

Please note the following:

- 1) This particular Web Site Design Report is purely a sample and does not represent the design report from any actual web site.
- 2) The precise pages (URLs) to be analysed are normally chosen by the client; four pages is usually sufficient to give a flavour of the site content and any potential problem areas.

ComeUpSmiling Web Site Design Report

The following four URLs were reviewed by ----- representing ComeUpSmiling Ltd, on 1st January 2010, and any changes made to the web site since that date do not form part of this report.

URL of Page One: <http://www.....co.uk>

URL of Page Two: <http://www.....co.uk>

URL of Page Three: <http://www.....co.uk>

URL of Page Four: <http://www.....co.uk>

The prime purpose of this Design Report is to give an overview of the web site's present accessibility and design; informed decisions can then be made - in consultation with your site administrator and web designer - as to the exact requirements of any future updates. Consequently, this report is deliberately kept as straightforward as possible and long lists of complex error messages are thus **NOT** included. However, more detailed error lists relating to accessibility and design validation are available if required, subject to the request being submitted to ComeUpSmiling within 30 days of receipt of this report.

Each section/criteria is prefaced in italics with an explanation of exactly what has been assessed, how it has been assessed, plus relevant background information; site-specific comments then follow, and any potential problem areas are highlighted in **red**.

Criteria 1 – Accessibility

*This automated accessibility check is based on the W3C guidelines and testable success criteria, known as **WCAG 2.0** which superseded WCAG 1.0 in December 2008 (see <http://www.w3.org/TR/WCAG/>). Each page is assessed with respect to its 'conformance level' from Level A (the **minimum** level of conformance) through Level AA to Level AAA (maximum conformance) using an accessibility validator. The purpose of these conformance levels is to try and ensure that websites are accessible to people with disabilities. If a site fails to reach Level A conformance, it is very likely that disabled users will struggle to use that web site. The W3C itself states that 'It is not recommended that Level AAA conformance be required as a general policy for entire sites because it is not possible to satisfy all Level AAA Success Criteria for some content'.*

*Please note that conforming to the Web Content Accessibility Guidelines (WCAG) using an automated accessibility check is **only an indicator** of a particular web page's actual accessibility, and it should thus be regarded as the first of several steps towards true accessibility. Also due to the complex nature of accessibility, different automated accessibility tools may give slightly different error results. Passing automated verification is thus merely a good indicator that the page is well constructed. Any resultant conformance claim **must** include significant information (see <http://www.w3.org/TR/WCAG/#conformance-claims>); consequently, it is essential to ensure that with any such claim the page has also been **checked manually**.*

PAS 78 (http://www.equalityhumanrights.com/uploaded_files/pas78_pdf.pdf), dated March 2006, is a 'Guide to good practice in commissioning accessible websites', and was developed by the Disability Rights Commission (DRC) in collaboration with the British Standards Institution. PAS 78 is not a British Standard and it is not compulsory, but it would be unwise to ignore its content; for example:

- WCAG are the most important accessibility guidelines for web commissioners to be aware of, as they are considered to be the de facto standard for accessible web design (6.4.2.1)
- The website should uphold WAI guidelines and referenced W3C specifications to ensure interoperability and accessibility to disabled people (4.2.1)
- Automated tools may be used as part of the validation process, but additional manual checks and user testing with disabled people are essential to be confident that the website is accessible to disabled people (4.3.2)

PAS 78 was a consequence of research published by the DRC in 2004, which found that 81% of websites tested failed to reach Level A compliance. Following on from PAS 78, the Central Office of Information guide 'Delivering inclusive websites' (<http://www.coi.gov.uk/guidance.php?page=129>) states that 'The minimum level of accessibility for all public sector websites is Level Double-A of the W3C Web Content Accessibility Guidelines. All new websites must conform to these guidelines from the point of publication.'

