

## Briefing your web developer

### Key questions to consider

- have all strategic decisions about the web development process and the development brief been made and approved by senior management before they are delivered to the web developer?
- does the development brief contain all the information about the project that the developer will need in order to complete the required tasks on time and within budget?

## Briefing your web developer

### Key points

- prepare a rough site map defining structure, content areas and likely relationships between pages, with content and functionality required
- collate all necessary information to prepare a comprehensive development brief for the web developer
- work with the web developer to agree on the final structure and navigation, as well as specific functionality, as the first part of the development process

## Briefing your web developer

Preparing the brief for the web developer, which is the crucial document in defining and communicating what you want to achieve

At the start of the website development project it is necessary to decide on the basic structure, functionality and layout of the website – the architecture – so that it will achieve the key purpose and deliver the objectives.

You may obtain advice from your web developer in making these decisions, but it is essential to record this in a formal development brief. It is important not to be confused between design – what the website will look like – and development – how the website will be structured and what it can do. While design will be involved, the essential skill is development.

*'I'm very particular about the use of the word "design", which is often taken to mean graphic design. I make a distinction between "design" and "not just graphic design" by substituting the word "development" which means "the whole thing".'*

*Stacie Johnston, President, Some Pig Information Design*

The development brief will contain the information necessary to help the people tasked with delivering an effective functioning site. It is vital for the success of the project, and the wise use of resources, that the requirements are clearly and succinctly communicated via the brief. This is especially important for website development when so many elements have to be integrated into a successful whole. Preparing this is a key aspect of the web manager's role.

Adequate time should be allowed. Two weeks to a month should be set aside for working through the process, building from strategic decisions about the primary purpose and objectives of the website. This length of time is realistic because the web manager is likely to be simultaneously managing other aspects of the project, as well as other work. Internal and external consultation is likely to be necessary. Information needs to be gathered to be included in the briefs. Other staff and departments need to be involved in the process, and it is likely, given the importance of the brief, that sign-off at senior management level will be required.

Investing more time at the beginning to present a fully completed, thought-through development brief, containing all the required information, eliminates misunderstandings at the outset and creates a clear framework for the work. This initial planning is easier while you are still in a strategic, not an action, mindset and will save inordinate amounts of time and expenditure later. You will be working with a strict budget, and the more work you can invest at this stage, the fewer hours the web developer will waste on trying to understand what you want and producing inappropriate results. A prominent international advertising executive once pleaded ‘give me the freedom of a tight brief’. Developers who are given clear instructions and information at the outset say such development briefs enable them to have a clear focus and get on with delivering effective solutions.

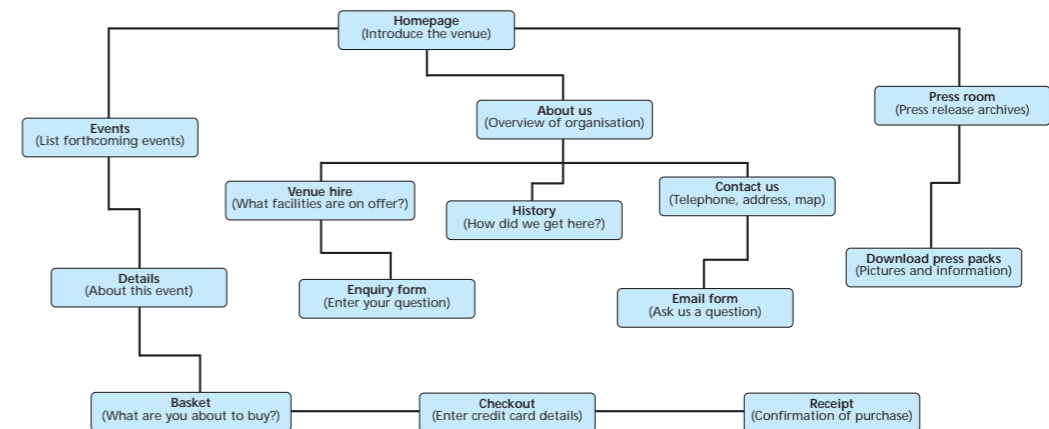
*‘Browsers are not a graphic design medium – think ergonomics and engineering design, not graphic design.’*

*Homepage Usability, Jakob Nielsen and Marie Tahir, 2002*

## Structure and navigation

The key part of the development brief is the website architecture, the structure and navigation (some call this simply buttons or pagelinks) in an outline form. This is not graphic design but ergonomics and engineering design. At its simplest level this means producing a tree view of how each page of the website and its content relates to the others, remembering that in practice each link on the tree needs a navigation button to make the connection. So separate flow charts are needed to show how the user will move from page to page to reach the content, using the website navigation.

## Sample site map

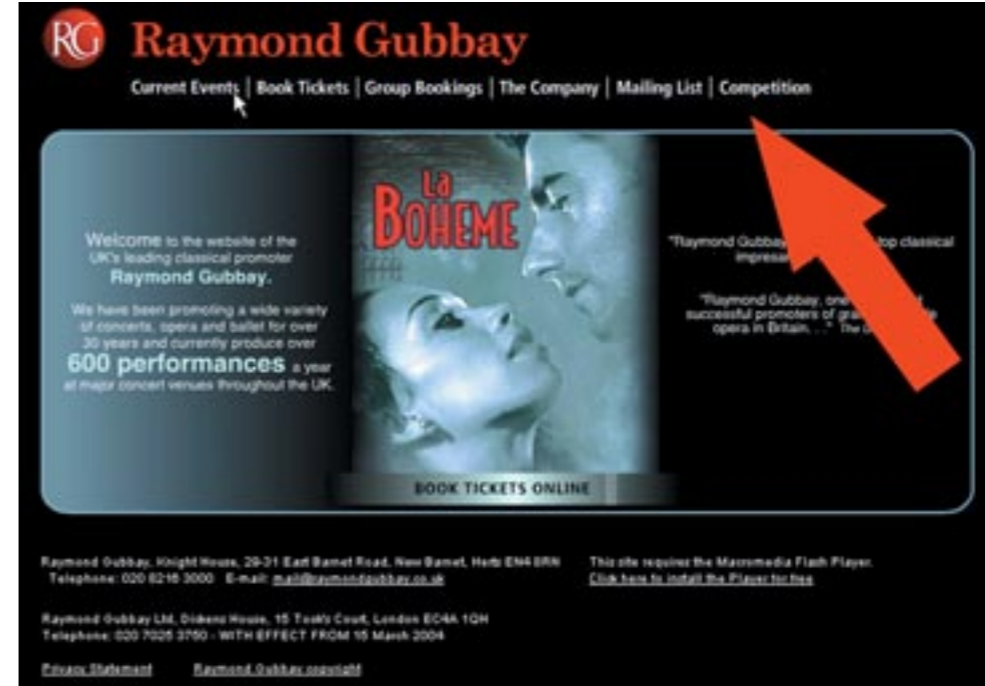


On each page it is necessary to specify what content and functionality is required. Remember, visitors do not necessarily arrive at the website home page but could follow a search engine content link and arrive deep in your site. Navigation enables users to move around your website from page to page, and is therefore a vital element in determining whether your site achieves its purpose. Although the web developer will provide recommendations as to the structure and navigation for the site, it is essential to provide a skeleton showing the proposed layout of the website.

