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A practical guide to developing and managing websites

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ARTS COUNCIL ENGLAND

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websites

Roger Tomlinson and Vicki Allpress

Contents

Foreword

Over the past two years I have spent a lot of time talking to people about websites and the most common feeling that people express (and I include myself in this) is one of inadequacy. I know they have been around for a while now, but to me this is still very much new technology.

Many artists and arts organisations have fully embraced the web and it has become part of the creative and business processes. But, this isn't always the case, and from Roger and Vicki's research for this publication it is clear that many arts organisations are still learning by experience and are already on their third website.

People are also unclear about who should be responsible for developing their website and deciding how it should work for the users. So we are producing this guide in response to the questions that people have asked:

- how can I be sure that my designer knows what they are doing?
- who in the organisation should take responsibility for managing the site?
- a member of the board has offered to design ours for free, what do I say?
- and the most frequently asked question of all – how much did you pay for yours?

This is a practical hands-on guide for arts organisations, aimed at the board and chief executive as well as staff of all kinds. As well as providing advice on all aspects of developing and managing a site, it helps you to decide what you need from your website. It even answers the question, do you really need a website at all?

This is one of a series of practical guides published by Arts Council England.

Phil Cave
Director of Audience and Market Development

Introduction

This is designed to be a practical guide to developing and maintaining a website that focuses on:

- setting the objectives
- planning the design and content
- tackling the key issues in its development
- monitoring and evaluating the results

It is as much about concepts, attitudes and approaches as it is about possible practical solutions. As with all such guides, each section will have different relevance for different readers. So at the end of this introduction we give advice on how the guide could be read to meet specific interests.

The advice is intended to be relevant and appropriate to all arts organisations throughout the UK. Examples quoted are not representative of any particular type or scale of organisation, but are there to illustrate points about websites. Where examples are website URLs (Unique Resource Locators, which are web addresses, eg www.organisation.co.uk) we apologise if the addresses are no longer operable or the pages different, but this reflects the ever-changing character of the Internet. As you will discover in the chapter on design issues, graphics for the web are prepared at a resolution of 72DPI, this is much lower than the resolution needed for printing, and as a result, illustrations of web pages used in the guide may not appear as sharp as they do on screen. For up-to-date examples of the points being illustrated do visit the relevant sites.

Most of the examples were found when researching this guide. This involved surfing numerous websites and assessing their functionality, whether they met their apparent objectives and what the user experience was like. We contacted some organisations and discussed their websites with many helpful people who shared their experiences: good and bad. This guide effectively contains the do's and don'ts from that research.

This is not a jargon-free subject. We have tried to write this guide in lay person's terms and to avoid obvious technical terminology or to explain such terms in the glossary. We hope to have succeeded in making a readable document. Undoubtedly, topics introduced here can be pursued in greater depth fairly easily, in books or most speedily on the web itself. Just type the word you want to look up into www.google.com.

But the Internet and websites are not about technology. This was always intended to be a medium that opened up access to information; a democratic medium sharing, linking and communicating. Think 'people to people' not 'computer to computer'. The people who use this technology are creative and think laterally, but are also creatures of habit, influenced by their lives and experiences. We should not repeat the 'video recorder experience' in which many adults were unable to operate a common piece of domestic equipment. Making websites effective and successful is about making them easy to use. The technology is merely the means by which people connect to communicate.

Websites are strategically important for all arts organisations. To be successful on the web, an organisation must decide what purpose its website serves and how it will be used, and think about the engineering design before applying the graphic design. 'Accessibility' and 'usability' are the keys to success.

Because this is intended to be a practical guide, there are **key questions to consider** and **key points** at the start of each section. While the content is presented in a logical order, it does not have to be read in a linear manner; like the web it is possible to read each section on its own or in the subject order which most meets your needs. In such a comprehensive guide there may therefore be some repetition.

To be accountable for a website as a senior manager or board member there is specific information you require and you should read **pages 7 to 29**. These will help you handle the corporate responsibility of your web presence and manage an effective website.

The information required to take on all or part of the responsibility in delivering a website involves the whole guide. Understanding **pages 39 to 58** in particular is crucial before anything else.

If you are a marketing person working alongside website developers, then you should pay particular attention to **pages 31 to 93**.

This guide is intended to give practical support and advice to the people developing websites in arts organisations, but the ultimate beneficiary must be the public, given usable, accessible and enjoyable websites.

Vicki Allpress and Roger Tomlinson

The importance of an effective website

Key questions to consider

- what is your organisation's website like? Evaluate it from a user's perspective. Does it work for you at home, on your domestic computer?
- what do you think visitors to your website will want to gain from it?
- what opportunities could your website offer to visitors that would help your organisation?
- do you think your website offers enough to hold visitors' attention or might they go elsewhere?

The importance of an effective website

The importance of an effective website

Why arts organisations must ensure they have a fully functional and effective website that meets users' needs

The challenges

The Internet has not been a satisfactory experience for most arts organisations to date. Some are on their second or third generation of websites and continue to be frustrated in achieving their aims. It is a similar experience for many of their users, frustrated by broken sites and links, content that is hard to navigate and failures to provide obvious functionality. This does not reflect well on organisations and it is likely it might impact on attendances and participation.

The Internet is still a relatively new medium and problems are universal. Arts organisations should take heart from the fact that many arts websites are better than commercial efforts.

'Across the board, websites are failing to meet expectations, according to a national survey of business professionals who actively use the Internet.'
The Customer Expectation Gap, Michael Reene, 2002

'…companies face a mounting challenge to provide a satisfying experience for their web users within a complex environment. It is a challenge many are woefully unprepared to meet. In fact, even once the issues are identified and potential solutions are put in place, companies are finding that many web initiatives are ultimately unsuccessful. In the meantime, customers are becoming increasingly dissatisfied with their online experiences…'
Review of top-rated US websites

The challenges come from a rapidly evolving medium, where often web developers are also on a steep learning curve and sometimes breaking new ground. The commonly quoted adage that 'an expert is simply someone who knows more than you do, today' is true, but the public uses websites today and wants them to work satisfactorily on their computers and Internet connections.

The 'dot.com' boom proved to be a 'dot.con' for many, but today the Internet is a real world tool used by the majority of the population.

An organisation's website is no longer an add-on. When we create an online presence, we expose our organisation to potentially large numbers of website visitors with high user expectations including immediate response.

Web usage

Web usage in the UK is increasing daily, and a wider audience brings new challenges. Now the mainstream population is the majority of users, websites have to be universal in achieving easy access.

e-MORI reported the percentage of the population online in October 2003 in their Technology Tracker, based on monthly surveys of the British population aged 15+. The top social grade categories ABC1, the principal arts attenders, make up 65 per cent of web users, and 74 per cent of ABs and 62 per cent of C1s are Internet users.

Figures from Nielsen Net Ratings in May 2003 show 34 million Internet users in the UK (home and work combined) of which 22.6 million are regularly active. Seventy-seven per cent of online Britons earn more than £30,000 and 70 per cent of visitors say they have made a purchase online.

The majority of web users say one of their primary interests is finding out about entertainment opportunities, and buying tickets is one of the principal e-commerce purchases they would like to make.

'In 2003 many arts organisations in London report online ticket sales averaging over 20% of the total, some as high as 60% for some events.'
www.ticketing.org.uk

It appears that many people find out about the existence of arts organisations through the web. There is little formal research on this but a wealth of anecdotal evidence.

'The website IS the company.'
Homepage Usability, Jakob Nielsen and Marie Tahir, 2002

Jakob Nielsen makes the point that for web users 'the website IS the company'. Nielsen is considered to be the guru on effective web presence with more than 80 research papers published on web usability. Just as an organisation with a building has a physical presence, then the website is the virtual presence. Just as on the ground the whole organisation is reflected through and in the building in which it is housed, it is important that it is also reflected through the website. However, the Internet also offers unique opportunities to open up access to information, interact with communities and enable 'customer self-service management'.

UK online

It is government policy for local authorities and UK government to be able to transact most activity online by 2005. Public funders will expect organisations in receipt of public funds to be equally online by 2005, and that their websites will meet the needs of all web users. For the first time, for many arts organisations this means meeting the needs of non-visitors to the physical organisation, people who are unable to visit it or have a different interest in it, or different information requirements from it.

Accessibility and disability discrimination

'I would love to see a few web designers thrown in jail. It is not enough but it would be better than nothing. The RNIB is backing a number of individuals in taking legal action against as-yet unnamed websites that they say do not comply with the Disability Discrimination Act. It is a betrayal of the principles of the web.'
Jack Schofield, Editor, Guardian On-Line

Accessibility on the web is covered by the Disability Discrimination Act and all arts organisations need to ensure their websites enable access for disabled people. This is a great irony as fundamentally the web was conceived as an accessible environment. Designers have to make conscious decisions to make it inaccessible, and they do, often not realising they are breaking web protocols and sometimes the law. Further, public sector websites are currently expected to meet WC3 accessibility guidelines, published by the Web Accessibility Initiative (WAI). See pages 39 to 47 for more on the subject of accessibility.

The Web Accessibility Initiative (www.w3.org/WAI) issues guidelines on accessibility.

The arts can be credited with helping to create the Internet revolution by leading many innovations in what is provided on the web. There are new methods of creating, presenting and disseminating art or information, new forms of publishing, new channels of communicating with audiences, new tactics for reaching and capturing visitors, and new ways to serve customers. This revolution has also raised audience expectations.

Resources

Steve Krug's Advanced Common Sense website: www.sensible.com
Web Accessibility Initiative (WAI) website: www.w3.org/WAI
E-Mori Technology Tracker: www.mori.com/emori/tracker.shtml
Nielsen Net Ratings: www.nielsen-netratings.com

Who should be responsible?

Key questions to consider

- who is responsible for managing your website? Is this effective?
- what skills and advice will you need to implement your website project?
- do you have internal skills you can recruit to the team? How will this impact on their existing responsibilities?
- what is your plan for recruiting external suppliers and what selection criteria will you apply?

Who should be responsible?

Key points

- compile the outline job description and skill set for your web manager
- identify whether this will be an internal appointment, by changing responsibilities in another post, or a new post
- carry out an appropriate appointment process
- agree the timetable for the web manager to prepare a project plan
- produce a matrix of the skills required on your team and their likely source

Who should be responsible?

Who should manage and implement your web project and what functions need to be covered?

Your website IS your organisation. It is a virtual presence enabling access to your organisation and presenting a public face. It is therefore of high-level importance to your image and profile. Ultimate responsibility and accountability for your website lies at board and senior management level. The board should approve the overall strategy for the website and agree time-based targets.

Board responsibility should be at a macro, not micro, level. Accountability does not mean that the board or senior management should become involved in the day-to-day decisions about the site.

Within arts organisations, responsibility for the website has often been given to an existing department or staff member, eg marketing. Although this can be the most practical and cost-effective solution, there are associated problems. The website represents the organisation, not just marketing. Furthermore, as an addition to existing workloads, the website may be neglected or given secondary importance.

Web manager

A solution can be found by appointing a dedicated web manager with overall responsibility for the project. This individual should report directly to senior management and be supported by internal staff and external suppliers who are assigned specific responsibilities. This ensures a dedicated focus is given to the project, and that existing staff members can be utilised without overloading their workloads. It also ensures that no one department claims ownership of the website and biases it towards any single agenda. The position of web manager need not be a full-time post, and could be incorporated with another role.

The web manager should take responsibility for the website's day-to-day functioning as well as its broader development. The web manager should prepare a project plan, and then liaise closely between all the relevant people involved. The skills and knowledge required for this role are wide-ranging and include familiarity with the web environment, editing and people management. Equally important is the ability to manage a project, pulling together external suppliers and internal staff, and keeping schedules on track. This requires this person to have excellent strategic and communication skills and the ability to lead a project.

The first key responsibility of the web manager should be to prepare a project plan, which should be signed off at senior management and board level. It will determine where internal staff and external suppliers need to be brought onto the project to form the web team. More detail about the content and structure of a web project plan is outlined on pages 95 to 103.

