

Chapter 9

Analysis & Design

Learning Objectives

- Summarize approaches for analyzing requirements for e-business systems
- Identify key elements of approaches to improve the interface design and security design of e-commerce systems.

Workflow management

Workflow is

'the automation of a business process, in whole or part during which documents, information or tasks are passed from one participant to another for action, according to a set of procedural rules.'

Examples:

- *Booking a holiday*
- *Handling a customer complaint*
- *Receiving a customer order.*

Process modelling

- Often use a hierarchical method of establishing
 - the processes and their constituent sub-processes
 - the dependencies between processes
 - the inputs (resources) needed by the processes and the outputs.

Starting a New Online Business

- 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

- 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

- 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

- 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

- 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

- 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

Building or Acquiring a Web Site

- 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

- 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

- 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

- 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

- 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

- 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

- 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

- 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

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

Content Creation, Delivery, and Management

- 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

- **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

- 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

Content Creation, Delivery, and Management

- Content Creation and Acquisition
 - Content Providers and Networks

premium content

Content not available elsewhere on the Web

Content Creation, Delivery, and Management

- 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

- 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

- **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

- 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

- 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

information architecture

How the site and its Web pages are organized, labelled, 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

Web Site Design

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

Home

Products

Support

Community

Guided Tour

About Us

Web Site Design

- Consistency

- look and feel**

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

Web Site Design

- 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

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

Web Site Design

- 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

- 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

- 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

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

- 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

- 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

- 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

- 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

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

Opening a Web Storefront

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