The following pages illustrate various ways of displaying navigation information.



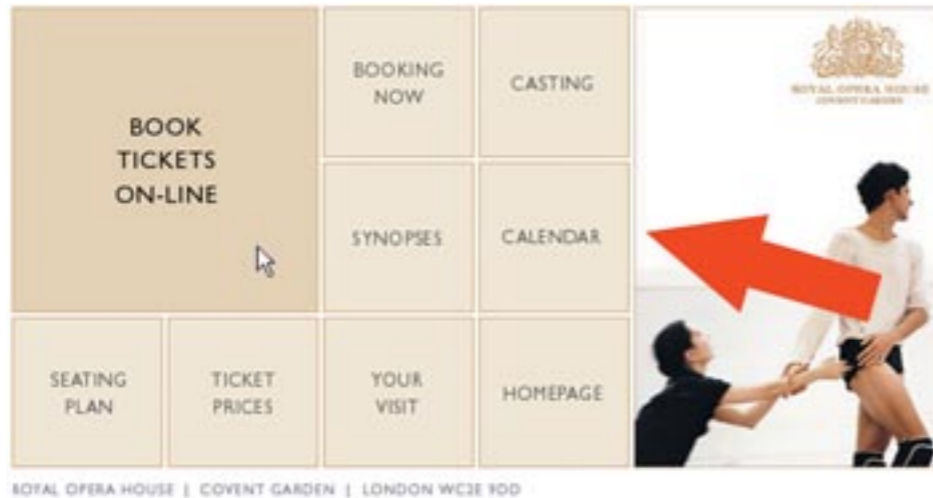
www.nationaltrust.org.uk



www.raymondgubbay.co.uk



www.csm.linst.ac.uk



ROYAL OPERA HOUSE | COVENT GARDEN | LONDON WC2E 9DD

The new production of **Faust** is extremely popular and we are limiting online purchases to two tickets per performance. The performances will initially be accessible online, even when they are sold out. This is to ensure customers have immediate access to any returned tickets that may become available.

[www.royalopera.org](http://www.royalopera.org)



[www.thebritishmuseum.ac.uk](http://www.thebritishmuseum.ac.uk)

### The development brief

The test of a good development brief is whether the web developer could sit down and, without talking to you, come up with a first draft of what you want. Therefore it should have the following ingredients:

- project background and rationale
- website primary purpose and objectives
- target markets and the anticipated character of the users
- key issues and problems to be resolved
- brand values and marketing messages to provide a context and visual identity
- competitor and comparative example websites
- proposed structure and content
- specific functionality needed, eg dynamic What's On guides, e-commerce, bulletin boards, registration
- required outputs
- internal resources to be used and when
- what content will be produced for inputting and how
- any specific constraints
- budget
- timetable
- resources and access to graphics, texts, etc
- any appendixes

### Sample development brief

The following is an outline taken from a real brief produced by a UK company, which offers a computer-based service for public and academic libraries.

#### Project

- website development project for UK company that offers computer-based service for public and academic libraries, internationally

#### Project background and rationale

- a corporate website is required, where potential library customers can find information about our products and how to trial/purchase them
- international visitors and potential customers must be catered for
- the new corporate website will be launched simultaneously with a new corporate brand, name and logo

#### Project team and responsibilities

- project manager – internal head of marketing
- web development – external web developer
- content – internal head of marketing

#### Website primary purpose and objectives

- provide an effective corporate interface online, leading potential and current library customers to trial or purchase our service for libraries
- provide accessible information to site visitors from all round the world

#### Target markets

- librarians (public, academic and school), library directors and managers and library collection acquisition personnel, mainly in the English-speaking world

It is important to understand that the corporate website is directed at librarians who may potentially purchase this service as a subscription service for their library. It is NOT a website for library visitors or patrons themselves.

#### Key issues and problems to be resolved

- accuracy, usability and accessibility are of paramount importance for this target market – they will be unforgiving
- style consistency between the print design and web design
- we are a new service and the first of our kind, therefore simplicity is key

#### Brand values and marketing messages

- outlined in detail in attached document, but the brand attributes of authoritative, relevant, comprehensive, dynamic and accessible must be adhered to

#### Competitor and comparative examples

- competitor websites listed here

#### Planned content and structure

- site map provided here

#### Specific functionality needed

- site search functionality and search box; must avoid 'not found' results and prompt for further searches
- top three What's New stories to feature dynamically on home page
- free trial sign-up form and log-in
- newsletter mailing list sign-up form and database
- press mailing list sign-up form and database
- downloadable press kit
- simple back-end web-based editing for in-house staff

#### Required outputs

- a choice of concepts at the initial stage
- a design template for the pages and navigation for the site
- targeted at librarians so should be aesthetic and enticing, but also simple, clear, informative and straightforward, of a high professional standard with effective navigation from all pages

- there must be plenty of white space and text should be readable and easy to scan
- potential for growth and product development requires a site structure and page design that makes it easy to add elements or sections

### **Resources**

- site map – attached
- site content – project manager to produce
- logos – attached
- images – as per print images, attached

### **Content**

- head of marketing is producing the content for the pages as referred to in the site map (outlines are available)
- content will be uploaded by the head of marketing into the pages

### **Specific constraints**

- retaining association with existing branding
- budget – development costs per annum

### **Appendix**

- design brief for corporate rebranding

# Technical issues

## Key questions to consider

- does the proposed technical structure support the primary purpose of the website? Will this work for the target audience? Will this technology still be relevant in two years?
- what do you need from your ISP in terms of services, software support and hosting packages and are there any technical issues that should be raised with the host ISP?
- how will the technical structure and host ISP impact on updating and maintenance of the site?
- will what you can afford give you any development issues?