The skills you may need to have on your web team include:

- brief writing: the ability to clearly brief internal staff and external suppliers
- web architecture: planning the site's technical and navigational structure and organising the information
- design: creating a cohesive look and feel consistent with your organisation and with the site's purpose
- web development: depending on the technical complexity of the site, the skills required will begin with HTML programming (the basic hypertext mark-up language) and could extend to other programming skills
- content creation: compiling all text and other content (photographs, video, audio) that will populate the finished site, and delivering this in a suitable format to the designer and developer
- editing: ensuring consistency of style and accuracy of content
- quality assurance and testing: thoroughly checking the entire site for errors and bugs
- content management: developing processes and systems prior to launch so that updating can begin smoothly once the site is live

Depending on the size and complexity of your site, you may be able to find one person or a company externally who possesses most of these skills, and others internally who have some of them or are willing to learn them. The advantages of using internal staff are the cost savings, company knowledge and sense of ownership. However, external suppliers are necessary where advanced technical, design or editing skills are required.

If internal staff are to be involved, it is important to consider what other work they will be responsible for during the site development period, and how their involvement will impact on this. Depending on the mix of internal, external, freelance or company personnel on your team, those involved may not always be working physically close together. This need not be a disadvantage if everyone is clear about the project objectives from the outset. Meetings and short presentations are recommended to help communicate the ideas and thinking, show examples, and encourage feedback and debate.

If you do not have an existing relationship with a web development or design company or freelancer, you can start by asking around your networks for recommendations or by visiting the websites of similar organisations and locating the designer or developer of those you like. Internet magazines and online directories can also be used to source possible suppliers. Pages 105 to 116 give more information about the process of briefing your web developer and designer.

Checklist for building a successful team

- ☐ is everyone clear about their role in the team?
- ☐ is everyone clear about the purpose of the site and the target audience?
- ☐ does everyone have an understanding of the culture of the organisation and the objectives it wants to achieve?
- ☐ has everyone agreed to a timeframe and individual deadlines?
- ☐ are there effective communication channels?
- ☐ has the management of internal team members' existing responsibilities been considered?
- ☐ have external freelancers or companies been recommended by someone trustworthy?
- ☐ are successful examples of their completed work available?
- ☐ is it easy to communicate with them and do they appear to have an understanding of your organisation and website vision?
- ☐ do they speak in a way which is understandable without too much jargon and in a non-patronising manner? Do they explain their decisions rather than expect their wisdom to be accepted?
- ☐ what other work commitments do these people have for the project timeframe?
- ☐ how will they keep the project on track and how will they evaluate success?
- ☐ what sort of reporting and communication processes are they proposing?
- ☐ are there any skills missing on the team or knowledge gaps that need to be addressed?

Resources

Collaborative Web Development: Strategies and Best Practices for Web Teams, Jessica Burdman, Addison-Wesley Pub Co, 1999

What is your website for?

Key questions to consider

- what is the primary purpose of your website? Is this agreed at corporate level and accepted by the key internal stakeholders?
- what are the implications of your primary purpose and the other objectives for your website?
- do you understand your potential visitors and the context in which they will use your website?

What is your website for?

Key points

- write down in summary form the primary purpose of your website and the other objectives
- produce a matrix of the objectives and the likely functionality required
- write up shorthand pen pictures of your target users and your ideas on when and how they will access and use your website

What is your website for?

The importance of defining the purpose of your website and how to communicate this to your users

The first step in planning your web project is to define the primary purpose of your website. It is vital to have complete clarity and internal agreement on this. Not only will this ensure the smooth running of your project, but your website's purpose – and how you decide to communicate it to users – will determine the structure, design and content. This is why a discussion on purpose has to take place at the outset, before your web project begins.

'Why should users do anything at a site if they can't figure out what there is to do there?'
Homepage Usability, Jakob Nielsen and Marie Tahir, 2002

It is easy for multiple agendas to arise, as a website has the potential to benefit various aspects of an arts organisation's operations. For example, your website can be a box office, a 'What's On' guide, a community, an education resource or an archive. However, it cannot do all of these things equally and simultaneously. Having a primary purpose does not preclude aiming to achieve additional objectives with your website. What it does is ensure a clear hierarchy of services or activities is communicated to the user, with its primary purpose being the most prominent.

When setting your purpose, you need to understand your audience. What you may see as the purpose of your website may not be what your user expects. You might intend your website to help your audience gain a deeper understanding of the art, while the user may wish to find out what is on and buy tickets. To deal with this challenge you must understand your potential users and the context in which they will visit your site.

Priorities

It is reasonable to expect your website to achieve three to four objectives, with one of these defined as your overriding primary purpose and the remainder being clearly prioritised. Consider how your website will work to achieve your organisational goals. Your website's key purpose may be among the following examples:

- provide in-depth What's On information (greater than that provided through any other medium) and persuade more people to attend
- reach a worldwide audience with your works of art and create an additional merchandising channel
- sell tickets online to improve the self-service options to purchasers and enable sales 24/7
- support your education and outreach goals with online resources for specific-needs visitors, including teachers, students and socially excluded people
- provide in-depth information about your organisation and its work and help in interpretation, appreciation and understanding as a means of developing audiences and ticket sales
- develop e-commerce opportunities as a way of increasing revenue streams
- provide support and services to a community of artists

Be prepared to restrict your ambitions. It is unrealistic to set objectives for your website that you are unlikely to achieve. Consider in reality what resources and efforts can be put behind each objective. For example, as much as you may see an exciting opportunity to publish your archive online, the cost may simply outweigh the benefit.

Clarity

When visitors reach your website, they should be able to immediately identify its purpose. It should be clear to them who you are, what role your website plays, what they can use it for and how to get started. Elements like clear branding, obvious navigation, defined links and legible text achieve this, hence the importance of defining your purpose before you and the site's designer begin work. Keep in mind that visitors may enter your website via a page other than the home page, so the website's purpose should be communicated throughout.

It is not necessary to overtly state your website purpose in writing, as the Durbeck Archive has chosen to do. At www.durbeckarchive.com, it states that 'the primary purpose of this website is to promote the sale and distribution of discographies of the complete opera recordings in The Durbeck Archive'. Although this is helpful, a clearly communicated purpose will be apparent to the visitor with clear labelling of the navigation and the correct hierarchy of elements.

The Sadler's Wells website's home page (www.sadlerswells.com) is a good example of clear presentation of purpose, with the following elements helping to capture users and lead them through to the desired action:

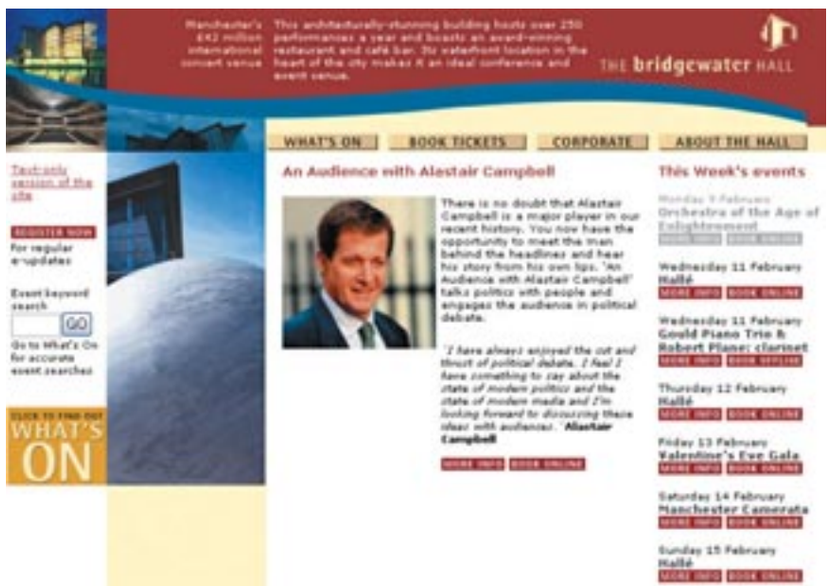
- the company name and logo is prominent
- branding is consistent with all other offline communication
- it clearly indicates what it expects visitors to want to do, eg 'Book now…'
- current programme details are prominent and command immediate attention
- the navigation is clearly labelled and reflects the website's priorities:
  - what's on
  - booking
  - supporting us
  - memberships
  - your visit
  - corporate hire
  - about us

Prominent branding and clear hierarchy of tasks communicate Sadler's Wells' purpose of providing event information and selling tickets online (www.sadlerswells.com).

Let's look at two examples of how your primary purpose could impact on your website's design and content.

1. Purpose: to provide in-depth What's On information (greater than that provided through any other medium) and persuade more people to attend

Navigation and choice of text and images should minimise mouse clicks to speed people into and through the process. While simple lists of events in calendar and/or subject form are helpful, users will want to access the information their way, which might include date order listing, art form listing and calendar access. Video clips, soundtracks, images or embedded music may be useful items to offer, all focused on leading to purchase. The search functionality on the site will be an important feature and needs to be configured to meet users' needs. Bridgewater Hall's website at www.bridgewater-hall.co.uk is a good example of a website that aims to achieve this purpose.



Users can find out what's on at the Bridgewater Hall website at www.bridgewater-hall.co.uk

2. Purpose: to develop e-commerce opportunities as a way of increasing revenue streams

The site will need to be able to handle an inventory of items for sale and show these, preferably with thumbnail illustrations, together with the stock position, typical delivery times, and costs including postage and packing (also allowing for overseas delivery) and VAT. The functionality of a shopping cart is essential. Purchasers must be able to register and view terms and conditions, available currencies and Data Protection implications before completing their purchase. Britart's website at www.britart.com is an example of a site providing e-commerce capabilities.

The Britart website at www.britart.com has the primary purpose of selling British artists' work to online buyers.

As with all objectives, those you set for your site should be measurable. It is important to determine quantifiable targets in order to measure success. Pages 129 to 136 outline the ways in which you can monitor your website's activity to determine whether you are achieving your objectives.

Resources

Homepage Usability, Jacob Nielsen and Marie Tahir, New Riders Publishing, 2002
Don't Make Me Think, Steve Krug, Circle.com Library, 2000
Designing Websites for Every Audience, Llise Benun, How Design Books, 2003

Design issues to think about

Key questions to consider

- what is the visual appearance? How does this relate to existing corporate identity, other physical manifestations of the brand and your organisation's values? How might the website reflect this and how and why might it be different?
- what key design elements are necessary to meet the needs and characteristics of your users? Is there anything the design must not include?
- have you found enough examples to communicate your design brief adequately to the designer?

Design issues to think about

Key points

- familiarise yourself with the web to understand how web design differs from print
- find as many examples as possible of websites that you like and provide the designer with the appropriate links
- where possible, scan images in-house to save time and money
- ask your designer to prepare mock-ups as HTML pages that you can view on your own computer

Design issues to think about

An introduction to website page design issues

If this is your first experience with website development, it is a good idea to familiarise yourself with the web environment to ensure good understanding and communication with project colleagues on the key issues in web page design:

- how designing for the web is different
- preparing images for websites
- using colours and fonts
- working with web designers

Forget about print

Most people in arts organisations have learnt about design through print. It can come as a surprise that many of the rules that apply in print do not apply at all on the web. For example, on the web the colour palette is limited and colours do not appear the same on every monitor, so it is not possible to guarantee that corporate colours will appear correctly. The web is dynamic; variables such as computer platform, browser software, Internet connection, screen resolution and individual preferences impact on the way each user experiences your website in terms of layout, font and even functionality.

Thinking in terms of print and graphic design is therefore the most dangerous misapprehension when approaching web design. Some people have difficulty accepting the apparent limitations of the web when making the transition from print and do not immediately see the immense alternative potential offered by the web. A good web designer must be able to explain why they are recommending certain design solutions for your website.

Preparing graphics for the web

The biggest problem users experience with web graphics is waiting for them to download, but there are a few simple things you can do to speed this up.

Make sure the picture is the right size

Images on the web are made up of pixels. The more pixels you have, the bigger the file will be and the longer it will take to download. It is often possible to put a big image file into a small space on the page, but this will slow down your website with more detail than it is possible to display.

Your designer should specify image sizes in pixels, and when you resize a picture, you should remember to do the same. Don't adjust sizes in inches or centimetres – these settings (combined with the resolution) control the way the image will appear on paper, not on screen. Remember that your monitor cannot display anything like the same amount of detail as a printed document.

Computer monitors (right) cannot display the level of detail a printed document (left) can.

