Best Practice in Web Design

Irrespective of whether you are intending to use a flat 'brochureware' website or an interactive e-commerce site, the overall look and feel of your website will play an important role in its usability.

It is important that visitors to the site can quickly and easily access the required information. The design should present the content in an intuitive manner, making effective use of colour, layout and site organisation.

There are also legal issues to consider in the design of the website. You have to ensure that you comply with the Disability Discrimination Act 1995 (DDA).

This guide provides advice on the principles of good web design, taking into account the requirements of the DDA. The design of your website may benefit from the help of a web designer or digital agency. If you decide to use a third party, this guide can help inform your discussion with them.

Planning your site
It is essential from the outset that you clearly identify what the purpose of your site is. Typical reasons why businesses develop websites include:

- building brand awareness
- saving money
- selling products
- providing improved customer support

Remember that what you want the website to accomplish and what your visitors require from the site may differ. You may be concerned about the visual aspects of the site, while your visitors probably care more about how quickly they can find information.

Content and audience
Establish the type of content you will need to support the objectives of the site and how this should be presented.

Look for examples on the internet that will enable you to present the content in the most appropriate way.

Ensure that you know the audience you are trying to reach. Try and understand what they will want when they come to your site, how you can initially attract them, what will encourage them to return, and what type of computer and connection speed they are likely to have.

All companies in the UK must clearly state the company registration number, place of registration, registered office address and if the company is being wound up on all of their websites. A common place to put this information is in the 'About us' or 'Legal info' page of the site - it does not have to appear on every page.

Planning techniques
It is a good idea to create a diagram that shows the structure and logic behind the content, presentation and navigation you propose to use.

A popular technique for mapping out a website is known as wireframing. This allows you to create a skeleton of the site that describes the basic elements you intend to include. The wireframe is made up of labelled boxes that illustrate the overall navigation and the blocks of content that each webpage will contain.

The wireframe can be drawn using packages such as Word, PowerPoint or Illustrator. Wireframes are very easy to change, so the initial design can be shown to customers or friends who are representative of your intended audience. Their comments can then be quickly incorporated to arrive at an agreed design.

Technical website design considerations
There are several technical issues to consider when designing your website.
Browser issues
You will have to design webpages that can be displayed by many different browsers. Common browsers include Microsoft Internet Explorer, Mozilla Firefox, Safari and Google Chrome.

You should test your webpages in as many browsers and different operating systems as possible during the development process to ensure that they will display properly. You should also aim to ensure that your webpages work in previous versions of the browsers, as some of your audience may not have updated their software.

Screen resolutions
The most common resolutions, expressed in pixels, is 1024 x 768, although there is a growing trend towards higher resolutions. If you opt to design your website for a higher resolution, then you need to be aware that some screens with lower resolutions may not display all of the content. You cannot control the screen resolution of the monitors used to view your website.

Download speeds
Not all internet users have high speed access, so connection speed should also influence your webpage design.

Too many images or rich media will slow down the speed at which the webpage loads. Generally, pages should load within ten seconds or less. If your pages download slowly, your users will probably move on to another site.

Try and keep file and image sizes to a minimum - generally the total size of a webpage should be no more than 40 to 60 kilobytes.

Technology
Some web technology will prevent users and search engines from viewing your site, this includes:

- HTML frames
- Javascript
- Text in images not seen by search engines or screen readers
- Flash
- AJAX

Accessibility issues
The Disability Discrimination Act 1995 (DDA) makes it illegal for a website provider to discriminate against a disabled person by refusing to provide a service that is generally available, providing a service of a lower standard, or failing to comply with a duty to make reasonable adjustments.

Accessibility guidance
The World Wide Web Consortium (W3C) has produced a number of accepted guidelines, which are divided into three priorities:

- priority 1 - websites must comply otherwise some users will find it impossible to access the site
- priority 2 - websites should comply, otherwise some users will find it difficult to access the site
- priority 3 - websites may comply, otherwise some users will find it somewhat difficult to access the site

Reasonable adjustment
The DDA requires a business to make ‘reasonable adjustments’. The website developer must:

- change a practice, policy or procedure that makes it impossible or unreasonably difficult for disabled people to use the service
- provide an auxiliary aid or service if it would enable (or make it easier) for disabled people to use the service

Making websites accessible
There are many adjustments you can make to your website to make it easier for disabled people to use. For example, your web designer can attach a text description to every image. This means that blind users, who rely on a browser that reads out the contents of the webpage, can hear an explanation of what the image is for.