## Technical issues

### Key points

- explore with the web developer the proposed technical structure for your site and all the implications, including usability and content, so you can produce a matrix of the interactivity you require and review the technical implications of the options you can afford
- together with the developer prepare a short technical specification from the matrix and confirm with potential ISPs that they can host your proposed website, provide the services and support the software
- get specialist technical help to identify the likely volume (size) of your site and the level of traffic it will attract
- review potential ISPs and their hosting packages and check them out in *internet magazine* (or similar) and seek personal recommendations or references

## Technical issues

The technical structure for your website; you may not want to get involved, but someone will have to

The web developer should advise you on the appropriate technical structure for your website, determined by the primary purpose and the necessary content and functionality of the website to achieve your objectives. The options range from a static site that has non-database HTML pages through to database-driven sites, with many variations in between. In assessing the options, keep asking yourself, 'Is this going to help deliver the objectives of the site?' and 'How might the user react to this?'

### Static site

A static site comprises any number of HTML pages that present the same information to every user. If the purpose of your site is to make general information about your organisation accessible on the web, then a static site can be appropriate.

The advantages of a static site are:

- ✓ cheap and quick to develop
- ✓ easily maintained and updated by someone with basic HTML and web content management skills
- ✓ likely to perform well across platforms and browsers
- ✓ unlikely to present technical barriers to users
- ✓ if navigation is logical and file structure and file naming is employed from the beginning, a static site is relatively easy to expand as the site grows

The disadvantages are:

- ✗ information is set until manually updated
- ✗ it is harder to manage dynamic date-related information such as What's On

### Database-driven site

If the purpose of your site is to present detailed and frequently changing information, such as event information, or provide e-commerce services such as sales and ticketing, a database-driven website is usually required. Database-driven sites select information from a back-end database and insert it into the appropriate parts of the web page. For example, if the website is selling tickets, the user can choose their performance and have the correct price and seat availability for that performance displayed alongside generic information about the event. For example: Birmingham Royal Ballet ([www.brb.org.uk](http://www.brb.org.uk)).

The advantages of a database-driven site are:

- ✓ the ability to present specific and up-to-the-minute information
- ✓ integration with existing computer systems to facilitate automated updating
- ✓ enhanced services to users
- ✓ secondary benefits such as freeing up staff time and improving access to correct information internally as well as to the public

The disadvantages are:

- ✗ the cost and time for development is increased
- ✗ reliance on specialist external skills for problem-fixing
- ✗ the possibility of being tied to a technology or programming language that may become outmoded
- ✗ web users with older systems and slower Internet connections may experience difficulties

If you are developing a database-driven website, the developers will need to liaise with the host ISP so that technical issues are identified and addressed early in the project, to avoid cost and time over-runs.



*A database-driven site (see [www.tate.org.uk](http://www.tate.org.uk)) is required for detailed and frequently changing content, such as event information.*

### Other interactivity

There are many levels of interactivity between static pages and a database-driven website. For example, e-commerce modules can be plugged into your site at the host server to add simple shopping functionality. Some ticketing system suppliers such as Tickets.com provide links from your site to their online sales engine. JavaScript rollovers, pop-up windows and drop-down menus are interactive features that can be used effectively in navigation to provide additional information and for specific promotions.

### Frames

Some developers may recommend a solution that uses frames. Frames effectively position two or more HTML files on the same screen (see the Sadler's Wells example at [www.sadlerswells.com](http://www.sadlerswells.com)). The main advantage of this is that navigation and header content is created once, and the browser replaces the body frame as the user navigates through the site. It saves time on downloading and also in development. But frames are not the only way of achieving what is required.



*Frames position two or more HTML files on the same screen (see [www.aam.co.uk](http://www.aam.co.uk)).*

Frames can be seriously problematic for access and usability. They prevent much standard web navigation, such as the 'back' button in the browser and easy text to speech interpretation, so they block accessibility. If they are poorly applied, they can lead to navigation and functionality problems, and be more difficult to update if the structure is not clear. Common errors with frames are pages that have no scroll bars so that not all of the content can be viewed on some screens, or external links opened within a website's frame so that users become confused as to where they are, and who is serving up what. Some early versions of browsers will not even display frames.

### What's in a name?

In order to be visible to other computers on the Internet, the website:

- must be hosted by a web server – a computer that is constantly connected to the Internet and allows other computers to access its information
- have a domain name – an address: the unique resource locator or URL, eg [www.artscouncil.org.uk](http://www.artscouncil.org.uk)

For most arts organisations it is essential that they have a domain name which is closest to the real name by which the public will recognise them. Because the public now understands how URLs are structured, many will try typing what they expect the address to be. So it can be helpful for organisations to obtain their domain names in all the relevant versions: .co.uk .com .org.uk .eu, etc. Some organisations may have familiar names (Glasgow's Citizen's Theatre has the address TheCitz) or more than one recognised name, such as a management name and a venue or touring company name. It is helpful to register them all and automatically redirect all traffic to the one website. Obviously, it is essential to expose the URL of your organisation in the same way as the telephone number.

Many web users will arrive at your site via search engines (such as [www.google.co.uk](http://www.google.co.uk)). However, not all search engines work in the same way, and some may have schemes so that specific websites come up in answer to some queries. For example, in many search engines just typing the name of most theatres in London and the word 'tickets' will take you not to the website of that theatre but to ticket agents. Organisations may need to make clear to search engine providers when they think web users are being led away from their sites.

### Internet Service Providers

Internet Service Providers (ISPs) are companies who provide hosting services for web servers (as well as services such as broadband and domain name management). Most arts organisations will already have an ISP for email and their own Internet access. The web server is usually hosted outside your organisation because it requires constant attention, high-strength protection and major fail-safe telecommunications capable of

handling high volumes of traffic. However, arranging for a website to be hosted takes us straight into deeply technical subjects and most arts organisations will need third-party advice on this from their web developer.

Before you look for hosting services, sit down with your web developer and draw up a list of technical specifications, including any specific programming languages or technologies, and what functions you want – such as e-commerce, ticketing, online forms, dynamic pages, databases, etc. If you are developing a database-driven website, you will need to ensure that the web developers liaise with the host ISP and that any technical issues are identified and addressed early in the project.