The accessibility result for each specified page was as follows:

Page One: Failed Automatic Verification for Level A conformance. For Level A, **18** failures identified, the prime reason being the lack of the ALT attribute for the majority of images. The ALT attribute provides alternative text for an image or convey its purpose, and it is this text which is heard by a visually impaired visitor when using a screen reader.

Page Two: Failed Automatic Verification for Level A and Level AA conformance. For Level A, **23** failures identified, the prime reason being the lack of the ALT attribute for the majority of images. For Level AA, **6** failures identified – absolute units (e.g. 180 pixels) have been used instead of relative units. Relative units, such as 80%, will help ensure the page can be rendered correctly at different resolutions rather than forcing certain elements to be specific sizes, and allows visually impaired visitors to magnify specific areas.

Page Three: Failed Automatic Verification for Level A and Level AA conformance. For Level A, **57** failures identified, the prime reasons being the lack of both the ALT attribute and descriptive text as the content of the <a> element for the majority of images. The latter is useful in helping the visitor decide whether or not such a link is useful following – the URL itself can often not be particularly descriptive. For Level AA, **6** failures identified - relative units will help ensure the page can be rendered correctly at different resolutions.

Page Four: Failed Automatic Verification for Level A conformance. For Level A, **64** failures identified, the prime reasons being the lack of the ALT attribute for the majority of images, and adding tags that are being used purely to create a visual presentation effect – with the latter, css should be used instead as this allows the content to be resized, for example, by a visually impaired visitor..

Consequently, in the light of these results none of these pages appear to meet WCAG 2.0 Level A guidelines, and thus do not satisfy the minimum level of conformance as recommended by the W3C.

If your site administrator requires a more detailed list of failings, then please email ComeUpSmiling with your request within 30 days of receipt of this report; alternatively, error lists can also be obtained via a suitable web accessibility evaluation tool; for further details please see <http://www.w3.org/WAI/ER/tools/>

The contrast ratio between the foreground and background colours of the text elements are next examined with a suitable analyser to see if they also conform to WCAG 2.0. If the **main** foreground and background colours on the page **do not conform**, then they are also assessed specifically in terms of three colour vision problems, namely protanopia, deuteranopia, and tritanopia (see below). Again, this check is only an indicator of a page's conformance and it ignores dynamic changes and any mouse-over effects.

WCAG 2.0 Level AA requires a contrast ratio of at least **4.5: 1**, except for Large Text where the minimum ratio is **3:1**; for Incidental (e.g. decorative text) or Logotypes (i.e. text that is part of a logo) there is no minimum requirement. WCAG 2.0 Level AAA requires a contrast ratio of at least **7: 1**, except for Large Text where the minimum ratio is **4.5:1**; again for Incidental or Logotypes there is no minimum requirement.

The contrast ratio result for each specified page was as follows:

Page One: Passed luminosity contrast ratio check. The contrast ratio of 18:1 passes at Level AAA

Page Two: as Page One

Page Three: **Failed for the text descriptors used below the gallery images (p class: description) giving a contrast ratio of just 1.6:1**. The foreground/background colours for these text descriptors appear to provide very poor contrast when considering the colour vision defects of protanopia, and especially deuteranopia.

Page Four: as Page One

PROTANOPIA - red-green colour blindness; people affected are less sensitive to red light; it affects about 1% of males and 0.02% of females. **Protanomaly**, which is a milder defect, affects a similar number.

DEUTERANOPIA - red-green colour blindness; people affected are less sensitive to green light, and together with its mild form **Deuteranomaly**, affects about 6% of males and 0.45% of females.

TRITANOPIA - blue-yellow (or more accurately blue-green) colour blindness; people affected confuse blue with green and yellow with violet; very rare.