Use the GIF for logos and line drawings

The GIF (Graphics Interchange Format) compresses pictures by reducing the number of colours (or specific shades) in the palette. If your image contains just a few colours, this can be a great way of speeding up your website. A good graphics package will let you choose the number of colours in the palette, so you can select a suitable level of compression.

Turning logos and line drawings into GIF files saves on size.

Use the JPEG format for photographs

The JPEG (Joint Photographic Experts Group) format reduces the amount of detail in a picture. By making the edges a bit fuzzy, this makes pictures radically smaller than the equivalent bitmap (BMP) files. In the example below, compression was set to 75 per cent of the maximum. Less-extreme levels of distortion are available where picture quality is important.

The JPEG format (right) is radically smaller than the bitmap equivalent.

Colours

The standard web palette has only 216 colours in it, which may seem a lot until it is broken down into greens, blues, reds, etc and there are only a limited number of options. Designers do use colours outside the 216 'web-safe' colours, but not every user will see the colours accurately, and sometimes colour combinations can end up looking poor on a user's screen.

While newer computers are increasingly able to display a wider range of colours correctly, it is important to think about the users and the still-significant number with older machines and monitors, and eight-bit video cards. The website Lynda.com features a useful article about browser-safe colours, with examples of how things can go wrong as well as links to the web-safe palette (www.lynda.com/hex.html).

Fonts

HTML code does not contain the actual fonts that the browser uses to display the text on a web page. Rather, it contains instructions to the browser to use a particular font or font family. If the browser can't find a font on your computer, it will check back to the HTML code and see if there is an alternative. For example, Arial is a standard Mac font and Helvetica is the PC equivalent, so a designer will often give the option of using Arial or Helvetica. Specify fonts to aid reading on screen – San Serif fonts are easier to read on computer screens, which are relatively low resolution compared to print. Avoid capital letters which are harder and slower to read.

Newer computers will have a larger array of fonts pre-installed, but to ensure readable copy it is wise to keep to the standard font families. If there is a good reason for using an unusual font (such as it being part of the logo) then this text must be within an image if you want it to be presented accurately. This will not then be read by a text to speech reader (unless the content of the image is explained in an 'alt tag', which describes any image that is to be downloaded).

If you are likely to require special characters such as umlauts and accents, there is a number of different conventions for including these within the HTML code. Your designer should be able to advise about this. If you need to use a different alphabet, eg Japanese, Cyrillic or Arabic, you may need to include instructions on the page to help users download the appropriate font(s). This is a lot to expect of users.

Research for this guide illustrated that most websites look good at 1024 × 768 resolution on a 17" monitor. Most pages work well via a Broadband connection viewed on Internet Explorer 6 on Windows XP or even better on a Macintosh.
Less than 25 per cent of users have this combination.
100 per cent of designers do.

Interpreting the proposal

One of the challenges of working with designers for the web is understanding and assessing what they propose. Visuals are static and do not reflect the technical circumstances of the web. Ask your designer to present design mock-ups as HTML pages that you can view on your own computer. Print-outs of QuarkXpress or PhotoShop designs will not give you accurate colour display, nor will they allow you to see how the site will appear on computers with different browsers and screen resolution. Static digital files will also not give you the full impression of a working design. Some designers set up a test site, so that you can view the design as it will be seen in practice, although there may be significant work and investment required just to reach this stage.

Flash and Shockwave

Flash and Shockwave are the technologies that enable developers to create highly interactive, multimedia experiences for website visitors, generally including graphics, text, video and sound packaged together in one manageable file. It is important to understand the degree of risk of these technologies related to accessibility.

For a number of reasons they can render a site inaccessible to certain users, eg they require plug-ins that some older browsers or Internet-enabled technologies do not support, and because certain assistive technologies such as screen readers require a linear format and can't find the 'top of file' in non-linear formats such as Flash.

It is possible to incorporate Flash and Shockwave content into your site with awareness that this content will never be fully accessible and therefore the content must also be

provided in secondary form. This could either be as a second page for each page of content or as database content that is served to the user in the form that they want. The onus is on Macromedia (which provides Flash and Shockwave) and the developers of assistive technologies to fully resolve this issue and there is indication that they are working towards it. In the meantime, the web manager may wish to consider the use of interactive multimedia and balance its purpose against the associated risk.

Checklist for website designs

- ☐ do you understand why the designer has chosen this solution?
- ☐ do you and others in the organisation identify with this design?
- ☐ will your target audience identify with this design?
- ☐ does the design support the objectives and primary purpose of the site?
- ☐ has the website been tested across different platforms and browsers?
- ☐ are there any aspects of the design that will affect content management and future updating of the site?

Resources

Web Bloopers: 60 Common Web Design Mistakes, and How to Avoid Them, Jeff Johnson, Morgan Kaufmann, 2003

Web Design in a Nutshell, Jennifer Niederst, O'Reilly & Associates; 2nd edition, 2001

Vincent Flanders' Web Pages that Suck website: www.webpagesthatsuck.com

Understanding your users

Key questions to consider

- do you understand the key usability and accessibility principles and how these apply to your website?
- are you confident your web developer has high awareness of these principles?
- how will you put into practice usability and accessibility testing for your site?

Understanding your users

Key points

- educate yourself on the basic principles of usability and accessibility to gain an understanding of standard practice, which you can then adapt to your situation
- include those criteria in the brief for the web developer and champion them on behalf of the user
- put into place an ongoing usability and accessibility testing programme
- ensure user responses effect website change

Understanding your users

The disciplines of usability and accessibility and the importance of meeting the needs of your website visitors to achieve your goals

If your website is to achieve its purpose and provide a service to its users, then it must be both usable and accessible, two vital concepts for the success and effectiveness of websites.

Usability and accessibility

Usability has been described as the science that addresses the relationship between tools and their users. It is a key element in planning your web project. A usable website is one where visitors are able to undertake the task they expect to achieve on the site and leave satisfied their needs were met.

All elements of your website contribute to the overall level of usability, including content, visual look and feel, functionality, navigation, text, links and use of images.

Accessibility describes the principle of reducing obstacles on web pages to ensure access for everyone. People with different kinds of disabilities can experience difficulty using the web if there are barriers in usability and content or if the site cannot be viewed by the user's agents (browsers, multimedia players, assistive technologies such as screen readers, eg Window-Eyes or OutSpoken, and voice software such as FreeSpeech).

'The power of the web is in its universality. Access by everyone regardless of disability is an essential aspect.'
Tim Berners-Lee

Tim Berners-Lee was the first advocate of web accessibility. He is the recognised primary inventor of the World Wide Web and the Director of W3C, a forum aimed at leading the web to its full potential. W3C runs the Web Accessibility Initiative, which, in coordination with organisations around the world, pursues the accessibility of the web.

Usability issues

Usability problems can be caused when websites do not conform to the universal web standards that have developed over time. In the same way that we inherently know a music CD has the title and artist on the spine, the tracks listed on the back and the CD inside, we are coming to expect websites to follow a certain format. Particular standards have become anticipated by users, for example the colours of visited and unvisited links, the location of navigation bars and where to find the 'contact us' information. Not complying with these universal standards can add to the level of anxiety and disorientation experienced by the user and their ultimate failure to complete the task.

Understanding how people use the web can help us to appreciate why we need to take usability and accessibility seriously. For example, think about the following:

- users jump around (they are not captive) and view many web pages (an average of 30) in a single session
- external links, bookmarks and multiple browser windows make it easy to leave at any moment
- they skim-read in a hurry and only dip into interesting text
- links are scanned for what's important and information on where to go
- they look at text before images
- users 'make do', eg as soon as they find a link that appears to lead to what they are looking for, there's a very good chance that they will click on it

'…when I look at a web page it should be self-evident. Obvious. Self-explanatory. I should be able to "get it" – what it is and how to use it without expending any effort thinking about it.'
Don't Make Me Think, Steve Krug, 2000

Users of your website can therefore easily give up at any point. Visitors will leave a website either because they have come to the conclusion that you do not have what they are looking for (rightly or wrongly) or they become sufficiently frustrated and leave.

Accessibility issues

Disabled users can be particularly frustrated gaining access to websites. For some disabled people, access to web technology can be even more critical than for other users because it may be the only way they can get to the information or receive the experience. This can be an even more important issue for funded organisations, as they have responsibilities to a range of constituents and stakeholders and are not just accountable to themselves.

Users may be affected by website barriers when they have:

- difficulty with sight, hearing, movement or processing of some types of information
- difficulty with reading or comprehending text
- problems with using a keyboard or mouse
- technical restrictions, such as slow Internet connections or small screens
- language comprehension difficulties
- older software (eg earlier versions of browsers) or assistive technologies (eg voice recognition programmes). These may not be able to decipher Flash, for example

Making your website usable and accessible

What determines a satisfying experience for users? Professional usability companies tend to measure usability in terms of goal achievement. Some of the most basic usability principles include:

- logo and tagline prominent on the home page
- description of who you are and what you do on the homepage
- clear, intuitive, consistent navigation and naming system
- demarcation between the site and any outside advertising (eg banners)
- ability to quickly scan clickable and non-clickable items
- inclusion of 'About Us' and 'Contact Us' sections
- customer-focused, non-jargon language

- readable text and font sizes which can be increased by the user
- most important content 'above the fold' (ie in the first screen of content)

See *Appendix 2: Detailed usability checklist* for a detailed usability checklist.

Comprehensive accessibility guidelines are published by the WAI (Web Accessibility Initiative) referred to earlier in this section. These are universal and an excellent guide for your web developer. They can be found at www.w3.org

Testing usability

The best way to measure the usability and accessibility of your site is to test it. Usability tests generally involve observing users who have been asked to complete a task on a website. This would then help identify the design changes or functionality problems which would remove any difficulties they experienced. It is typical to test between 10 and 20 users to get enough information to make accurate assumptions.

Using a professional usability company can be expensive, but if your website relies on profits from e-commerce, then usability tests take on a higher importance. There is, however, no reason why arts organisations cannot undertake usability tests themselves. The important thing to remember is always to follow a systematic process of testing and resist the urge to make usability changes to a website based on a single user's feedback or the whim of an individual such as a board member.

See *Appendix 1: Do-it-yourself usability testing* for guidelines on do-it-yourself testing.

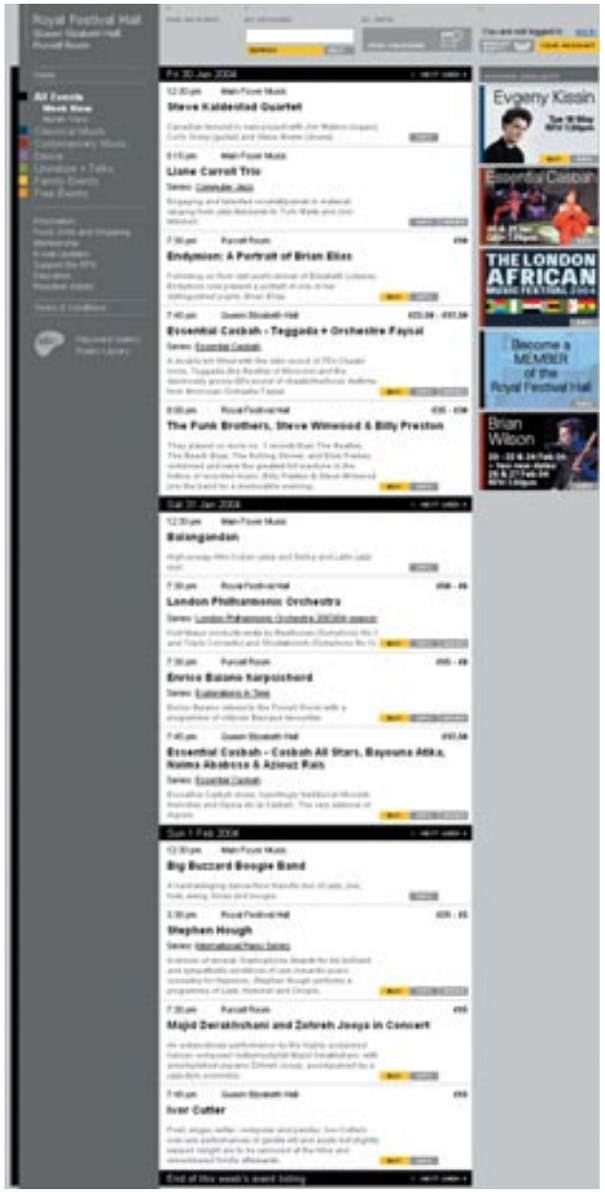
To ensure your website meets accessibility standards, you can use a number of testing measures. Ask your web developer about these:

- validate your web pages using a free online validating tool such as the W3C Markup Validation service at www.validator.w3.org
- try your site as if you were a different type of user, eg without a mouse
- use your site on a text-only browser, such as Lynx
- ask a range of people with various abilities and disabilities to test your pages and give you feedback
- use 'Bobby' to test your pages for compliance with the WAI Web Content Guidelines at www.cast.org/bobby/

The legislation

Be aware of the anti-discrimination legislation impacting on accessibility of websites, eg the Disability Discrimination Act 1995, the Disability Rights Commission Act 1999 and the Special Educational Needs and Disability Act 2001. In addition, the UK's Disability Rights Commission announced in March 2003 that 1,000 websites are to be investigated for their ability to be accessed by Britain's 8.5 million-plus disabled people – the first study of such breadth and depth of its kind in the UK.