### Hosting plans

ISPs will usually have a variety of hosting plans that include a certain level of services and a size limit for your site. Forty MB is a common entry-level size, which should be enough for a static-page website of up to 100 HTML pages with web-friendly graphics, a small database and a few documents as downloads. The other important figure to take into account is the volume of traffic (or file transfer rate) that your website will generate – that is the number of pages actually viewed by users. Most ISPs will charge a fixed rate for this at around one gigabyte or higher per month. Some ISPs offer free hosting, but generally this has a small size limit and may come with other strings such as advertising banners or you cannot use your own domain name. Some ISPs will be happy to negotiate sponsorship arrangements, where their logo is displayed on your site in return for hosting.

In every case, it is essential to ensure that the ISP can host your website at a price you can afford. This may determine the technical structure of your site.

### How to find an ISP

The hosting of your website can be 'mission critical' to your success, determining whether your presence is continuous and the traffic generated can be handled. To find a suitable ISP ask around your networks for recommendations. Make sure you are asking someone who understands your questions. There is a comprehensive online UK

ISP directory ([www.uk-isp-directory.co.uk](http://www.uk-isp-directory.co.uk)), which includes reviews, free ISPs, regional ISPs and other helpful information. *Internet magazine*, among others, makes a monthly comparison of the top UK ISPs and covers hosting services.

It is not necessary for the ISP you choose to be in the UK; in fact it may be financially advantageous to have your site hosted offshore. For example Actrix in New Zealand ([www.actrix.co.nz](http://www.actrix.co.nz)) sponsors the hosting of the Magdalena Project website, [www.themagdalenaproject.org](http://www.themagdalenaproject.org), which is based in Wales.



*Internet magazine* ([www.internet-magazine.com](http://www.internet-magazine.com)) publishes monthly comparisons of the top UK ISPs.

## Platforms and languages

Host servers can run various platforms including Unix, Apache, Sun, Cisco, Linux and Windows. Different programming languages and technologies work on different platforms. Your web developer should discuss with you whether the site will require any of the following, and if so you should check with potential hosts that the technology is supported (this list will inevitably become dated):

- CGI (common gateway interface): this is a fairly standard form-processing protocol that enables the transfer of information entered into a form on your site
- SSL (secure socket layer): this is fairly standard encryption for passwords, credit card information and so forth
- Cold Fusion (database)
- ASP: Microsoft's dynamic web page technology, for performing interactive functions
- PHP: an open-source scripting language that works with HTML to perform interactive functions; it is used primarily on Linux-based servers, or Windows with add-on software
- JSP (Java Server Pages – not to be confused with JavaScript): Sun Microsystems' version of the dynamic page
- Microsoft SQL Server – used by many ticketing systems for their Internet ticketing engines and not compatible with all website development languages

## Internet Service Provider checklist

What do you need to ask of your ISP?

- how much space can your site have on the web server?
- how is site traffic charged – a flat rate or per MB – and are any strings attached, such as pop-ups or banner advertising?
- will you have full File Transfer Protocol (FTP) access to upload and delete files from the site?
- what statistics are provided, and in what format, so you can measure the success of your website?

- what is the level of web server monitoring (24/7, 9–5, etc)?
- what technical support is provided – by phone, by email, and what does it cover?
- what email services are provided as part of the package – number of mailboxes, email forwarding, spam filters, etc?
- how often is web data backed up, and in what format?
- can you install custom software?

### Resources

Webmonkey – web developers' resource: <http://hotwired.lycos.com/webmonkey/>

How To Web – news, features and resources for web professionals:

[www.howtoweb.com](http://www.howtoweb.com)

JimWorld – services, tools and resources: [www.jimworld.com](http://www.jimworld.com)

Internet magazine: [www.internet-magazine.com/](http://www.internet-magazine.com/)

UK Directory of ISPs: [www.uk-isp-directory.co.uk](http://www.uk-isp-directory.co.uk)

## Monitoring success

### Key questions to consider

- what information do we need to know about our web visitors?
- what information is provided by our web host server logs?
- do we need to purchase additional web statistics software?

## Monitoring success

### Key points

- determine the key evaluation measurements and benchmarks you will employ
- set up procedures to obtain the key statistics you require
- arrange website review sessions with key stakeholders and senior managers

## Monitoring success

How you can monitor the success of your website and evaluate if it is achieving your objectives

It is essential to monitor effectiveness if you are to achieve the website's objectives. There is no single definition of what is success. In 2003 the Arts Marketing Association stated there were no established benchmarks or even agreed forms of measurement in relation to web marketing or e-marketing by which arts organisations could compare achievements. They have since started to collect and share information towards identifying some benchmarks.

By taking advantage of the measurability of the web, it is possible to assess the success or otherwise of your website. Web servers can keep logs of every visit to your site, what people look at, for how long, where they hover their mouse, what they click on, etc. Any interactivity on your website helps to compile information on user behaviour. Some methods to achieving this are:

- build the functionality into your website that can create tracking links on demand, enabling you to assess responses to individual promotions
- purchase some search engine monitoring software, such as Web Position Gold, that enables you to set up regular automated reports that show your rankings and how they are changing over time
- monitor your link popularity on a regular basis using free software such as [www.linkpopularity.com](http://www.linkpopularity.com) and [www.linkpopularitycheck.com](http://www.linkpopularitycheck.com)
- analyse server logs from your web hosting company to find out where visitors are coming from, how they are finding you and what paths they are taking through your site. If necessary, purchase additional web statistics software to further drill into user activity

- monitor what people type into the search engine field on your site so you can see if you are meeting their needs
- analyse key areas of activity such as e-commerce or Internet ticketing to see where users drop out of the purchase process



Checking your link popularity, using one of the free online tools such as [www.linkpopularity.com](http://www.linkpopularity.com), enables you to assess how many other sites are linking to you.

### Everyday monitoring

Websites need to be monitored daily to ensure they are available and functioning appropriately. Think of it as a member of staff – has it come into work today, is it OK and is it fulfilling customer requirements? Many sites have content problems such as broken links or dated content, which users find but organisations are not aware of, so it is vital to review the site and key functionality on a daily basis. Many organisations find that low levels of Internet ticket sales stem from difficulties of usability, which can be identified from web server logs of activity and when/where people drop out. Just counting visitors is not enough.