For a list of suitable contrast ratio analysers, please see <http://www.w3.org/WAI/ER/tools/>

Criteria 2 – Cross-Browser Check

Each page is viewed on a PC with a screen resolution of 1024 x 768 pixels using six common and popular browsers: Internet Explorer 8, Internet Explorer 7, Firefox 3.6, Opera 10, Safari 4, and Google Chrome 5. Together these six browsers represent approximately 99% of users (source w3schools, August 2009 - http://www.w3schools.com/browsers/browsers_stats.asp). Any **significant** differences or problems are indicated below; however, minor variations in font style, text or image positions are reasonably common and are thus only commented upon if the page structure/design/content is adversely affected.

Screenshots of the relevant page(s) as seen in that particular browser are included to better illustrate any such problem areas. Simply because a page appears similar in these six browsers using a PC is unfortunately no guarantee that the page will appear appropriately in **all** possible browsers and **all** possible screens.

The cross-browser result for each specified page was as follows:

Page One: No significant differences found.

Page Two: **In Firefox, Opera, Safari and Chrome the right-hand column appears at the bottom left of the page; also the central text block containing various link details moves to the left.** Obviously this completely destroys the structure and overall balance of the page; in addition, many visitors will completely miss the right-hand column, since they are unlikely to appreciate the need to scroll down to view it. One possible reason for this problem is that the column widths have been set too large for these browsers. **[A screenshot illustrating the problem would normally be added here]**

Page Three: **In Firefox, Opera, Safari and Chrome the image positioning for the gallery breaks down with the image alignment adversely affected, also throwing off the positioning of the descriptive text.** Once again this destroys the page structure, and visitors are likely to move on elsewhere rather than trying to work out which image matches with which text description. A knock-on effect is that the 'Next Page' links are also out of alignment, adding to the confusion. **[A screenshot illustrating the problem would normally be added here]**

Page Four: No significant differences found.

Criteria 3 – Design Style and Structure

The overall design is reviewed as to how well each design component (logo, banner, columns, menu, headers, text and images) complements the other, together with the page navigation and ease of use. The nominated pages are then viewed at three common screen resolutions to see the effect on the page structure and content; finally the title, together with the keywords and description metatags are checked to ensure that they have been included (generally, no comments are made about the suitability of a page's keywords or description, as this requires a significant knowledge and understanding of each site's specific market). Please also note that the comments below represent the views of an experienced web designer and as such are thus a subjective judgement on each page's design style and structure.

The comments for each specified page were as follows:

Page One: The design is contemporary with an attractive logo which is effectively incorporated into the top banner. However, the left-hand column colour scheme of purple and grey is rather dour; this, together with some relatively dark photographs tends to make the **make the page rather unexciting, almost uninviting.** Using six such photographs, set out in 3 by 2 grid, creates a rigidity which might be softened by reducing the number of images and making one or more of different sizes. The text areas are well separated from each other, and it doesn't feel that images or text dominates the other.

The page structure is clear, simple and uncluttered, the placement of the logo complementing the title and top menu. Once again, the top menu of purple and grey – whilst easy to understand and use – adds a sombre mood to the page, fortunately lifted somewhat by the background white. The images seem relevant to the page content and virtually all look professional, although the two people shaking hands are doing so with their left hands, and it just appears a little 'odd' - a possible consequence of the original image being laterally inverted for some reason?

The main text font and font size is easy to read for normal viewing, as are the headers, which in turn are sufficiently large to do their job and illustrate different sections. However, **the reference text is in a relatively small font size** and some readers are likely to find this rather difficult to view.

Since the site is primarily an information site there is no obvious way of telling whether or not such information is up-to-date; the **various text blocks are not dated**, and there is no 'Latest News' section which might indicate that the site is regularly updated.

Navigation links are easy to understand with meaningful titles; however, the large number of menu items in the left-hand column could easily cause confusion, especially as the **order was non-alphabetical**. The Contact-Us link was easy to find.

Many visitors prefer for the non-menu links to be obvious by being underlined (which they are) and once visited they should change colour (which they did not) – such conventions can be rather debatable as visitors are generally more experienced than a few years ago. Unfortunately, **some normal text on the page is also underlined**, adding confusion as to whether it is a link or not. There is **no search facility**, which for a site of this size and content type was a little surprising.