Incorporating (or improving) usability can make a tangible difference to the bottom line. Following research into users' experiences on the Royal Festival Hall website and follow-up work on the site to meet their needs, London's South Bank Centre achieved a marked increase in users and online ticket sales, often over 30 per cent of the total sales for an event.



The Royal Festival Hall website at www.rfh.org.uk was changed following usability testing, resulting in a marked increase in ticket sales.

For many web developers, usability and accessibility are not viewed as priorities and they may not even be aware of them as disciplines. Your appointed web manager must take responsibility for understanding the guidelines and championing these issues on behalf of the user.

Usability principles should be defined during the planning process and incorporated into the brief for your web developer, who must be reminded of these principles throughout the project.

Resources

Designing Web Usability: The Practice of Simplicity, Jakob Nielsen, New Riders, 2000
Jakob Nielsen's Website: www.useit.com
RNIB website – 'Accessible info' section: www.rnib.org.uk

Content issues to think about

Key questions to consider

- have you planned to create original content for the web, rather than repurposing existing print copy?
- have adequate resources been allocated to content creation (eg photographs, video, copy editing) with a realistic timetable for content delivery?
- has search engine optimisation been considered in the creation of your website's content?
- have you considered ongoing updating and content maintenance?

Content issues to think about

Key points

- assign responsibilities for each area of content management
- produce a content plan and content template
- check that all content material is being commissioned or prepared and appropriate permissions obtained
- prepare a list of relevant keywords and phrases to be incorporated into the site text, titles and metadata

Content issues to think about

The importance of your website's content, the unique requirements for preparing text for the web and how to optimise your content for search engines

'Content' refers to the text, images, graphics, rich media, downloadable files and links that populate a website. For example, the content of the website for The Whitworth Art Gallery, Manchester, at www.whitworth.man.ac.uk, comprises:

- headings and sub-headings
- text
- images
- lists of events
- online searchable catalogue database
- maps
- hyperlinks – internal (within the site) and external (to other sites)

Content as the end not the means

The content of your website is there to enable users to achieve their purpose. Therefore, planning the content for your site is one of the most important aspects of a web development project. Content is often underestimated as being merely the text that fills the gaps of the new website design. However, content is the very reason people visit websites (the end), with the design simply providing the route to that content (the means).

'Content is the focus of the web user's attention.'
Homepage Usability, Jakob Nielsen and Marie Tahir, 2002

The strategic development of the content and managing the resources required to produce and maintain it are two of the most important responsibilities of your web manager. The extent to which aspects of these responsibilities are delegated or self-managed will depend on the particular skills the individual brings to the role. Responsibility needs to be assigned for:

- coordinating the content (sourcing, compiling and commissioning)
- generating new content
- editing the content to prepare for publishing

It is possible for one person, such as the web manager, to be responsible for all three areas, but it is important to understand that each requires specific skills.

Be careful not to fall into the trap of 'repurposing' your brochures or press materials to fill your website. This is not a viable solution, as web content operates in a very different environment from print and has to fulfil unique requirements. It is important that the web manager comprehends this and approaches the strategic development of the website content with this in mind.

Planning the content

After creating the brief for the developer, the web manager should produce a content plan for which the starting point should be fulfilling the primary purpose of the site. The website design and content should work in synergy, successfully leading users to complete their intended task. This will involve thinking about:

- what content is required – not only text, but also images, photographs, video, audio, downloadable files, graphs, maps and charts
- who will be responsible for content coordination, content generation, proofing and final editing
- what approval and checking processes will be employed
- where to source existing content and which content has to be generated from scratch
- how frequently content will need to be updated
- how content will be archived or replaced once it becomes dated
- the timeframe for compiling and generating content, taking into account aspects such as briefing writers, researching information, sourcing images, preparing downloadable files, securing copyrights and permissions, liaison with other departments, proofing and editing
- how ongoing content maintenance will be managed and by whom

The web manager needs to map the content into sections and subsections, prioritising these in relation to the site's purpose. Typical sections might be Performances, News, Press Centre, Box Office or About Us. Typical subsections of a section such as About Us might be Company Description, Our History, Members of the Company, Finding Us or Contact Us.

A hierarchy should also be created in terms of what is top-level content and what is deep content that only visitors with a specific interest would seek. This hierarchy should be driven by the primary purpose and secondary objectives of the site.

Web not print

When you are generating the text content for your website, it is important to appreciate that writing for the web is different from writing for print. The three most important rules are:

- be concise
- structure your content in a way that it can be easily scanned
- layer long information into multiple pages, with the most important content at the top level

As you have read in the usability section of this guide (pages 39 to 47), web users tend to be in a hurry and wish to scan content quickly for what they need.

Checklist for writing for the web

- ☐ write specifically for the web – forget writing for sustained reading
- ☐ adopt a journalistic writing style: use shorter words; use shorter, more concise phrases and sentences; make only one point per sentence; emphasise facts; and avoid hyperbole
- ☐ use bullet points and short paragraphs
- ☐ aim for a simpler vocabulary and a lower reading age
- ☐ structure so conclusion and key points come first
- ☐ be clear and don't exaggerate to retain attention

Preparing a content outline

A content outline will help you subdivide your sections into separate pages. A section may have one or more pages. As an example, a content outline for the Milton Keynes Theatre website at www.theambassadors.com/miltonkeynes/index.html (at the time of going to press) would look something like this:

What's On:

- Diary
- Search
- Mailing list
- Comments
- Concessions
- How to book

Theatre Information:

- Map and directions
- Seating plan
- Access information
- Jobs
- Mailing list
- Comments

Education:

- Background
- Classes
- Holiday courses
- Workshops
- Talk backs
- Resources
- Backstage tours

Friends:
- Benefits
- Edit your details
- Special offers

Corporate membership:
- Benefits
- Contact information

The content template

Your content outline can then be turned into a content template. This will speed up the process of content delivery and ensure that everything is provided effectively at once rather than having to be constantly added. A content template should contain all the necessary information to enable the input of the content, including:
- the filename of the HTML page where the content is to go
- a list of the filenames of the images for that page, any captions and alt text (the text that replaces an image that doesn't appear)
- filenames of any other content for that page, such as audio or video clips and downloadable files (PDFs, Word documents, etc)
- the text copy, formatted as it should appear on the page, with headlines and subheadings clearly indicated

If a content template had been created for the location page on the Artsadmin website at www.artsadmin.co.uk it might have looked something like this:

Page:	Location
Date:	26/3/03
Filename:	aaresources/location.html
Author:	HVJ

Primary navigation:	Artists Information Artists' advisor Resources Current news
Secondary navigation:	Rehearsal Spaces Video Resources

Page copy:

Artsadmin is based in Toynbee Studios in East London. The building contains a 240-seat theatre, four rehearsal spaces, a fully licensed café serving hot meals, and a video resource including cameras and editing facilities.

Location of Toynbee Studios
Toynbee Studios is part of the Toynbee Hall complex at 28 Commercial Street near Aldgate East in London.

For further information on, and exact conditions of, studio and equipment hire, contact Artsadmin by telephone +44 (0) 20 7247 5102 or email admin@artsadmin.co.uk

Text links

Email link to:	admin@artsadmin.co.uk
Image filename:	Alt Text: mapillustratoreps.gif

All copy should be edited by one person to ensure consistency of style and appropriateness for the web. If you are re-using print copy, take care to remove page references and any other indications that the copy was written for print, such as 'PTO'. Ideally all copy for the web should be rewritten to maximise effectiveness.

Search engines

A key consideration while you are creating content is optimisation of your site for search engines. This impacts the main content of your site as well as the 'metadata' in the code behind it. Search engine crawlers are more likely to index and highly rank websites that appear very relevant to particular search terms. They will pick up on key words in your content that match the terms users type into their search fields.

Keeping in mind that quality content and good usability (see pages 39 to 47) are still the best tools for ensuring a high search engine ranking, you should also include keywords and phrases prominently in the most visible content areas. These keywords should be those you would expect to be used in a search by your desired target audience when they are looking for the services you provide, eg 'theatre tickets in Cheltenham'. Without destroying the readability of your text, you should aim to include these in body text (particularly on the home page), headings, alt text and hyperlinks.

Keywords should also be included in the metadata of the site. Metadata is HTML-embedded text containing browser information mainly for search engines or for screen-reading software for visually impaired users. This text should be written by your copywriter for consistency across the website. Metadata includes the title tag (the text that appears in the top blue bar of your browser), description tag and keywords tag.

Resources

Web Word Wizardry A Net-Savvy Writing Guide, Rachel McAlpine, Ten Speed Press; 1st edition, 2001

Developing Online Content: The Principles of Writing and Editing for the Web, Irene Hammerich and Claire Harrison, John Wiley & Sons; 1st edition, 2001

Hot Text: Web Writing that Works, Jonathan and Lisa Price, New Riders, 2002

Online Content UK, network for online content professionals: www.onlinecontentuk.org

Companies which work with arts organisations on search engine optimisation and search engine placings include: Eureka Marketing: www.eureka-marketing.co.uk/hi/aboutus.html and Receptional: www.receptional.com/

Relating to your users

Key questions to consider

- what interactivity is required to achieve your objectives?
- what are the design implications of the interactivity and the intended impact on the relationship with users?
- how do you want to handle registration and log-in procedures?
- what kind of online communities do you want to create?

Relating to your users

Key points

- list the interactivity, feedback opportunities, tailoring and personalisation selections you require the website to offer and produce a matrix for which users will use what
- plan your registration and log-in procedures
- write a structure for the bulletin boards and online communities you propose, outlining numbers of subject groups, how threads will be handled and arrangements for moderation. Your web developer should help choose the specialist software for this
- list the categories of web relationship you wish to offer and the character of newsletters and any response mechanisms you require

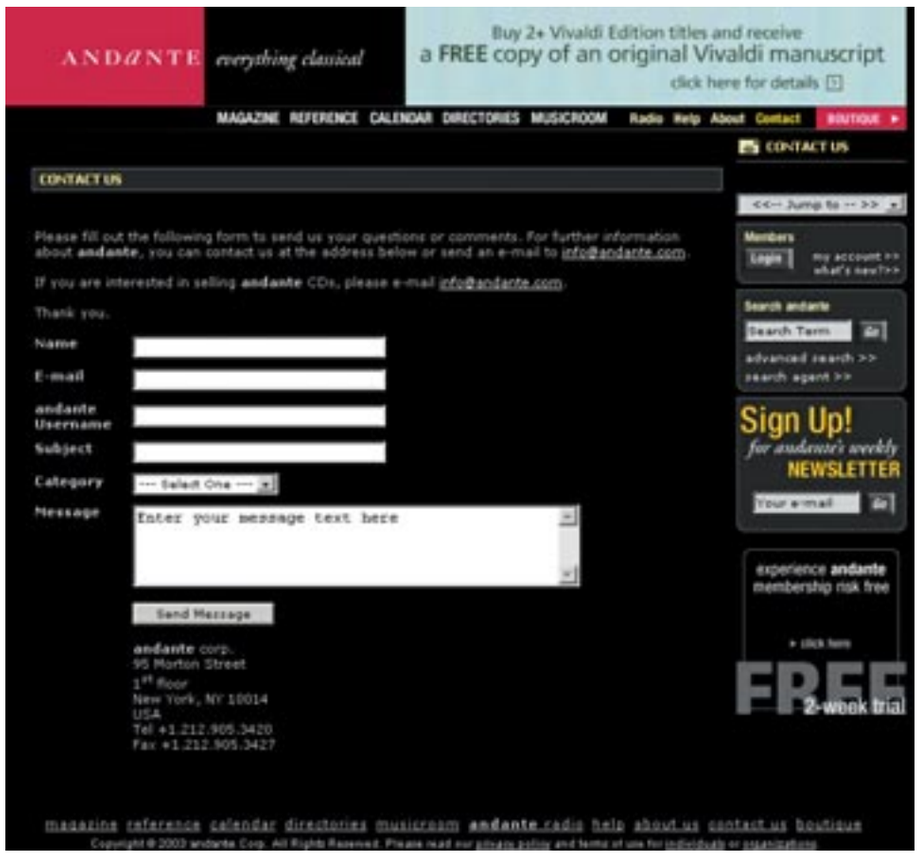
Relating to your users

How to relate to visitors on the web and exploit the advantages of this interactive medium

The web is fundamentally two-way. People can send information in both directions and it is this potential for dialogue and feedback that transforms how we can relate to our customers.