### Key terms of measurement

In terms of website visitors, it is important to understand exactly what it is you are measuring. There are common misconceptions, such as the regular incorrect use of the term 'a hit' to describe a visitor. In fact it refers to a download of a file (see below). The key terms of measurement are as follows.

### Impression or page view

An impression is one single viewing of a page, or consequently, a banner ad. If one visitor to your site goes to six different pages on your site, then that is six impressions. Impressions are the standard unit of measurement for Internet advertising campaigns. Ad rates are expressed as CPM (ie cost per 1,000 impressions).

### Visitor session

A visitor session is all activity for one visitor to a website. A visitor session is generally recorded as ended when a visitor is inactive for more than 30 minutes. The session time is relevant, because websites are aiming to make themselves more 'sticky', where visitors stay on their site longer.

### Unique visitor

One person who visits a website. For example in one week you may record 200 visitor sessions to your website, but that does not necessarily mean 200 individuals. It could be 150 individuals, 50 of whom visited twice.

**Click**

The number of times a visitor clicked through to your website via a link or advertisement placed elsewhere on the web. Sometimes advertisers will purchase banner ad campaigns where they pay per click, ie they are only paying when someone takes action on their ad.

**Hit**

You will hear people refer to hits to their website. This is not an accurate way of measuring visitors. A hit is an action on a website, such as when a visitor downloads a file. A file can be an image or a graphic, eg a home page could generate around 14 hits every time a visitor opens it. So a single hit is not a single visitor.

**What you should measure**

The type of information you will want to know about visitors and their activity is:

- where they are geographically
- which ISP they use
- where they come from to get to your site (a search engine, a link on another site, typing in your domain name)
- if they come via a search engine, what search term they use
- which page they arrive at
- what paths they follow to your site
- what actions they take on your site
- how long they stay on your site
- if visitor session lengths are generally increasing over time
- if they are new or repeat visitors
- if users are reaching the end goal, eg buying tickets
- if not, where they drop out of the process

This information should be provided in a palatable form by the web hosting company as part of the server logs that you are entitled to access. This is something that should be agreed with potential hosts before you sign up.



## Web Server Statistics for [www.blackheathhalls.com](http://www.blackheathhalls.com)

Program started at Sat-07-Feb-2004 03:10.  
Analyzed requests from Fri-06-Feb-2004 00:20 to Fri-06-Feb-2004 22:23 (0.92 days)

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**General Summary**

(Go To: [Top](#) | [General Summary](#) | [Daily Report](#) | [Daily Summary](#) | [Hourly Report](#) | [Hourly Summary](#) | [Quarter-Hour Report](#) | [Domain Report](#) | [Organization Report](#) | [Host Report](#) | [User Report](#) | [User Failure Report](#) | [Failed Referrer Report](#) | [Referrer Report](#) | [Referring Site Report](#) | [Search Query Report](#) | [Search Word Report](#) | [Browser Report](#) | [Browser Summary](#) | [Operating System Report](#) | [Status Code Report](#) | [File Size Report](#) | [File Type Report](#) | [Directory Report](#) | [Redirection Report](#) | [Failure Report](#) | [Request Report](#))

Successful requests: 811  
Average successful requests per day: 881  
Successful requests for pages: 233  
Average successful requests for pages per day: 252  
Failed requests: 21  
Redirected requests: 1  
Distinct files requested: 15  
Distinct hosts served: 118  
Data transferred: 10.413 Mbytes  
Average data transferred per day: 11.334 Mbytes

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*Your web hosting company should provide you with server statistics logs.*

### Key benchmarks and measurements

Key internal benchmarks must relate to the website's primary purpose and objectives. If your objectives include increasing ticket sales, measure how many transactions are coming through the website and whether these are existing customers. If your main objective is to increase awareness of your organisation, look for measurable evidence of this from site traffic statistics, registrations, more enquiries, etc.

Set dates for reviewing the website and its objectives. Six months to one year after the launch is a good time for the first formal review. By this time, your users, hopefully the target audience, should be aware of the website and how to access it, and this should be having other effects such as information distribution and requests being channelled through the website, increased ticket sales, and feedback from the site.

Your organisation should define key benchmarks that will enable you to determine the achievement or otherwise of the website's primary purpose and objectives:

- does the website meet its objectives?
- does the site embody the culture/brand of the organisation?
- does it communicate its purpose clearly?
- does the site appeal to the target audience?
- is navigation clear and easy to follow?
- is the site technically functional?
- is the content up to date and free from copy errors?
- are 'bells and whistles' used to enhance the content or are they unnecessary add-ons?
- are accessibility/usability issues addressed and working for users?
- what is the conversion rate?
- are adequate numbers of visitors reaching the end goal?

### Resources

Link Popularity: [www.linkpopularity.com](http://www.linkpopularity.com)

Link Popularity Check: [www.linkpopularitycheck.com](http://www.linkpopularitycheck.com)

*Web Site Stats: Tracking Hits and Analyzing Traffic*, Rick Stout, Osborne McGraw-Hill, 1997

Arts Marketing Association research on benchmarking: [www.a-m-a.co.uk](http://www.a-m-a.co.uk)

## Appendixes

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## Appendix 1: Do-it-yourself usability testing

- set a schedule for usability testing, both during the development of your website and ongoing once the site is live
- determine the most important usability evaluation criteria for your website, keeping the website purpose and type of user firmly in mind. For example: Can the user navigate successfully to the end goal of purchasing tickets?
- develop a checklist of these criteria and define matching user tasks that determine if the usability criteria are being met, eg set the user the task of purchasing a ticket for a current event
- define a schedule for regular usability testing, factoring in follow-up decision and development time to fix common problems, and time for retesting
- agree internally on the level of sophistication of the tests, dependent on available resources such as time, budget, staff, space and equipment
- select your sample, based on your desired user profile, keeping in mind that 10–20 users is the standard number on which to accurately evaluate usability responses
- invite users to the usability test (you may have to provide an incentive such as cash or tickets)
- ask sample members to follow the set tasks under observation. It is important to keep the tasks completely consistent across the sample. It is also extremely important not to get involved or offer assistance but to remain an independent observer
- collate the results and identify common usability pitfalls. If you are unsure about any, schedule more tests
- once you are convinced that enough users are experiencing the same usability problem, put a schedule in place for changes to be made and brief the web developer
- repeat the process regularly – every three to four months is probably realistic
- use your own site and others to keep reminding yourself what it is to be a user trying to locate information or complete a task

## Appendix 2: Detailed usability checklist

Is the purpose of your site immediately clear to your user?

