

Web design and implementation

Web design

- It's another type of publishing
 - Your web site is your shop window – people will judge your company on it
 - Web publishing is no different from other types of publishing
 - Spelling, grammar, point size, broken links, incorrect captions
 - Social networking sites make this available to all
- Get the domain name right
 - Inventive: business.com vs PlentyOfFish (dating site)
- Design is important
 - But functionality more so
 - Integrate good design with backend databases
- <http://www.webpagesthatsuck.com>
 - <http://www.dokimos.org/ajff/>

Web design mistakes

- Ego: Believing people care about you and your website
 - Why are they looking at your site?
 - What are they trying to do?
 - Do you help them achieve THEIR goals?
- Can't figure out what your website is about in less than four seconds
 - <http://www.genicap.com/Site/>
- Contrast Contrast Contrast
- Mystery Meat
 - Navigation you have to roll over
 - Zero intelligible content
 - <http://www.osbrinkagency.com/>
- Too much stuff
 - <http://www.arngren.net/>

More Common mistakes

- Huge images
- Distracting colour schemes
- Flashing gifs, scrolling text
- Music
- Unclear navigation
- Unreadable
- Cluttered
- **Useless Title**
- **Zero intelligible content**
- **Refuses to work with IE**
- **Only works with IE**
- **Requires Flash**
- **Assumes screen size**
- **Assumes font size**
- **Contains errors**

www.webpagesthatsuck.com

Navigation

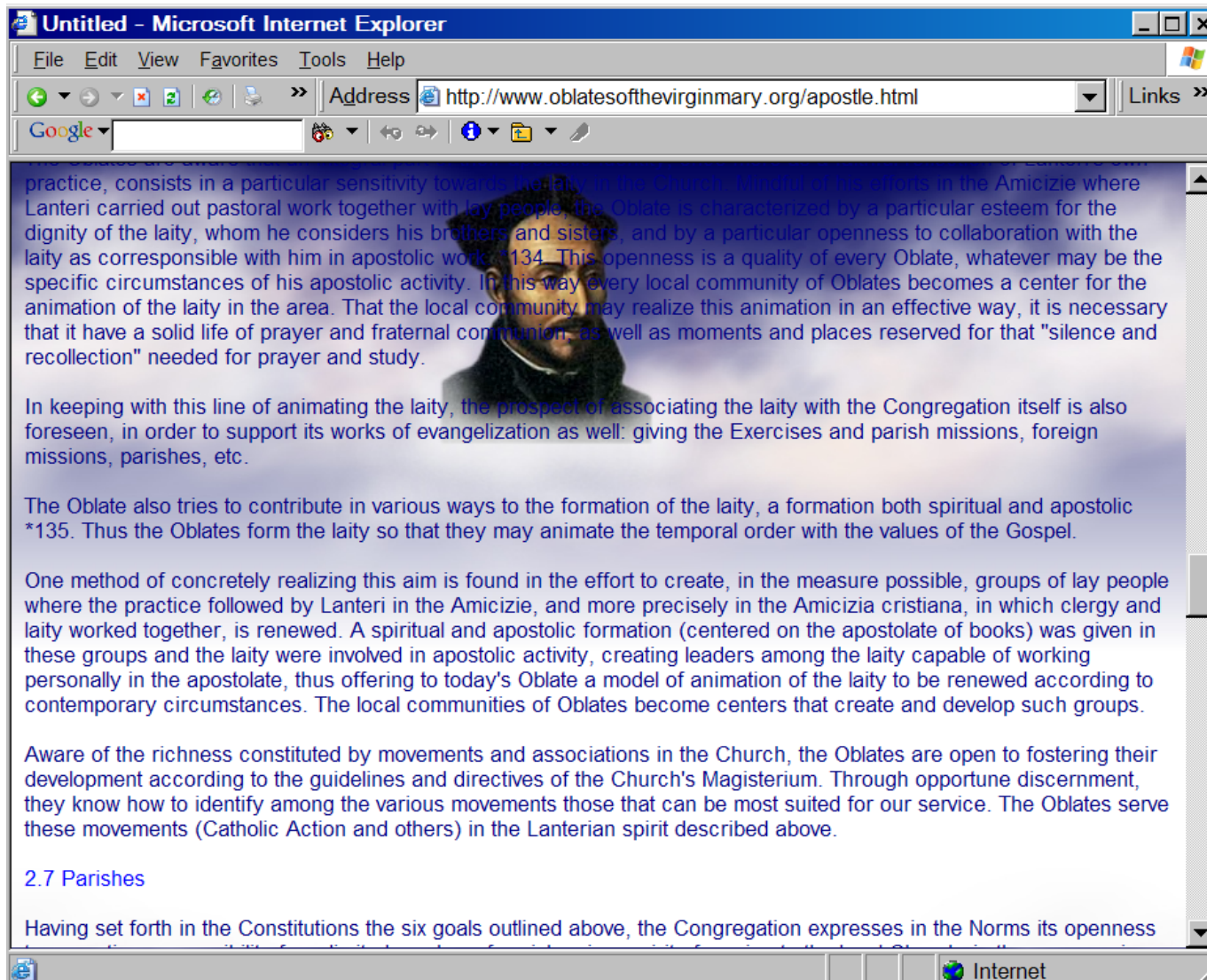
- Navigation is important
 - Make the navigation clear
 - Three clicks maximum to get anywhere
 - Hard when Sainsbury's have 25,000 line items