The design has a fixed-width structure which means that at a screen resolution of 800 by 600, then horizontal scrolling is necessary; nowadays, very few visitors are likely to have monitors using this resolution, but it might be worthwhile checking visitor data to see if this is a potential problem.

The title seems relevant for the page. The **keyword and description metatags were both missing** which will reduce the page's search engine ranking for relevant keywords.

Page Two: as above; it is common that the logo links back to the home page or as an alternative that there is a home page link somewhere – this is also relevant for search engines. **No such link was found**. There was consistency of design style and navigation.

Page Three: as Page Two. In addition, the **large number of images merely made the page very cluttered** and detracted from the visual impact such images should make; there was also no option to click on the image for a magnified version. **Finding a specific type of image wasn't particularly easy, and the actual ordering was unclear**; this might be improved by categorising the images in some obvious and relevant fashion, perhaps even adding category links – but this would of course add an extra click in order to get to a specific image. **Many of the images looked slightly out of focus, and several had the main component not centred** – overall, this gave the images and thus their content, a rather amateurish look.

Page Four: as Page Two. The animation was sufficiently unobtrusive not to distract the visitor from relevant information; there did seem an awful lot of text and it might be worthwhile considering separating out some of the content onto additional pages.

Criteria 4 – Design Validation

The coding of the page is checked with an automated validation tool to see if it follows the 'accepted rules' of that particular coding language as recommended by the W3C and International Standards. If appropriate, the total number of errors is stated, and the main error types for the selected pages are listed (up to a maximum of eight). XHTML is the predominant language for web pages; Cascading Style Sheets (CSS) are used to define the colours and formatting of a web page.

Any 'errors' encountered might not necessarily affect how each web page is seen by a visitor and such errors can easily creep in as updates are made to a site. Pages on most sites are likely to have some errors, part of the reason being that the coding 'rules' change over time as – like any language – XHTML and CSS continue to evolve. That said, even if a page satisfies design validation it does not mean it is a 'good' web page; however, a page with several hundred errors could well indicate rather sloppy coding practice, or possibly an inappropriate DOCTYPE attribute (a DOCTYPE or Document Type Declaration informs the browser which (X)HTML coding version is being used). Such a page is thus quite likely to have problems being viewed correctly across a range of browsers and screen resolutions. For more detailed information, see <http://validator.w3.org/docs/why.html>

Please note that different automated validation tools may give very slightly different error results; also with some validators, one individual html or css coding problem can lead to more than one reported error.

The number of coding errors obtained for each specified page was as follows:

Please note: each page assessed used an **inconsistent DOCTYPE declaration**; consequently they were checked by the validator as XHTML 1.0 Transitional.

Page One: 120 (X)HTML coding errors detected, plus 22 CSS errors.

Page Two: 110 (X)HTML coding errors detected, plus 22 CSS errors.

Page Three: 174 (X)HTML errors detected, plus 22 CSS errors.

Page Four: 62 (X)HTML errors detected, plus 22 CSS errors.

The main error types include:

- 1) (X)HTML - required attribute "alt" not specified for various images [see also Accessibility]
- 2) (X)HTML - the majority of image dimensions lack quotation marks around the image dimensions
- 3) (X)HTML - similarly for the various table elements e.g. valign = "top"
- 4) (X)HTML - end tag for "img" frequently omitted, but OMITTAG NO was specified
- 5) (X)HTML - various end tags for certain elements are incorrectly placed e.g. </p> some of which might be a consequence of earlier errors
- 6) (X)HTML - the attribute "BORDERCOLOR" has been used several times but is not a valid attribute
- 7) CSS - all of the letter-spacing values require a unit not just a number
- 8) CSS - similarly all of the margin values require a unit

If your site administrator requires a more detailed list of errors, then please email ComeUpSmiling with your request within 30 days of receipt of this report; alternatively, error lists can also be obtained via an appropriate validator; for further details please see <http://www.w3.org/QA/Tools/>