- do you explain who you are and what you do?
- do you explain what the site itself will enable the user to do?
- have you expressed this both visually and textually?
  - visually: with ranking and prioritisation of headings and links
  - textually: eg 'Here on the X website you can find information about our current and future events and book tickets online'
- does the user leave feeling satisfied that the site provided what they wanted?

### Navigation

Can people find their way easily around your site to reach their end goal?

- is the primary navigation in a highly noticeable place, eg along top or on left-hand bar?
- if the user arrives in the middle of your website (via a search engine result), is it clear where they are in the context of the site?
- when a user follows a trail can they always get back again without using the browser 'back' and 'forward' buttons?
- do the names for links and tabs make the destination obvious?
- do you avoid duplicating navigation (especially links to the same place with different names)?

### Content

Is the content on your website relevant and meaningful?

- does your website's content work to achieve the purpose of the site?
- is the content organised logically?
- is the content able to be easily scanned (eg not in wide blocks of text)?
- would you consider your content to be informative?
- have you written it for a web audience, eg readers are in a hurry, need to scan links?
- have you avoided in-house jargon?

### Design

Is the design of your site simple, logical and appealing?

- is your page layout balanced?
- is your site uncluttered with adequate white space?
- have you remembered that dark backgrounds are hard to read on screen?
- have you limited the number of font styles to three or less?
- have you chosen an easy-to-read font?
- do you have a consistent graphical theme from page to page?
- is your website design consistent with your offline design?
- are the critical page elements 'above the fold' (ie there is no vertical scrolling required from those with the standard screen resolution setting of 800 x 600)?

### Graphics

Are you using graphics wisely and sensibly?

- do the graphics help to achieve the website's purpose?
- do they enhance the user experience (be honest)?
- have you avoided watermark (background) graphics, which make text harder to read, increase the page load time and give an amateurish impression?
- are your images labelled with captions if it is not obvious what they are?
- are you limiting the use of animated graphics, eg blinking or rotating GIFs?

### Functionality

Are your visitors able to use your site at the most basic level?

- have you avoided excessive use of pop-ups (eg pop-up window ads) or plug-ins (eg insisting on downloading of Flash to view your site)?
- can the user choose an animated introduction or not? (It's OK in the right context to have animation as long as users can skip it if they choose)
- are you avoiding potentially irritating features like embedded music (music that plays automatically when site opens) or cursor effects (cursor turns into 'cute' graphic when user moves mouse)?
- does your website download quickly (ie in 40 seconds on a 56K modem)?
- are there no 'page under construction' signs or 'page not found' errors?
- can your site be used on different browsers (eg Internet Explorer and Netscape) and platforms (eg PC and Mac)?

### Accuracy

Is your website accurate and up to date?

- is your website free of spelling and grammatical errors?
- is it current and updated?

### E-commerce

Do you provide a satisfying, professional and secure e-commerce experience?

- do you clearly display what the site sells?
- is your product listing well organised with text and images?
- do you provide clear information on pricing and availability?
- do you enable clear pathways from all areas of your site to what you are selling?
- are your advertising claims truthful and substantiated?
- do you provide secure payment procedures?
- have you posted a privacy statement and reassured customers about providing their personal details?
- have you provided a customer service and returns policy?

### Corporate communication

Are you providing clear and accessible corporate information?

- is your company name and logo in a reasonable size and location?
- are you providing complete contact information including physical address, phone and fax details and email address?
- are you grouping this information in one place?
- are you linking to this information directly and clearly from the home page?

### Links

Are your links working effectively?

- do all of your internal links (links within your website from page to page) work?
- do your links to external websites work?
- are you checking these links regularly?
- are the links on your site differentiated from other text and therefore easily scannable?
- do your link colours show unvisited (usually blue) and visited (usually purple) states, so users can see where they have been already?

### Overall impression

Is your website creating a good first impression?

- is it pleasing to the eye?
- does it look professional and credible?
- is it consistent throughout?
- are you ensuring the user is not turned away immediately?

## Glossary

## Glossary

- Accessibility** A website is 'accessible' if it can be used by everyone, including people whose disabilities mean that they cannot use a normal web browser.
- ADSL** Asymmetric Digital Subscriber Line – a method of transmitting data over telephone lines, similar to ISDN but faster. Typically an ADSL connection will download data much faster than it will upload it.
- Alt Text** Alternate Text – the text attached to an image that will be displayed if the picture cannot be downloaded. Alt Text should convey any information contained within images, so that visually impaired users or those with slow Internet connections can still use a website properly (see Tags).
- Applet** An application that is downloaded from a web server and run by a browser.
- ASCII** American Standard Code for Information Interchange – a method of encoding simple text using a set of 128 characters that can be understood by almost all computers. Some foreign characters and currency symbols are missing from the ASCII set of characters.
- ASP** Active Server Pages – a programming language from Microsoft that allows web servers to dynamically produce web pages from a database as they are requested by clients. Similar to JSP and PHP. (Beware: ASP is sometimes used as the acronym for Application Service Providers.)
- Bandwidth** The rate at which data is transferred between computers, expressed in bits per second (bps).
- Bitmap** Bitmap files store graphics as different coloured pixels. Unlike a vector file, a bitmap will drop in quality as it is enlarged.
- Bookmark** When a user bookmarks a page, their browser adds the URL to a list of favourite websites, so that the page may easily be found later.
- Broadband** A fast Internet connection such as ISDN, ADSL, leased line or cable modem.