 - Consistent position/action
 - Logo top left and takes you home
 - Search

TEXT

- <http://www.mrbottles.com/>
- Consistent font
 - One family
 - Care on colour/size
 - Fonts carry a subtle implicit message
 - Serif or San Serif?
 - **Loud** *Soft* STRANGE Respectable Old fashioned

Poor design example



Poor design example



Title seems to be confused with keywords

Mixture of fonts

Navigation a mess

Far too much material

Lingscars.com

Needs more than 1024x768

Good design example

The image shows a screenshot of the Cisco website with several callout boxes pointing to specific design elements. The website features a blue header with the Cisco logo and navigation links: Products & Services, Support, How to Buy, Training & Events, and Partners. A search bar is located in the top right corner. The main content area features a large banner for Flip video cameras with the text "do you flip? This season's best gift" and a "Buy Now" button. Below the banner is a "Latest News" section with a link to "Talk2Cisco: The Evolution of Corporate Social Responsibility - 08 Dec 2010". The footer contains several columns of links, including "Solutions For Enterprise", "News & Alerts", "Support", "Communities", "About Cisco", and "Offers".

Consistent navigation

Call to action

Recent news stories

Quick links to sub areas

Flip-up menu

Consistent navigation

Services for subscribers

Search clearly available

Social media

Special event links

Technical support

Communities

Protected and encrypted pages

- Most web sites are open to all
- Protected pages for
 - Subscribers, Suppliers, Customers, Staff
 - Protected by
 - Username / pw; IP address; Domain name of browser
 - Combinations of these
- Most traffic to and from web sites is in clear
 - Potential eavesdropping possible
 - Secure Socket Layer (SSL) encrypts data
- Widely used technology
 - Used whenever privacy is important
 - Payment
 - Secure communication (spooks, terrorists, medical)

Static and Dynamic pages

- HTML forms
 - Fill in fields
 - Press button to submit data
 - Validate locally using Javascript
 - Remember user input when redrawing form
- HTML with extra tags pre-processed
 - Java Server Pages (JSP)
 - Active Server Pages (ASP)
 - PHP
- Complete content management systems
 - Signiant, Vignette, Joomla, Drupal etc
 - Content and style kept distinct – can adapt for target
 - Dynamic pages added as extensions, many already in libraries
 - Complex javascript frameworks (Jquery, MooTools, Prototype)