Criteria 5 – Speed Report and Link Check

Using a suitable speed test analyser, the size (in kilobytes) of the page content is assessed, together with the respective average download times for users with a 56k modem or 1.5Mbps broadband connection. In calculating download times, speed test analysers make various assumptions (for example, some will add on the delay time per object due to 'round-trip latency'), and different analysers are thus likely to give differing results. Consequently, the speed report detailed below should only be taken as an **estimate** of the relevant download times. Where download times are 'excessive' for particular components, then these are highlighted.

Please note that excessive download times are likely to remain excessive even if a different analyser is used, and image-heavy pages will always take longer to download. Apparent anomalies between respective download times generally relate to the number of images to be downloaded.

The speed report for each specified page was as follows:

Page One: Size of html content is approximately **11.6kb**; total image size is approximately **632kb**. Estimated average download time via a 56k modem is approximately **90.0s**. Estimated average download time via a 1.5 Mbps broadband connection is approximately **3.7s**.

There is thus a potential problem for non-broadband users, and it would be worthwhile checking visitor data to see how many visitors are likely to be affected; if necessary the image size will need to be reduced. Of those households with Internet access, 90% had a broadband connection in 2009 (source: Office for National Statistics, August 2009, <http://www.statistics.gov.uk/pdffdir/iahi0809.pdf>).

Page Two: Size of html content is approximately **19.8kb**; total image size is approximately **164kb**. Estimated average download time via a 56k modem is approximately **23.5s**. Estimated average download time via a 1.5 Mbps broadband connection is approximately **3.3s**.

Page Three: Size of html content is approximately **50.0kb**; total image size is approximately **660kb**. Estimated average download time via a 56k modem is approximately **94.1s**. Estimated average download time via a 1.5 Mbps broadband connection is approximately **12.7s**. **The number and size (in kb) of the images used on Page Three causes the page to load relatively slowly.** Visitors may well be prepared to put up with this as they can quickly see that it's an image gallery, but some visitors landing directly on this page may well navigate quickly elsewhere. The gallery images could either be reduced in number or optimised (kept the same size but reduced in memory, which will have some effect upon the clarity of each image) more effectively to help improve download times.

Page Four: Size of html content is approximately **12.5kb**; total image size is approximately **306kb**. Estimated average download time via a 56k modem is approximately **43.7s**. Estimated average download time via a 1.5 Mbps broadband connection is approximately **5.7s**.

Suitable speed test analysers include <http://www.websiteoptimization.com/services/analyze/> and <http://www.webscale.com>

Finally, the page links (including menu items and image links) for each nominated page are checked with an automated link checker to ensure that there are no broken or invalid links; any such links are listed (upto a maximum of eight). Please note that an automated link checker may sometimes fail a working link if, for example, it is to an external web site which is temporarily offline, or with an image link, the image reference has spaces within it.

The number of broken/invalid links for each specified page was as follows:

Page One: No broken or invalid links found.

Page Two: **3 broken or invalid links found. Each of these broken links relates to an image which presumably should appear on this page.**

- 1) Line 18, reference ../../link1.gif
- 2) Line 23, reference ../../link2.jpg
- 3) Line 74, reference ../../link3.png

Page Three: No broken or invalid links found.

Page Four: **Line 41, broken or invalid link found to an external page, <http://www.someothersite.html>**

For a list of suitable link checkers, please see <http://www.w3.org/WAI/ER/tools/>

Disclaimer

The content of this report is provided for informational purposes only; it represents the professional opinion of an experienced web designer and has been prepared using various sources and data which ComeUpSmiling believes to be reliable. However, ComeUpSmiling Ltd makes no representation as to the accuracy, completeness or usefulness of this information, and in no event shall ComeUpSmiling Ltd assume any liability or responsibility for any errors, omissions or opinions in this report.

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