<b>Broken links</b>	Links that go to pages that do not exist or are no longer available.	<b>Dither</b>	To approximate a colour that is not available by combining pixels of different colours, either in a pattern or at random. When used in large images, dithering increases the number of visible colours, but it can make small text fuzzy and hard to read. Dithering can be avoided by using web-safe colours (see Palette).
<b>Browser</b>	A program used to view web pages. The most popular browsers are Microsoft Internet Explorer and Netscape.	<b>Domain name</b>	The part of a web address (URL) between the http:// and the suffix (.com, .org, .co.uk, etc). Each domain name can only be registered and owned by one organisation at a time.
<b>Cache</b>	Browsers save frequently visited pages in the client computer's cache so they can be displayed without having to be downloaded every time. The disadvantage of cached pages is that browsers may display out-of-date information. Normally, the browser's refresh button will cause it to download a fresh version of the page.	<b>Dot.com boom</b>	A period in the late 1990s that saw extensive investment in online businesses with unproven potential.
<b>CGI</b>	Common Gateway Interface – a popular system for handling information entered into forms on a website.	<b>Download</b>	To receive files or information from a web server.
<b>Client</b>	A technical term for somebody receiving data from the web, normally the visitor to a website – half of the client/server relationship.	<b>DPI</b>	Dots Per Inch (see Resolution).
<b>CMS</b>	Content Management System – in a database-driven website, the content management system is what the web manager will use to update the website once it has been delivered. This usually takes the form of hidden password-protected web pages where you can enter and edit site content.	<b>Early adopters</b>	People who are quick to embrace new technology.
<b>Content</b>	The text, images, sound clips and video that people visit a website for, as opposed to the infrastructure that delivers it.	<b>E-commerce</b>	Business that primarily takes place on the Internet.
<b>Cookies</b>	Cookies are bits of information sent to a browser by a server that are saved on the client's computer. Cookies can be used to remember log-in information, registration details or almost any kind of personal preference. Not all browsers will be set to accept cookies.	<b>FAQ</b>	Frequently Asked Questions – a page or set of pages containing the answers to the most commonly asked questions about a website.
<b>Crawlers</b>	Software used by search engines to browse the web, recording and indexing information about the content of pages, also sometimes called robots.	<b>Firewall</b>	A device or piece of software designed to protect your computer or network from unauthorised access.
<b>CSS</b>	Cascading Style Sheets – a development in web design, where a single style sheet can be used to format a large number of pages, making it possible to change aspects of the design of a whole website quickly.	<b>Flash</b>	An interactive animation format devised by Macromedia, sometimes used to build whole websites. All-Flash websites can cause problems with accessibility, search engines, bookmarks and navigation.
<b>Developers</b>	Computer programmers.	<b>Font</b>	A typeface or lettering style.
<b>Dialup</b>	A connection to the Internet that uses a standard telephone line.	<b>FTP</b>	File Transfer Protocol – the normal method used by administrators to send files to and from a web server.
		<b>Fulfilment</b>	In e-commerce, fulfilment is the delivery of goods ordered. Many companies specialise in providing fulfilment services to online businesses.
		<b>Functionality</b>	The aspects of a website that <i>do</i> something, eg a search engine.

<b>GIF</b>	Graphic Interchange Format – an image file format commonly used on the Internet to deliver graphics in very small files. The pictures are compressed by reducing the number of colours displayed. Often used for logos. GIFs can contain several frames, allowing simple animations within images.
<b>Home page</b>	This term is used to mean either the first page you see when you open your web browser, or the front page of your website.
<b>Hosting</b>	Hosting companies keep and maintain large numbers of web servers in secure locations, linked to very high-speed Internet connections. Most organisations use a hosting company to store and deliver their website.
<b>HTML</b>	HyperText Markup Language – the simple formatting language used for most web pages. HTML file names end in the extension .htm or .html
<b>HTTP</b>	HyperText Transfer Protocol – the standard method of delivering content over the Internet from a server to a client.
<b>Hyperlink</b>	When you click on a hyperlink, the browser takes you to another web page. Hyperlinks can be images or text. If a link is directed at a page that no longer exists, that link is described as ‘broken’.
<b>Internet</b>	A global network of computers that communicate using the same system of addresses (URLs).
<b>Intranet</b>	An internal network that uses software like that used on the Internet to display information to users within an organisation.
<b>IP address</b>	A series of numbers that uniquely identifies a computer on the Internet. IP addresses consist of four numbers between 0 and 255, separated by decimal points, eg 217.206.162.66
<b>ISDN</b>	Integrated Services Digital Network – a telecommunications standard that allows an ordinary telephone line to be used for the transmission of digital information at much higher speeds than with a conventional modem.
<b>ISOC</b>	The Internet Society – an international group dedicated to the continuing development of the infrastructure of the Internet.

<b>ISP</b>	Internet Service Provider – a company that provides email, Internet access and hosting services.
<b>Java</b>	A programming language devised by Sun bearing many superficial similarities to C and C++, not to be confused with JavaScript.
<b>JavaScript</b>	A simple programming language designed to add functionality to web pages. Not to be confused with Java.
<b>JPEG (JPG)</b>	Joint Photographic Experts Group – an image file format commonly used on the Internet to deliver graphics in very small files. The pictures are compressed by reducing the sharpness of the image. Commonly used for photographs.
<b>JSP</b>	Java Server Pages – a programming language from Sun that allows web servers to dynamically create web pages from a database as they are requested by clients. Similar to ASP and PHP.
<b>Leased line</b>	A fixed network connection between two locations, usually between an office and an ISP. The fastest (and most expensive) type of Internet connection.
<b>Link</b>	See Hyperlink.
<b>Link popularity</b>	The number of web pages that contain links to a specific page or site, famously used by the search engine Google to estimate the popularity of a website.
<b>Metadata</b>	Literally, information about information. On a web page, metadata is the information that describes the content of that page.
<b>Metatags</b>	A short description of the content of a web page used by some search engines to identify pages. Metatags cannot normally be seen by visitors to a website.
<b>Modem</b>	Modulator and Demodulator – a device that allows computers to communicate with each other using normal telephone lines, most frequently used for dialup Internet access.
<b>MPEG</b>	Moving Pictures Expert Group – a standard format commonly used to transmit video over the Internet.
<b>Multimedia</b>	Information presented in multiple formats, eg text, images, audio and video.