- how can we provide simple interactivity?
- what are the issues involved in registration and log-ins?
- how can we build communities on the web?
- how can we use web relationships?

The web and browsers offer interaction, eg at the simplest level rolling the mouse over a link will turn the pointer into a hand and text should pop out from the link to describe what it is and where it leads. The Contact Us button can provide an emailable form to send direct to the organisation.



Users of classical music website www.andante.com are offered a web form in which to provide feedback.

There are many other possibilities for animation and interaction. A panel can contain changing information, cycling through a sequence of text and/or images, and rolling the mouse over it can stop it; clicking on it can take you to further information. The South Bank Centre usually offers a good example of this (at www.rfh.org.uk). Fields can provide drop-down lists, banners and pop-ups can appear, and new frames open.

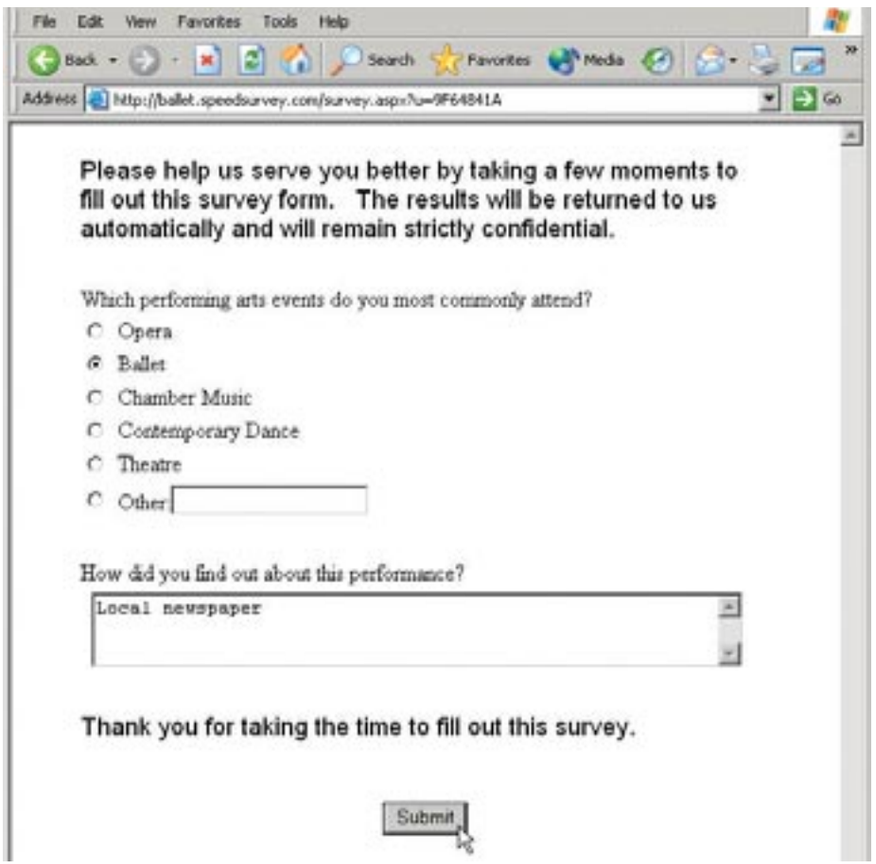
Pop off

There is a danger to this. Animations on websites can be a turnoff to many users. Some browsers can be configured to suppress pop-ups and banner ads. Many users click the close box on small frames before they finish downloading. It is absolutely essential to ensure that animation and interactivity relate directly to the primary purpose of the website, improving the experience for the user and helping build the relationship with them.

Because the web is interactive, it is important to reflect this in the opportunities you offer. One argument is that simply providing tasks that require users to respond starts to build a relationship. So some websites ask visitors to vote on a subject or participate in a simple quiz or game, email a named individual in the organisation to give feedback or comment, or ask a question. However, it is important to ensure that these do not form distractions from your primary purpose.

Visitors to the BBC website (at http://news.bbc.co.uk) are offered the opportunity to vote for their favourite Turner Prize artist.

Going further, the public is usually willing to give helpful feedback to those organisations they favour, so an online survey can obtain good response rates. There are shareware versions of such interactive surveys which can be incorporated into your website. Market research rigour still needs to be applied to the formatting of the questions to ensure usable practical responses. The nature of the sample and the respondents will require careful consideration when assessing the answers.



A simple online survey from Speed Survey (http://ballet.speedsurvey.com).

To register or not to register

A key issue in the planning of your website is at what point you choose to ask users to log in, if at all. Web servers collect basic information about users such as the platform, browser, and country of their ISP, and can/will place a cookie in their computer, which recognises a returning user, based on their behaviour on their first visit.

To be recognised, individuals must register in some way. This can be achieved simply by requesting their email address and a user-chosen password. This minimum is adequate but it is very helpful if you can also collect real names so you can identify the person properly (who may have more than one email identity). For e-commerce purposes, much more information is needed such as full address and contact information. There is a debate about when this extended information is collected.

The first argument is about when and why users should be asked to log in. If you ask users to log in as they arrive at your website, this may deter some new visitors and you will lose their involvement with your site. Many websites will offer log-in fields as part of their fundamental navigation in the belief that users will log in at the point which suits them during their visit. This means that this facility must be on every page.

It is possible to configure the website so that first-time visitors are not asked to log in until later, on a second visit, when they are recognised by a 'cookie'. This enables real interactivity to begin, for example the opportunity to encourage people to choose to receive email newsletters, to tailor the subjects on which they want information and to configure the website according to their personal interests and priorities. All these elements need careful specification with the developer.

Returning users

Returning users are more interested and therefore it is important to give them personal recognition. If your organisation recognises customers with mailing list schemes, memberships, season tickets or subscriptions, then you should provide this recognition

online. Again, the cookie can be configured to recognise the character of the returning user. Users need to see some benefit from this – not least a significantly different first page which shows that you know who they are.

The log-in process is harder for the customer if it requires an offline membership number or such-like, not least because the user will need to have this to hand to log in the first time. While this number can be emailed to them automatically and immediately if they have forgotten it, the step adds a significant obstacle.

Requiring users to have their offline membership number to hand can add an obstacle (see www.sadlerswells.com).

One argument for requiring users to log in and provide their personal information at the start of the transaction sequence is that they are more likely to complete the transaction because of the commitment they have already made to the process. If your website provides e-commerce and particularly online ticket sales, then at some point there is a requirement for input-heavy collection of information. There is an argument that customers should be encouraged to input information as early as possible to reduce the burden of input during the actual transaction. So it can be useful if contact details are collected at the initial log-in and used to populate the forms in the e-commerce transaction.

Talkback

Patrick Marber's play *Closer* contains a scene in which two people in separate rooms have a desperate dialogue using an Internet chat room. Frenetically fast typing still means their dialogue is slow. But it is still dialogue and the responses don't have to be instantaneous. Enter the world of Bulletin Boards, chat rooms and discussion forums.

The Fuel4Arts email discussion forum (www.fuel4arts.com) provides the opportunity for dialogue among arts practitioners and arts marketers.

For many users, the main interaction websites can provide is the ability to post questions, contribute to discussions and read changing information posted by other contributors. The software to provide this functionality is often available as shareware but it is important to ensure that it has the functionality you require.

Posting on the web is effectively publishing, so moderation of content is important. Most websites have a member of staff who reads all postings before publishing or at least ensures postings are monitored daily and inappropriate ones removed. This is not optional. Some venues ask users to post their own short reviews of events they have seen, and even these need moderation as some may contain offensive personal remarks about individual artists and their work. Some sites offer a special email on the Bulletin Board for users to warn the moderator if they see a posting they think inappropriate.

Bulletin Boards and discussion forums are specific tools for creating online communities of people with shared interests and specific needs. An example of users of such forums would be teachers who can share education workshop and project materials and explore or discuss subjects and experiences. It can take some effort to get such online communities up and running but they can then operate largely on a self-help basis with only modest moderation.

Each Bulletin Board should have its own log-in arrangements and make clear who it is for and what areas are covered. Most software supports discussion threads and also enables contributors to subscribe to receiving emails of new postings so that the online discussion can keep moving and contributors are made aware of activity.

Web relationships and e-marketing

If users log in, websites can monitor much of their behaviour, what buttons they click, which pages they view and how much time they spend on each page. The large amount of information which can be collected, much automatically, makes websites a rich source of data capture. This information needs to be exported in a usable format so that it can be used for direct marketing. Some computerised box office and e-commerce solutions provide this functionality such as ts.com's *ticketing solutions*.

Newsletters

The challenge of data capture and user-defined requests is deciding when to push information out to users and when to let them pull what they want. Provided permission is obtained under data protection law, organisations can send out appropriately tailored and targeted emailings based on website behaviours and expressed interests. However, most arts organisations simply let users tell them what information they want to receive. The most common usage is to send email newsletters. It is more effective if multiple newsletters are produced according to interests, so this means the website must offer the opportunity for users to select the character of newsletter they want to receive and at what frequency.

E-commerce and Internet ticketing

Key questions to consider

- what factors determine the selling of merchandise on your website? Minimum order size and value? Fulfilment and delivery? Customer queries and follow-up?
- what will users want to buy from your website? Can you afford to sell to them? Will it be profitable?
- if you plan to sell tickets, how do you persuade users to buy? What could put them off buying from your website?
- how does your internal search engine work? What happens when you interrogate it?
- what is your policy on fees and charges? On what terms will your ticketing system supplier do business with you?

E-commerce and Internet ticketing

Key points

- plan an e-commerce strategy with all the processes fully analysed and an agreed methodology for executing them
- review page optimisation and information collection with your web developer and, if appropriate, your ticketing system supplier, and identify the steps to shorten the process and improve the flow
- monitor sales and view web server logs to see if you can identify problem areas in the e-commerce process
- monitor customer input into your search engine and configure responses to deliver the links they want. Discuss with your web developer how to optimise your search engine to meet users' needs

E-commerce and Internet ticketing

The implications of offering e-commerce functionality on websites

For most arts organisations, e-commerce is unlikely to be quoted as the primary purpose of their website. However, some are recognising that, as purchasing tickets is the preferred activity of the majority of their users, they need to focus the functionality of their site around this. For example, in London in 2003 some arts organisations reported that on average over 20 per cent of their tickets were sold online, and for some events up to 60 per cent (www.ticketing.org.uk). For many existing attendees, this is seen as an important added-value element to the sales channel, with the purchaser in control.

Imposing logic on shopping

How do you shop? Is your approach to shopping logical and reasoned? Are you methodical and systematic? For most people the answer is No. The physical retailer can still expect high volumes of sales, because you will arrive at your purchase selection your way. Your behaviour is considerably restricted if the inventory is provided in a catalogue – you can still skip about the pages, but the order in which the goods are offered is set and the information is limited to what the vendor thinks is of interest to you. Your behaviour is even more restricted when you move to buy things on the web. It is necessary to impose a logical process on to the purchase.