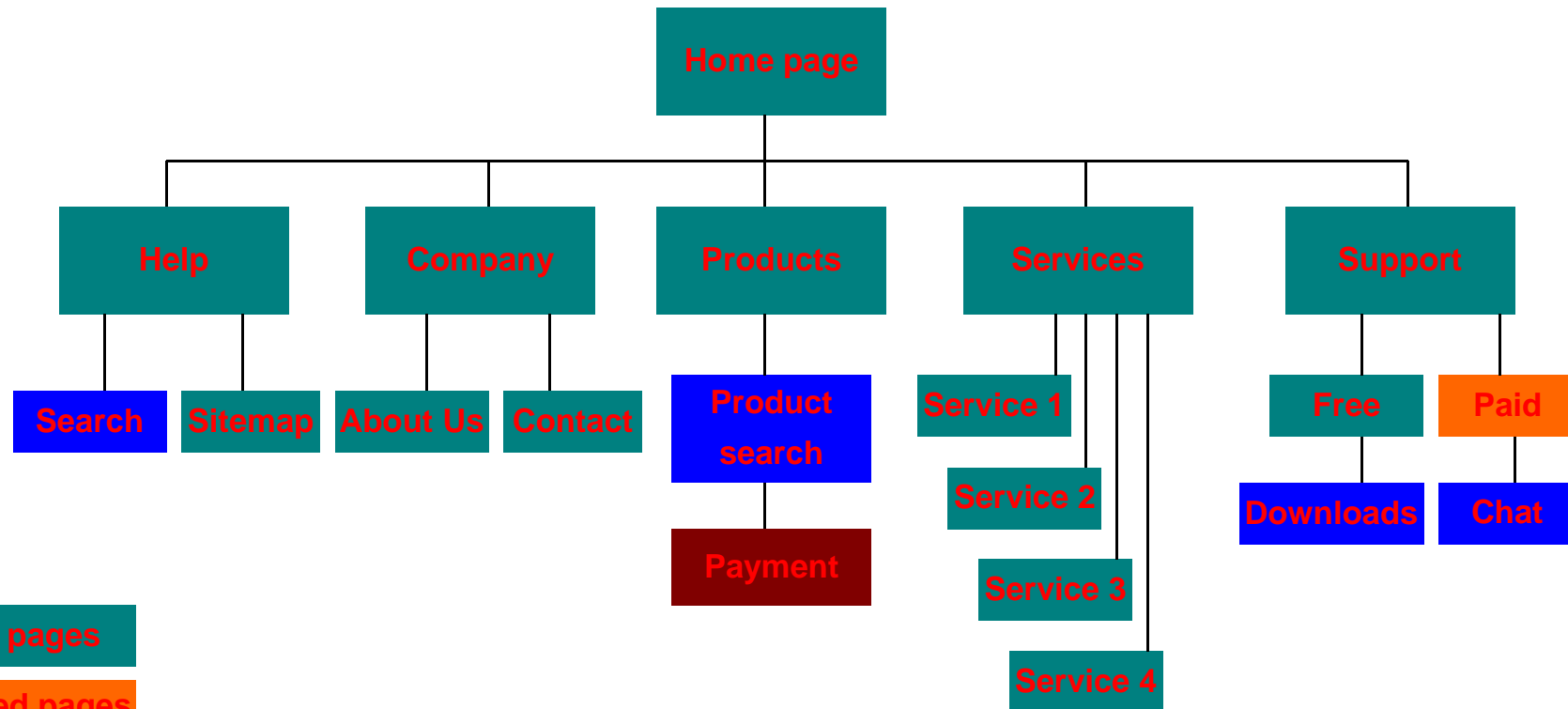
Improving the experience

- AJAX: Asynchronous Javascript and XML
 - XMLHttpRequest calls as data entered
 - No need to refresh entire web page
 - Immediate field verification
 - Google suggestions and Instant
- Web apps that compete with local ones
 - Sproutcore for iPhone apps
 - HTML5 includes geolocation, local storage
 - Google Web Toolkit
 - Java compiler produces Javascript
 - That works with all browsers
 - That can be tested using standard Java IDE
 - <http://code.google.com/webtoolkit>

Search Engine Optimisation

- Links from other domains
- Page titles – each page different
- Meta tags
- Anchor and alt text
- Robots.txt

Page transition diagram



- Static pages
- Protected pages
- Dynamic pages
- Applications
- Encrypted pages

Shortcuts

Search from every page
Payment from free support page

Online decisions

- User logon required?
- Remember credit card details?
- Same price for everyone?
- Special offers (free delivery if over \$100 spent)
- Backend integration?
- Help desk support?
- Online credit checking?
- Order picking?
- Online stock shown?
- Delivery extra – options - reliability

Consumer Generated Media

- General model funded by adverts
 - Layout generated by owners, content by users
 - FaceBook, MySpace, YouTube, Twitter, Blogs
 - Instant feedback to ideas and huge audience
 - Seen as important tool in UK election
 - Modern version of “on the stump” heckling
 - Companies see need to participate
 - Over 50% of shoppers who use social media follow / friend brands
 - But it can bite them back
- Consumer review sites eg tripadvisor, lateroom
 - Some ad income, other income from hotels listed
 - Offers analytics, right of reply
 - Unclear in some cases whether people had actually visted
- Wikis
 - Widely used as informal knowledge sharing tool

Social networks

- Blogs, tweets, face book, google, etc
- Kicckstarter, Indigogo
- Wiki, git

- Human face of company
 - Relationship building
 - Trust

- Consistent voice
 - Regular updates
 - Get trusted help from the community
 - Crowd moderated

Outline Physical Design

Load balancer

Big IP

Web Server
(static data)

Apache

Application Server
(business logic)

J2EE

Database server
(orders)

OPS

Legacy
(stock control)

IBM

Sizing

- Scalability
 - How many people?
 - At the same time?
- Number of products
- Size of downloads
 - Ring tones 10K
 - Music 4M
 - Software 200M
 - Movie 2G
- Reliability

Lastminute.com system design