<b>Navigation</b>	The menus, tabs and buttons used to move around a website.	<b>Robots</b>	See Crawlers.
<b>Netiquette</b>	A set of conventions for politely communicating online.	<b>Sans serif</b>	A term that describes a font with no extra ornamental strokes added to the end of lines, eg Arial or Helvetica.
<b>Open source</b>	'Source code' is the set of instructions, like a flow chart, that a piece of software is based on. Software is described as 'open source' if this code is available for the public to inspect and alter freely. Developers often like 'open source' software because they can see how it works and alter it if they have to.	<b>Server (web server)</b>	A computer that 'serves' a website to visitors. They are usually owned or maintained by hosting companies.
<b>Page views</b>	The number of unique requests for pages in any given period. Divide this figure by the number of unique users in that period, and you know the average number of pages viewed by each visitor to your site.	<b>Silver surfers</b>	Internet users over retirement age.
<b>Palette</b>	The colours available for a computer to display. While most modern computers can display virtually any colour, some older machines can only accurately show a limited number. To make sure that your website looks right on all computers, it is best to stick to the palette of web-safe colours.	<b>SMS</b>	Short Message Service – the facility on GSM networks used to send text messages of 160 characters between mobile phones.
<b>PDF</b>	Portable Document File – a file format developed by Adobe that can be locked, so that files can be edited only by the person who creates them.	<b>Spam</b>	Unsolicited email, usually commercial marketing materials. Also used to describe inappropriate commercial or promotional material posted on message boards.
<b>PHP</b>	Hypertext Pre-processor – an open source programming language used to create dynamic web pages from a database.	<b>Splash page</b>	A page seen by all people entering a website, sometimes used to direct major groups of users to different sections of a site, eg corporate information and consumer sales. Some splash pages just contain elaborate animations that don't seem to do much or are intended for first-time visitors.
<b>Populate</b>	To fill a website with content or insert data into fields in forms on a website.	<b>SQL</b>	Structured Query Language – a standard method of communicating with a database. SQL is used by numerous commercially available database products.
<b>Pop-ups</b>	Web pages that automatically appear in new windows when a page is displayed. While sometimes used for important navigation, these windows frequently contain advertising. As a result it is increasingly common for browsers to block them altogether.	<b>SSL</b>	Secure Sockets Layer – a widely adopted system, developed by Netscape, for the secure encryption of data in commercial transactions online.
<b>Protocol</b>	A set of standards by which two devices (eg computers) communicate with each other.	<b>Streaming</b>	The process of playing an audio or video file as it downloads from a server. The most popular streaming formats are Windows Media and Real Audio.
<b>QuickTime</b>	A video format devised for Apple Macintosh computers.	<b>Tags</b>	In HTML and XML, tags are instructions contained within <pointed brackets> that tell software what that text is and how it should be displayed.
<b>Resolution</b>	The number of dots per inch (DPI) in a digital display or printout. The standard screen resolution is 72DPI, but many scanners and printers will have resolutions of 600DPI or higher.	<b>Thumbnail</b>	A small version of an image, often linked to a larger one.
		<b>Title</b>	The title of an HTML page usually appears in the bar at the top of the browser window, and frequently has a significant effect on the way a search engine will index a page.

<b>Usability</b>	The extent to which a website can be used intuitively without learning how.
<b>Upload</b>	To send files or information to a web server.
<b>URL</b>	Uniform Resource Locator – the standard addressing system used on the web, also the specific address of a file or page eg <a href="http://www.ticketing.org.uk">www.ticketing.org.uk</a>
<b>Validation</b>	Several bodies including the W3C offer online validation services that check that web pages meet the numerous standards for online compatibility and accessibility.
<b>Vector graphics</b>	Image files that describe graphics as shapes, so that they can be enlarged without any loss of quality, unlike bitmaps. Vector graphics are used for diagrams and logos rather than photographs.
<b>W3C</b>	World Wide Web Consortium – the primary standards body for the World Wide Web. The W3C issues guidelines on making websites accessible to those with disabilities ( <a href="http://www.w3.org">www.w3.org</a> ).
<b>WAI</b>	Web Accessibility Initiative – a W3C project to promote accessibility online through technology, guidelines, tools, education, research and development.
<b>Watermark</b>	An image used as a background behind the text on an HTML page, or a hidden message or code used to help detect the copying or redistribution of images and music.
<b>Webmaster</b>	The person in charge of a website.
<b>WWW</b>	World Wide Web – the part of the Internet that delivers hyperlinked pages.
<b>WYSIWYG</b>	What You See Is What You Get – an acronym used to describe a program that allows you to edit a page or image as it will appear to the user.
<b>XML</b>	eXtensible Markup Language – a method of formatting data commonly used on the Internet, especially for information feeds from one website to another. XML uses tags similar to those found in HTML.

## Further reading and other useful information

Tim Berners-Lee, Disability: [www.disability.gov.uk](http://www.disability.gov.uk)

Data Protection Act 1998: [www.informationcommissioner.gov.uk](http://www.informationcommissioner.gov.uk)

PageResource.com: [www.pageresource.com](http://www.pageresource.com)

*The Customer Expectation Gap*, Michael Reene, 2002

SitePoint: [www.sitepoint.com](http://www.sitepoint.com)

Web Developer's Virtual Library: [www.wdvl.com](http://www.wdvl.com)

Web Page Design for Designers: [www.wpdfd.com](http://www.wpdfd.com)

### Marketing and Audience Development Agencies

Network is the association of arts marketing agencies dedicated to collaborative audience development and arts marketing. For details see [www.audiencedevelopment.org](http://www.audiencedevelopment.org)

### Arts Marketing Association

The professional development body for those promoting the arts and cultural industries. For details see [www.a-m-a.co.uk](http://www.a-m-a.co.uk)

### Arts Council England New Audiences programme

New Audiences was a programme of action research designed to bring new art to new audiences and new audiences to the arts, which ran between 1998 and 2003. Details can be found at [www.artscouncil.org.uk/newaudiences](http://www.artscouncil.org.uk/newaudiences) along with practical tool kits and advice on developing audiences.

## Acknowledgements

Charles Davies led the research phase of the project. Andrew Doe gave technical advice and prepared illustrations. Helen Varley Jamieson assisted with sections on content and design and provided information and recommendations. A large number of people made specific comment and advice or strongly expressed their opinions on some issues and subjects. We are especially grateful to Stacie Johnston of Some Pig Information Design. Many people in arts organisations helped us by sharing their experiences and discussing the challenges of creating effective websites.

We were supported by a Steering Group who also read the drafts and constructively commented on the content: Phil Cave, Tom McVeagh, Karen McKinnon-Lilley, Sarah Boiling, Rebecca Morrill.

Three authors deserve special mention. *The Art & Science of Web Design* by Jeffery Veen is 'For everyone who has looked at the web and asked "Why" rather than "How"'. Jakob Nielsen is undoubtedly the guru of web usability. His books, including *Designing Web Usability – The Practice of Simplicity* and *Homepage Usability* (with Marie Tahir), are entirely practicable and should be on the desk of anyone working with web designers and developers. Steve Krug takes a similar but humorous perspective focused on navigation and usability in *Don't Make Me Think*.

*A practical guide to developing and managing websites*

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ISBN 0-7287-1023-4

© Arts Council England, July 2004



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Thanks to Café Afrika, Cambridge

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