E-commerce is mail order by another method. Every item sold has to be packaged and delivered, or arrangements made for it to be collected. Even the 'collect from the box office' option can be onerous if 35 per cent of your tickets are sold online and all the purchasers turn up 15 minutes beforehand. So arts organisations selling successfully on the web have a new terrestrial problem – ticket collection kiosks.

Back-office requirements

Consideration of e-commerce opportunities needs to start with the back-office functions:

- what packaging will be required for UK delivery and what packaging and customs notification will be needed for overseas delivery?
- who will post and pack and how much will it cost?
- who will track deliveries to completion?
- who will manage stock control and 'out of stock' problems?
- who will receive telephone and email enquiries about orders?
- what currencies and payment methods will be accepted?
- who will handle credit card chargebacks and queried transactions?
- how might refunds and damaged goods problems be handled?

Card payment

It is easiest to accept payment only by credit card. This means payment is guaranteed at the time of purchase and customers from anywhere in the world can settle in sterling. However, the acquiring banks (the banks to which you pay credit card income) now require separate merchant accounts for web sales and usually impose higher percentage commissions. As a result many e-commerce organisations make a surcharge for credit card payment. Some also accept debit cards which, dependent on the bank, can be processed through the same merchant account. The choice of credit card bank need not be determined by which bank provides your main account, but by which one offers the best terms and service and accepts the most card types.

Banks sometimes demand a bond to cover the time lapse between order/payment and delivery. Banks tend to adopt the side of the customer if they query delivery or satisfaction. This can lead to chargebacks and cancellation of payment which can make it difficult to recover payment. This may be a serious reason to reconsider where you supply, especially outside the UK.

Bundling

Order size is a key determinant of profitability, so it is essential to identify whether the cost of processing low-value transactions is worthwhile. There may be public benefits that outweigh logistical issues, such as selling exhibition catalogues, posters or postcard bundles. Items can be grouped together into a single higher-value transaction – not one poster but three; cards in a pack of 10. In every case, the true cost of fulfilment must be considered.

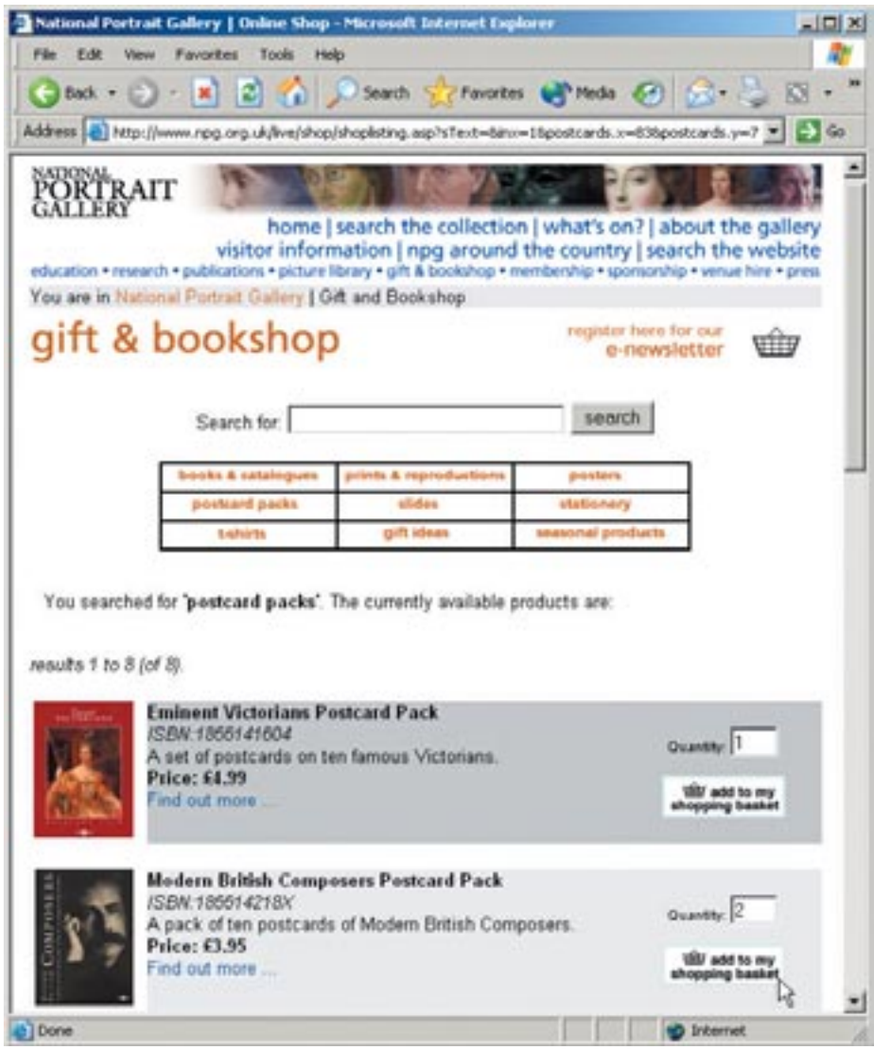
Cataloguing

A physical shop usually has software to handle product recognition, stock control, inventory/stock order position, cost of sale, margin, tax treatment, etc. An online shop needs to interface with this. Some software packages will accept interfacing with the web and some computerised ticketing systems will handle a limited inventory of merchandise sales. There are also e-commerce software packages that can handle everything from cataloguing to payment mechanisms. The key issue is ensuring that stock control and sales accounting is under control.

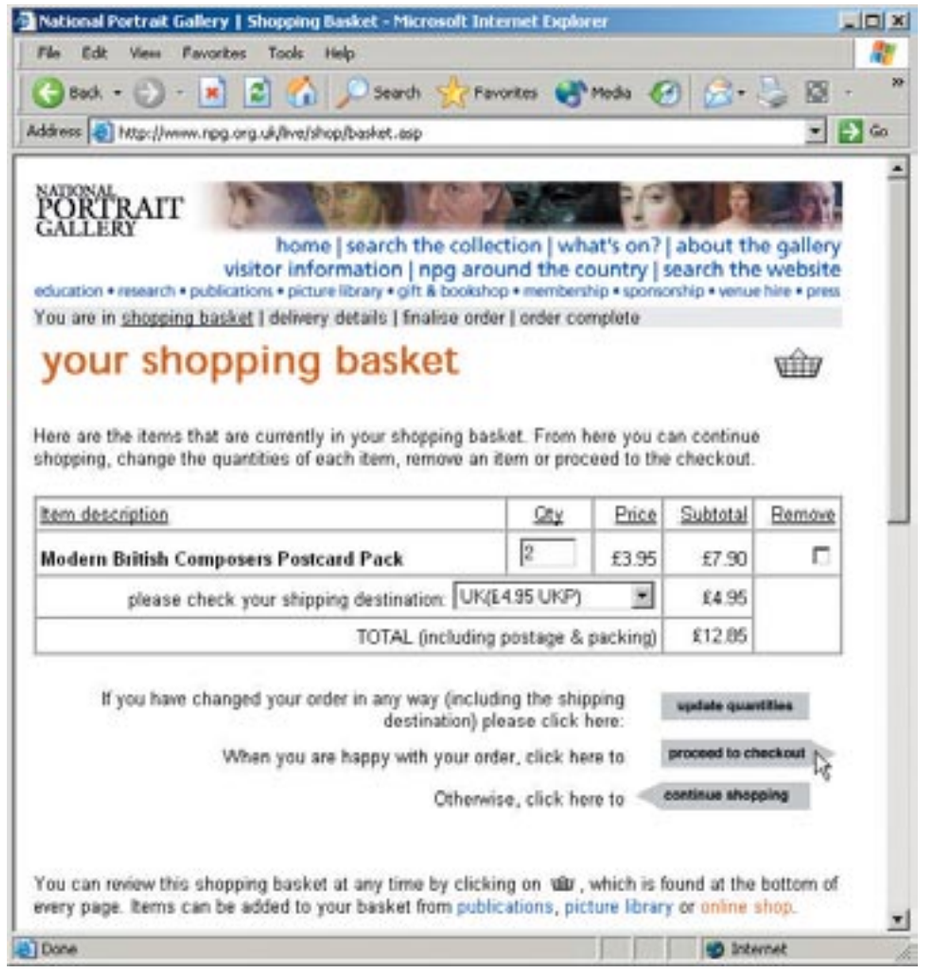
E-commerce requires an online catalogue of items for sale that can be browsed and searched. The catalogue will need thumbnail illustrations of each item and these need to be meaningful. The description should be aimed at satisfying users' needs for information to persuade them to buy, together with the stock position, typical delivery times, and purchase costs including postage and packing (also allowing for overseas delivery), plus VAT.

Shopping cart

The functionality of a shopping cart is essential. This icon works for most people. The basket should appear on every page of the website and permit access at all times to its contents, with an itemised, costed list plus a total including all delivery costs. Clicking on this icon should offer navigation into the inventory as well as itemising the current contents and permitting items to be removed.



The functionality of a shopping cart is essential for an e-commerce site (see www.npg.org.uk).



www.npg.org.uk

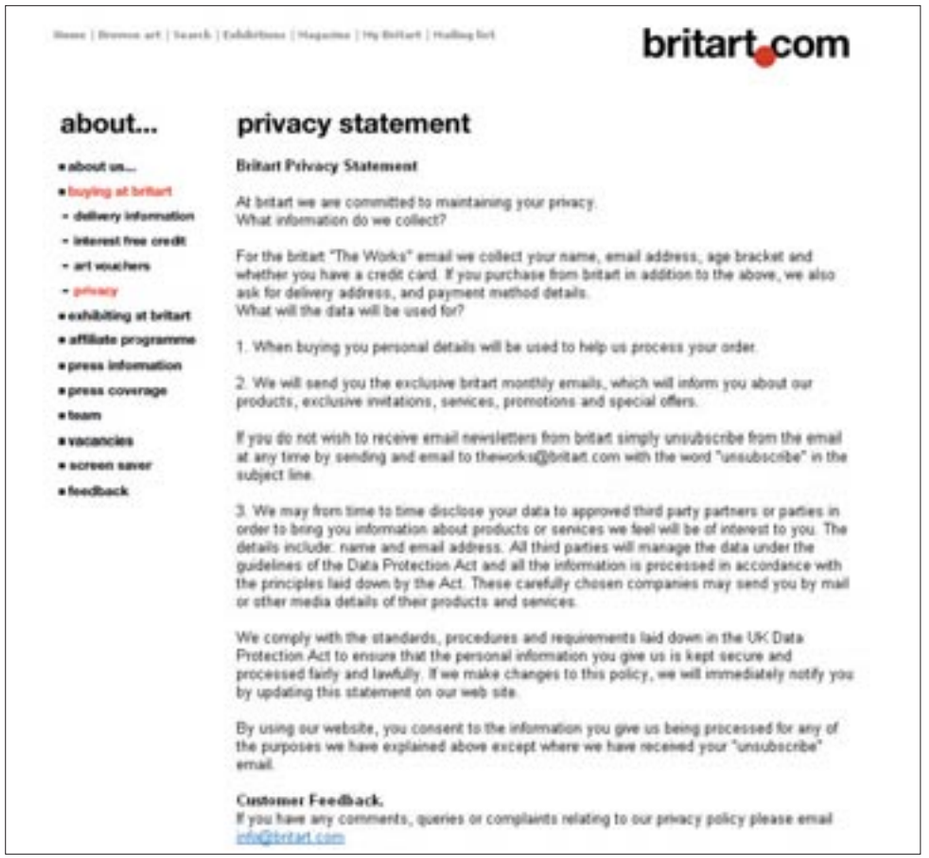
Terms and conditions

Once users have completed their selections, they proceed to the check out. However, more than payment is handled at this stage. It is essential that purchasers see and understand the terms and conditions and the data protection implications. It should only be possible to complete their purchase once they have acknowledged these. The recommended practice is that the terms and conditions are read and that the button to accept them and proceed is at the bottom of the text. It is not recommended that terms and conditions are an optional read, accessed by a separate button.