Checking if your site is accessible
If you have not already uploaded your code, you can check your website’s accessibility using free HTML validation services on the Design Group website If your website is already uploaded, you can read about and search for accessibility tools on the Web Accessibility Initiative website

Designing the site
When designing your website, plan a theme and structure that will hold all the pages together. You should convey an image of good basic operational functionality, neatness, and a professional appearance.

Visual aspects
Create a common theme of colours, fonts, graphics and page layouts. Remember that this can be achieved without the need for spectacular graphics - simplicity and elegance can be more effective.

Consistency
Plan to create a unified look for the various sections and pages of your site, so that the users are aware that they are moving around within a single site as they move from page to page.

Create smooth transitions from one page to another by having consistent elements on each page and repeating colours and fonts, for example:
• placing navigational elements in the same position on each page
• having a consistent background texture to each page
• using fonts and colours consistently throughout the site

All of this will help to reinforce the identity of the site.

White space
Don't be afraid to use white space or blank areas in your webpage design. Good use of white space can help define areas of your page and can be used to structure and separate content. A lack of white space can give the impression that the page has too much content and can confuse the user.

Branding
The brand and image of your business should be reinforced by your website. Consistent use of your company logo throughout the site will help in this, and should be viewed as an element of your overall marketing strategy.

Designing for the user
The key to designing a successful website is understanding the needs of your audience and reflecting these in your design.

User interaction
Consider how the user may want to interact with the webpage, perhaps by selecting products or services that you offer or moving around the site using hyperlinks. Use linked text and short descriptions, and organise links into related topic groups.

If the page contains large amounts of text, keep paragraphs short to aid online reading. Ensure that the text is legible by providing enough contrast between the background and foreground colours.

Ranking the information
Rank the information you want to display in terms of how important it is. Position the most important in the middle of the page, next important across the top, with the least important or static information in the left margin.

Hierarchy of information
Don't make users navigate through too many layers of the site to find the information they want. Provide prominent navigation aids so the user can quickly find the information they need. A standard navigation bar that is in the same place on every page enables the user to move quickly through the site.

Exploit hypertext
Use hypertext to provide links that will enable the user to move easily around the site. They should also be able to return easily to the higher sections of the site. A hypertext table of contents allows the user to pick the exact topic that they want to view.

Amount of content
Consider how much content should be contained on a webpage. Avoid putting too much information on a page, as this may make it more difficult for the user to locate the information they need. Use links as a method of dividing content between pages.

Web typography
Designing for the web restricts your font choices. If you specify a font that a user does not have, their browser will substitute a default font, changing the look of the page.

Choice of fonts
The webpage will look clearer if you choose fewer fonts and type sizes. Decide on a font for each different level of topic importance. For example, you should have a different font for page headings, section headings and body text. Effective use of different fonts for different levels of importance will guide the user through the content more efficiently.

Choose different size fonts of the same type throughout the site. Consistency will help you to develop a strong visual identity for your site.

Availability of fonts
The user's browser and operating system determine how a font will be displayed, so you can't be absolutely sure how your page will look. In addition, if the font is not available, then the user's system will default to a standard font. Remember to use commonly available fonts and test your webpages on multiple platforms to see what effect these have on the overall appearance.

Ensure the page is legible
The size and face of the type used on the page determines the legibility of the text. Remember that it's harder to read on screen than from a paper copy, so keep fonts big enough to be comfortably read online.

To make things easier for the user you can add more white space around the blocks of text and between lines, both of which will help with clarity.

Make sure that you have enough contrast between your text colour and the background colour. Dark backgrounds
frequently make the text difficult to read, so opt where possible for darker text on a lighter background.

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**Site navigation**
Develop a simple and consistent navigation scheme. Links should be presented clearly and the words or images that the user clicks on must be clear, concise and relevant to the information they are leading to.

**Navigation buttons**
Always ensure that the navigation buttons are placed in the same place on all of the pages on the site.

You should remember that every graphic you add to your website for navigational purposes increases the download time for the user. So keep your navigation buttons simple and reuse the same ones throughout your site.

It is now commonplace to have the company logo as a link back to the home page.

**Finding information**
The key to the success of your website will be largely based upon how easy it is for users to find the information that they require. You should consider including a site map and a search facility to help in the location of information.

Once a user is browsing the site, you should use hypertext to provide contextual linking to related ideas or content. Try to anticipate what information users are likely to want next, but at the same time leave them free to make their own navigational choices.

If it’s a large website consider the use of a breadcrumb trail to show users where they are within the website.

**The ‘three click rule’**
Bear in mind the ‘three click rule’ which means that users starting at your home page should be able to get to the information they require in three mouse clicks. While this is not always achievable, by taking it into account at the site design stage you are more likely to get close to it.