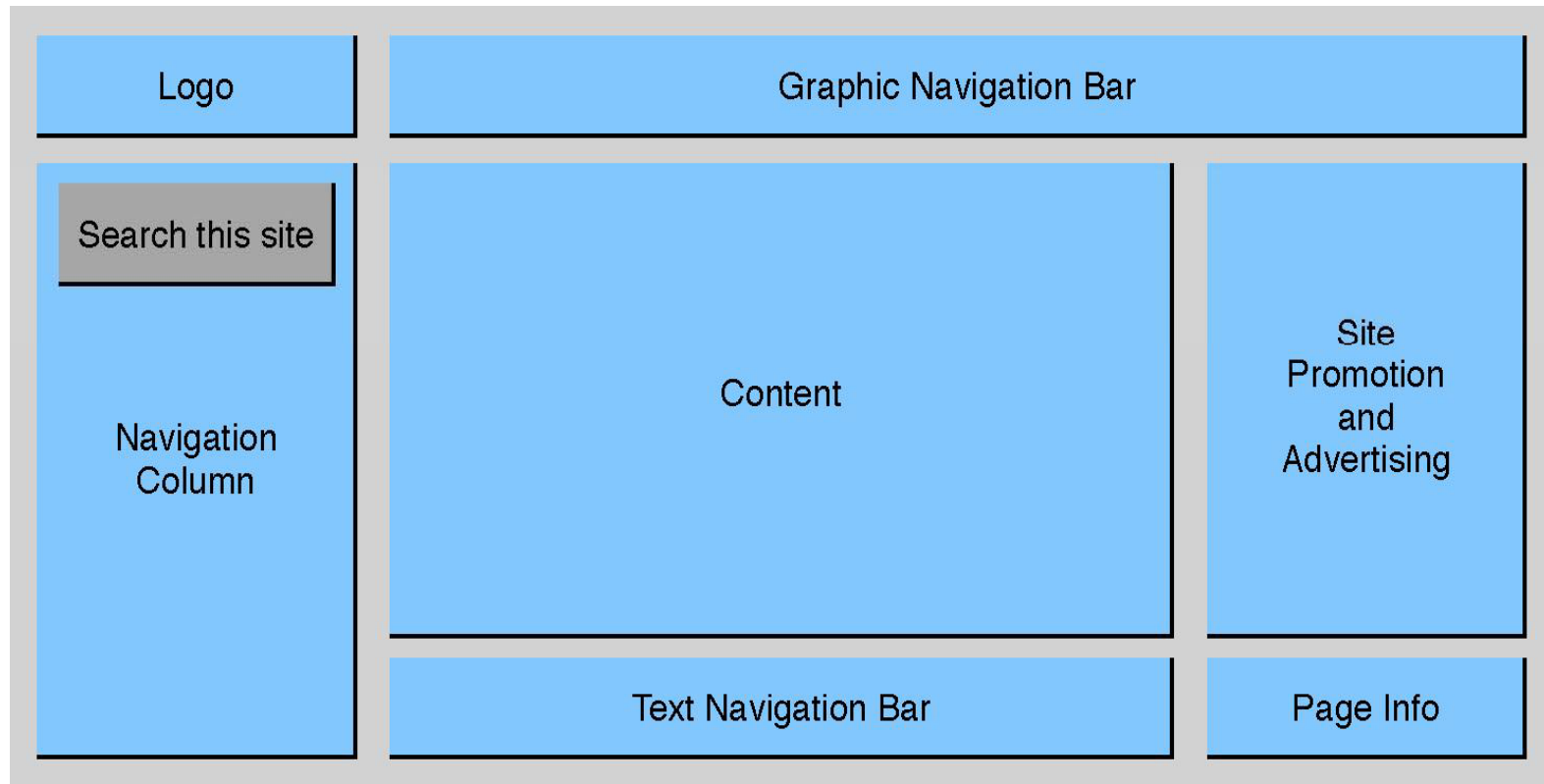
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- Consistency

## **look and feel**

The elements, including layout, typeface, colors, graphics, and navigation aids, that visually distinguish a site from any other

# A Web Page Layout Grid



# Web Site Design

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- Performance
  - Speed ranks at or near the top of every list of essential design considerations, for good reason
  - Visitors who have to wait more than a few seconds for a Web page to load are likely to hit the “stop” or “back” button and go somewhere else

# Web Site Design

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- Colors and Graphics
  - The key to effective use of color and graphics is to design the site to match the expectations of the target audience
  - Other rules that guide the use of color and graphics on Web sites are provided in Online File W16.12

# Web Site Design

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- Quality Assurance
  - Quality assurance is about making sure the Web site design is properly tested before it is launched and ensuring that it continues to perform up to expectations after launch
  - A lesson most Web designers can learn from total quality management (TQM) principles is to design the site for easy maintenance

# Providing EC Support Services

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- Who Builds the Web Site?
  - Do It Yourself
    - internal Web site development**
    - The process of building and/or maintaining the Web site with company staff
  - Outsource
    - external Web site development**
    - When the business hires another firm to build and/or maintain the Web site

# Providing EC Support Services

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- Hybrid

- partnering Web site development**

- When a mixture of internal and external development is used to build and/or maintain a Web site

# Providing EC Support Services

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## **Web site construction**

The initial content creation, design, programming, and installation phases of a Web site's development

## **Web site maintenance**

The on-going process of keeping the Web site open for business, managing content, fixing problems, and making incremental additions to the site

# Providing EC Support Services

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- Managing Web Site Construction
  - Start with a plan
  - Set goals early and stick to them
  - Use a fixed-price contract
  - Justify graphics and features

# Providing EC Support Services

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- Payments: Accepting Credit Cards

## **card-not-present (CNP) transaction**

A credit card transaction in which the merchant does not verify the customer's signature

# Providing EC Support Services

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- Web Site Promotion

- Internal Web Site Promotion

- signature file**

- A simple text message an e-mail program automatically adds to outgoing messages

- search engine optimization (SEO)**

- The application of strategies intended to position a Web site at the top of Web search engines

# Providing EC Support Services

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- Customer Relationship Management

- Listening to Customers

- e-mail discussion list**

- A group of people who share a common interest and who communicate with each other via e-mail messages managed by e-mail list software

- electronic discussion (e-forum)**

- A portion of the Web site where visitors can post questions, comments, and answers

- chat group**

- A portion of the Web site where visitors can communicate synchronously

# Opening a Web Storefront

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- Options for Acquiring Storefronts
  - Build them from scratch
  - Build them from components
  - Build with templates
  - Use someone else's storefront

# Opening a Web Storefront

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- Options for Acquiring Storefronts
  - Selecting a Development Option
    - Customers
    - Merchandising
    - Sales service
    - Promotion
    - Transaction processing
    - Marketing data and analysis
    - Branding

# Managerial Issues

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1. What does it take to create a successful online business?
2. Is creating a Web site a technical task or a management task?
3. How do we attract visitors to the Web site?
4. How do we turn visitors into buyers?
5. Are best practices useful?
6. How much of my new business should we give to funders?
7. How do we save on Web hosting expenses?

# Summary

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1. Fundamental requirements for initiating an online business.
2. Funding options for a start-up online business.
3. Adding e-initiatives.
4. Transformation to e-business.
5. Web site hosting options for an online business.
6. Web site construction options for an online business.
7. Provide content that attracts and keeps Web site visitors.
8. Design a visitor-friendly site.
9. High placement in search engines is key.