Data protection

The public have many fears about the security of making purchases and giving their personal details and credit card payments on the web. There are web security schemes and some ticketing system suppliers have their web pages approved, such as Verisign or Verified by Visa. Standard security procedures can protect credit card details and the transmission of personal data. However, it is essential to provide a clear data protection statement on exactly who the purchaser is trading with, who will process their data and where, and what the outcomes of the processing will be.

The recommended practice is again that the data protection statements have to be read through even with scrolling, and that the button to accept them and proceed is at the bottom of the text. However, whereas with terms and conditions the purchaser must accept these to proceed, it is thought unfair under data protection legislation to prevent a purchaser from proceeding because they don't want their data kept and used, so there should be two buttons: proceed and accept and proceed and decline.


britart.com

about...

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- team
- vacancies
- screen saver
- feedback

privacy statement

Britart Privacy Statement

At britart we are committed to maintaining your privacy.
What information do we collect?

For the britart "The Works" email we collect your name, email address, age bracket and whether you have a credit card. If you purchase from britart in addition to the above, we also ask for delivery address, and payment method details.
What will the data will be used for?

1. When buying you personal details will be used to help us process your order.

2. We will send you the exclusive britart monthly emails, which will inform you about our products, exclusive invitations, services, promotions and special offers.

If you do not wish to receive email newsletters from britart simply unsubscribe from the email at any time by sending and email to theworks@britart.com with the word "unsubscribe" in the subject line.

3. We may from time to time disclose your data to approved third party partners or parties in order to bring you information about products or services we feel will be of interest to you. The details include: name and email address. All third parties will manage the data under the guidelines of the Data Protection Act and all the information is processed in accordance with the principles laid down by the Act. These carefully chosen companies may send you by mail or other media details of their products and services.

We comply with the standards, procedures and requirements laid down in the UK Data Protection Act to ensure that the personal information you give us is kept secure and processed fairly and lawfully. If we make changes to this policy, we will immediately notify you by updating this statement on our web site.

By using our website, you consent to the information you give us being processed for any of the purposes we have explained above except where we have received your "unsubscribe" email.

Customer Feedback.
If you have any comments, queries or complaints relating to our privacy policy please email info@britart.com

A clear data protection statement is essential (see www.britart.com).

A clear data protection statement is essential (www.ebay.co.uk).

Log-in and registration

When is the best place and time for customers to log in or for new users to register for the first time? Loyal customers will want to log in at the start of their web session, especially if they are members of friends or subscription schemes and, for example, gain privileged access to discounts. The website will need to permit purchasers to register and give all their details as easily as possible. This is a data input-heavy process and the design and layout of pages is crucial. Forms should avoid scrolling and multiple pages, and content should be designed to be 'above the fold' at all times (the online ticketing example on pages 88 to 91 provides a detailed examination of what can be involved).

Order confirmation and delivery

Once payment has been made it is expected that:

- first the website returns a confirmation, with an order number and details of delivery. This tells the purchaser that their transaction has been completed and should give contact details for queries and to track delivery. It is good if this offers a button for a printable version
- second an email confirmation is sent to the purchaser, repeating the above. Where there is a despatch delay, it is customary to send a further email once the goods have been collected by the carrier
- in some systems these emails are sent automatically and do not use an address that can be replied to. It is essential to put mechanisms in place to track responses from purchasers and to ensure that they are dealt with. Orders can become an administrative nightmare if purchasers roll back their credit card payment because of a tardy response. The choice of carrier may be significant since some now give purchasers the opportunity to track delivery through their system, which is greatly appreciated. There is of course a modest delivery cost implication

Online ticketing

Most arts organisations have existing computerised box office systems, but interfacing these with websites to provide an effective ticket-selling experience is not always easy. The simple fact is that many arts organisations have their own ticket-selling procedures which reflect their ways of doing business, so standard Internet-ticketing engines immediately restrict their options. The vast majority of box office managers require that seats sold on a self-service or semi-automatic basis are selected not by the purchaser but by a best-available algorithm set up on the computerised system. This can be configured with the order in which seats should be sold to provide the best seats, dress the house, and ensure no singletons are left.

There is considerable evidence that purchasers don't like being allocated a seat and would prefer to select their own, but only a couple of UK computerised system suppliers offer that option at present (for further information on this see www.ticketing.org.uk). For venues with numbered seating, it looks as though achieving high percentages of online sales will depend on this functionality.

'We in the arts industry need to understand that we're not the people that are driving online ticketing, it's not the ticket agents and software companies that are driving online ticketing – it's the customer. Ultimately we are responding to customer expectation and the expectation of online ticketing is growing every day. If we don't pay attention now, our businesses will simply be left behind.'
Stuart Buchanan, former Marketing Manager, Royal Court Theatre

There are a variety of solutions for delivering online ticketing, often easily confused because of unclear terminology. In fact, selling online may not involve a computerised box office system at all. The options and implications are:

- giving an allocation of tickets to a ticket agent for them to sell over the web, such as First Call (www.firstcalltickets.com). No connection to live box office data. Will involve manual reconciliation of sales
- making an allocation to your own web-selling tool, such as ts.com, for example. No connection to live box office data. Will involve manual reconciliation of sales

- using a combined ticketing system/services supplier who links your ticket sales to their Internet ticketing operation, such as Ticketmaster. Live connection to box office data. May involve substantial fees imposed on customers
- using a ticketing system supplier who supplies an Internet gateway and Internet connectivity, such as Tickets.com, for example. Live connection to box office data. May involve choice of license fees or per-ticket fees
- using a ticketing system supplier who supplies an Internet gateway software module, such as Artifax and Galathea STS for ENTA. Live connection to box office data. Requires the organisation to provide its own web server with firewalls and flood protection, plus credit card clearing. Usually involves only license fees
- using a ticketing system supplier who sells a specification to enable you to develop your own Internet ticket sales tool, such as Galathea STS for BOCS. Live connection to box office data. Involves development costs or out-sourcing

It is strongly recommended that venues should implement one of the last four options, all of which give real-time ticket-selling solutions, selling live off the changing inventory. Allocation methods ought only to be considered as a temporary solution.

Connecting the box office system to the Internet usually requires a separate connection to the web sales engine. This can be either a leased line to your ISP or an ISDN line or an ADSL (broadband) connection. Call charges will be incurred for some of the telecommunications options. This is significant because it may mean the venue incurs costs even when customers do not complete their ticket purchase.

Live online ticketing has some technical challenges. Venues need a system to manage access, ticket availability, seat allocation and then payment processing. This is why some suppliers have developed integrated Internet ticketing solutions in which they supply the ticketing system, Internet gateway and Internet connectivity, thereby delivering services as well as software. Some of these come with a 'private label' version that enables venues to sell directly off their own website.

Optimising the process

Where e-commerce is a fundamental requirement of your website, a few simple rules apply:

- minimise the number of pages to be viewed and the number of times the mouse must be clicked
- make it obvious and quick to find the e-commerce area from every page of your website
- don't make the users repeat actions or get caught in circular processes, eg if they look at What's On and identify event, date and time, then the link to ticket purchase must not require them to repeat this process
- speed is essential – design pages to download quickly and make suppliers reduce delays while pages interrogate the box office system
- transactions require interaction from the user and heavy data input, so minimise what you need to collect and keep it simple
- ask whether you would find it easy to use, whether you have given the user the information they need to confidently complete their purchase

Only a small proportion of users who start e-commerce transactions actually complete them, and these are often a small proportion of the overall visitors. Clearly users visit websites to obtain more information. If they don't find what they want easily, then they will leave. Does the start of the transaction process in some way put them off, is it too complicated and does it involve too many steps and inputs? This is an area where venues are experimenting to see what they can do to improve results. Minimising the number of pages and simplifying the selection and form-filling process is clearly very important.

A recent review of Internet ticketing on arts organisations' websites in the UK for www.ticketing.org.uk showed nearly half had problems that prevented progress with transactions. A considerable number of these came from wrong links within What's On event details, possibly because of incorrect text within the link – a typo here is not a misspelling, but a failed link.

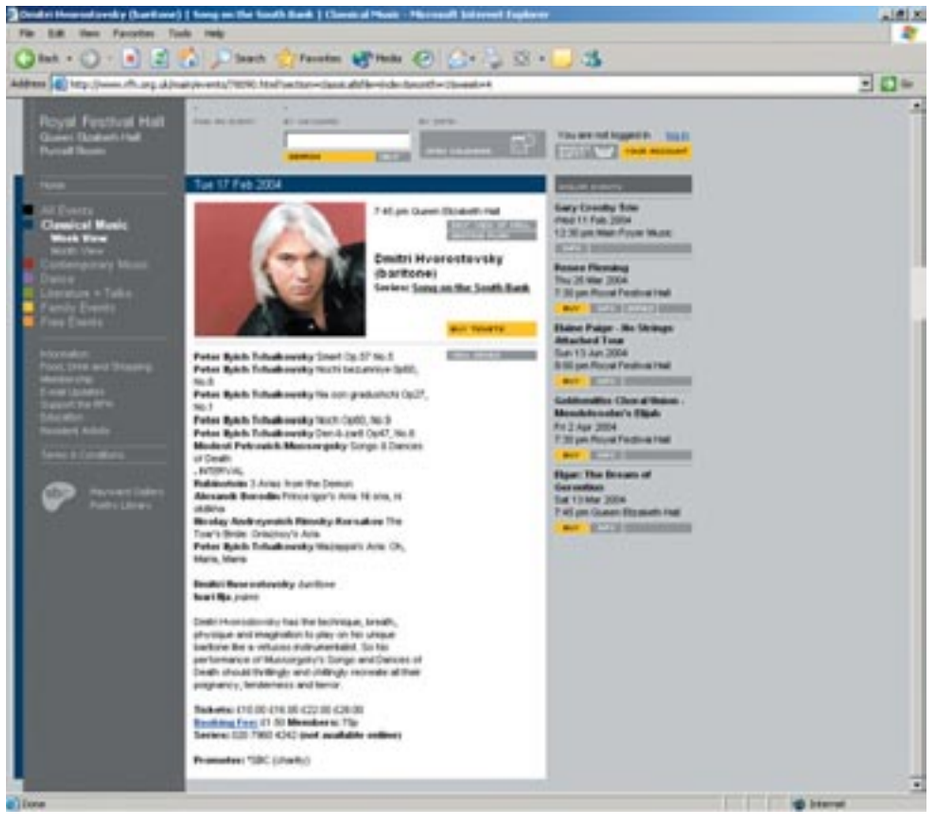
What's On and date/time selection

The same review revealed problems with What's On information itself. Event details often listed a whole season, and despite most events having passed, it was necessary to scroll down to reach current events. Current events often had inadequate information and links were mostly wrong for events originally put on the website many months earlier. Details of dates, days of the week and times were often not presented clearly or with alternative formats such as a simple listing or a calendar. If these formats were offered, the actual dates and times were usually not configured as links straight to the appropriate point in the booking process. Many websites assumed the public would fill in a field stating the date and time or choose from a drop-down list at a later point. Clearly this is a major area for design and functionality improvements to which both web developers and ticketing system suppliers need to pay attention.

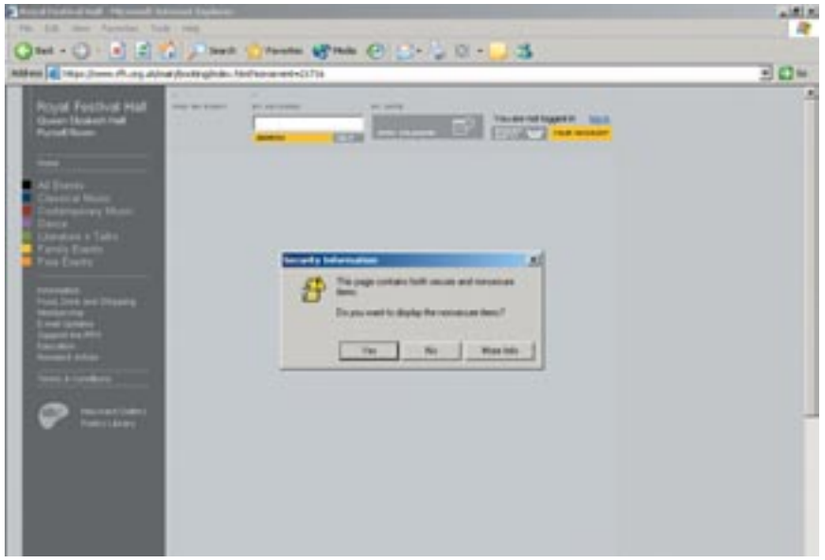
Exit points

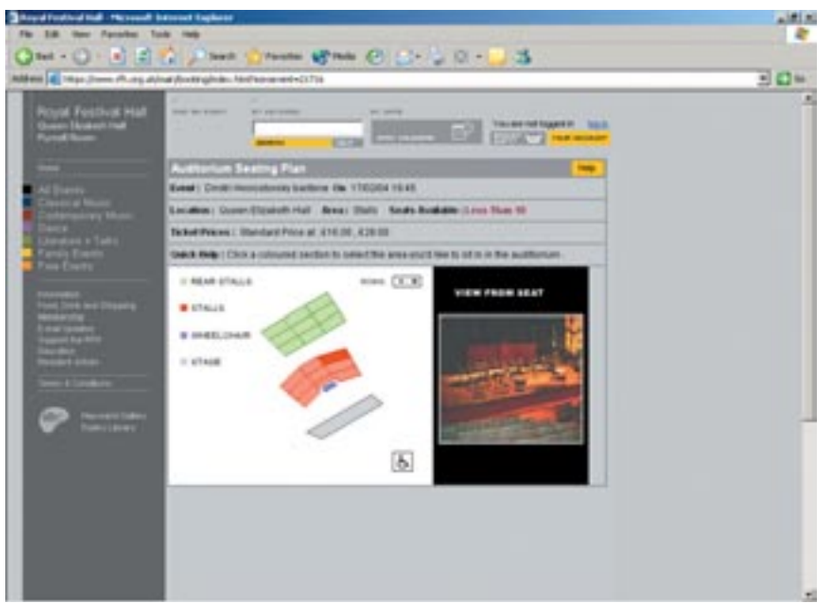
Many potential customers leave at the payment screen, even more where ticketing is concerned. There is no published research that reveals why, it could be because of issues with credit card security, the first viewing of total cost with fees and charges, form filling, or, for ticketing, the first time the user has seen the actual seat numbers allocated to them, or perhaps because the user is simply doing a price and availability check before phoning the box office.

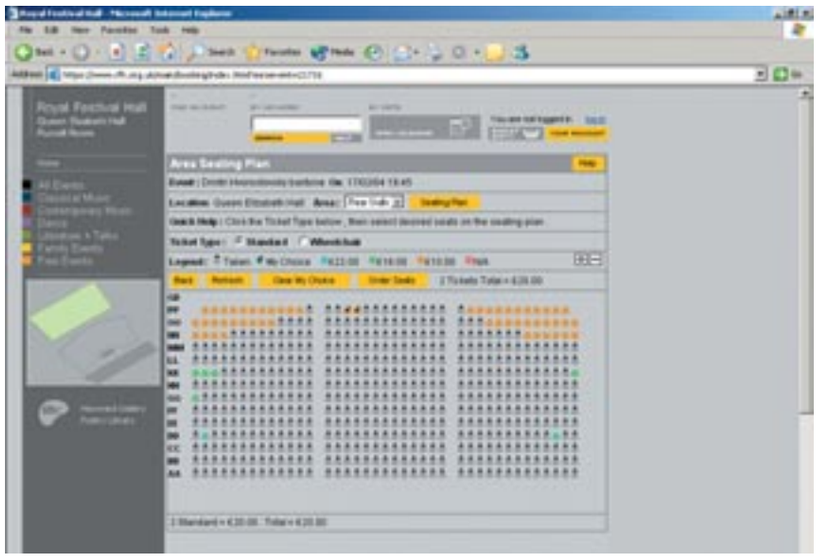
What we do know, is that those few venues that provide the choice of the actual seats off the plan over the Internet achieve a much greater level of purchase completions.

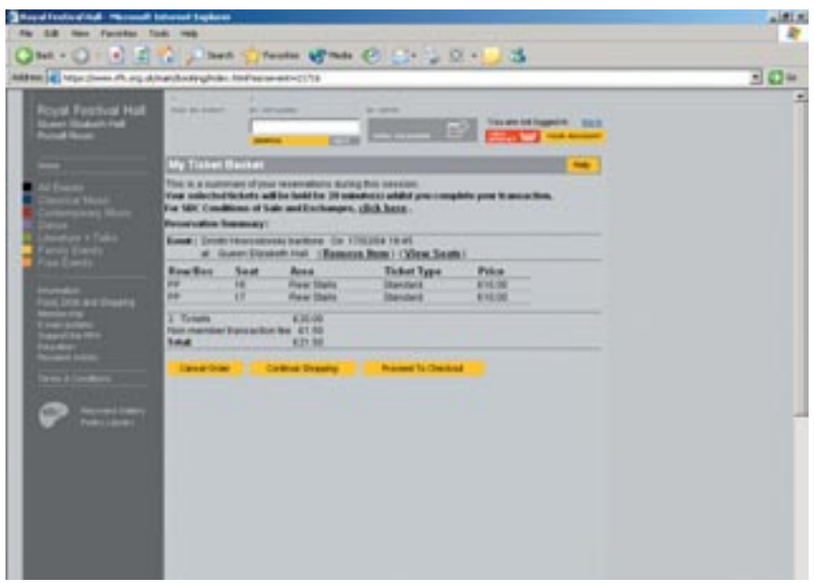


What's On information and ticket purchase sequence on the Royal Festival Hall website at www.rfh.org.uk






Royal Festival Hall
Area Seating Plan


Royal Festival Hall
My Ticket Basket


Royal Festival Hall
Account Log-in
Order Summary

It would appear that some members of the public expect web prices to be lower than purchases through other channels, because they themselves do all the work and the venue is notionally saving on staff. It is the practice of many commercial companies to discount prices for web sales, with companies such as easyJet taking £5 off web fares, even on their lowest prices. Without a price reduction on the web or with a convenience fee charged on top, many people seem to prefer to speak to box office staff.

Internal search engines

Jakob Nielsen and others suggest that once on a website, just over half of users use the website's internal search engine to try to find what they want. This is a major problem. Search engines are mathematically very simple unless specially configured.

Example

Imagine you wish to book for the London Symphony Orchestra at the Royal Festival Hall in London, which typically has over 4,000 events booking in advance, some years ahead. If you typed London Symphony Orchestra into their search engine, and if it made the standard Boolean search, you would get all the events with the word London, all the events with the word Symphony and all the events with the word Orchestra – thousands. An experienced web user might know to type in quotes "London Symphony Orchestra" so the same search would only find the proper name combination. A solution in this case is to configure the search engine so that if a user types in capitalised words it adds quotation marks.

Search options

Because some users have problems knowing the exact spelling or name of an event or artist, it is necessary to configure search engines with 'sounds like' and 'looks like' alternatives and common keyboard-juxtaposition misspellings. Dates in a variety of formats must be accepted. Web server logs show that some people simply type in the date they plan to attend, but most search engines don't recognise the date or link the

date to events on that date. Essentially, you don't want the search engine to respond with a 'no entries found' message, but for it to ask to 'try again', offering alternatives or new options. Avoid offering advanced search functionality – maths graduates are declining in numbers and even they can't necessarily spell Alan Ayckbourn.

Resources

Web Word Wizardry A Net-Savvy Writing Guide, Rachel McAlpine, Ten Speed Press; 1st edition, 2001

E-commerce User Experience, Nielsen Norman Group, 207 Guidelines for E-commerce Sites: www.nngroup.com/reports/ecommerce/

E-commerce Research Room on Web Marketing Today website: www.wilsonweb.com/research/

Internet Ticketing advice on the Ticketing.org site managed by the Arts Marketing Association: www.ticketing.org.uk

Planning the website development project

Key questions to consider

- who is responsible in your organisation for managing the website?
- who do they report to and what budget is allocated?
- what skills and advice will you need to develop your website? How many of these can be provided internally and effectively?
- who will it be appropriate to recruit to provide skills and advice and how will you appoint them? Will they be freelancers, web development companies or a mixture of both? Should you seek a ‘one-stop shop’ solution?

Planning the website development project

Key points

- compile the web manager's outline job description and identify whether this will be an internal appointment by changing responsibilities in another post or a new post
- carry out an appropriate appointment process and agree the timetable for the web manager to prepare a project plan
- produce a matrix of the skills required and their likely source and prepare a checklist for discussions with freelancers and web development companies (you may need to produce a draft of your development brief to approach people with – see pages 105 to 116)
- plan visits, arrange interviews and collect references of candidates. Review websites on which they have worked and talk to the people who directly commissioned them
- ensure style guides at your organisation include a section on websites

Planning the website development project

How to plan the development of a website and identify the skills and the people you will need to work with on the project

It is clear that ultimate authority for the website is a matter for the board and senior management, who need to ensure an appropriate management solution and adequate budget are agreed. It is recommended that a senior member of staff is given responsibility and authority as web manager for the organisation. This need not be full time and could be incorporated within another post, but it is essential that it is publicly signalled, all staff are aware of the responsibility and there is a time allocation.

The web manager will need to manage both internal and external teams, relating internal staff to external assistance, so the ability to lead and manage a project, resolve issues quickly, and keep it on track will be important. It is fundamental that the web manager can resolve conflicts of priorities and implement an effective hierarchy on the website. Therefore, the web manager should report directly to the chief executive or through the head of marketing if that person clearly carries responsibility for all external communications. Marketing should have a major role in the website and marketing policies should inform many decisions about the character of the website.

The web manager should act as the project manager for the web development project, as well as holding ongoing responsibility for the website. It is important to understand that a web project is not a one-off event.

Project plan

The first responsibility is to prepare a project plan for the development of the website, to be signed off by senior management and the board. At the start of this process key decisions have to be made internally about the purpose and objectives of the website. With a firm view on the agreed primary purpose of the site, the project plan should comprise:

- key purpose and objectives of the website
- target markets
- key requirements of the technical and design solution in order to achieve the objectives and the primary purpose of the site, defining the needs not the solution
- staff and departments to be involved and the implications on their time
- key tasks and responsibilities, and the requirements for outsourced skills and knowledge
- approach to recruiting and working with third parties
- content required and how it will be produced
- arrangements for ongoing maintenance and management
- planned web marketing strategies to help achieve the objectives
- available budget and what it must cover
- timeline indicating each stage of the development process and the key dates
- how the website results will be measured and success evaluated

Note that planning and preparing the content for the site is a major piece of work in itself, and can catch by surprise those whose website is built before the content is ready.

The web manager will need to understand website architecture (see pages 105 to 116) before implementing the project plan. Key decisions are required on whether content is unchanging or dynamic, determining whether the website is static or database driven. External advice can be obtained to help make these and other decisions, starting with the budget.

Budgetary considerations

There is no simple answer to budget level, but there are two figures to consider: the initial set-up cost and the annual maintenance costs. A website is a new and extra responsibility, and both extra staff time and a budget must be allocated. Suggested expenditure figures are not helpful here because the budget for the initial set-up has to be calculated on the basis of the purpose and objectives for the website and therefore the requirements for structure and design. While static page websites have served some arts organisations well to date, it is inevitable that an in-depth web experience will need a database-driven content-rich site for most arts organisations, which will increase the initial set-up cost.

In the research for this guide, most arts organisations were found to have spent in the range of £3,000 to £30,000 (2002 figures) for largely static page sites, though you cannot be sure like is being compared with like. You will need to investigate the range for an appropriate budget for developing your website. Start by asking around your network of contacts for recommendations; visit the websites of similar organisations and contact the designer or developer of those that you like. If no company has been recommended to you, look in the Yellow Pages, Internet magazines and online directories to find possible companies to contact. Surf the web and contact the developers of sites that appeal to you. Most people will willingly tell you their development costs and may also introduce you to people to consider working with.

The budget for the website will need to cover:

Set-up costs

- web server and licences, if needed
- application software and licences, if needed
- web developer's fee
- content development
- specialist fees including graphic design, content writing, bulletin board configuration, etc
- e-commerce implementation
- domain name costs

Running costs

- hosting of the web server and ongoing licensing costs
- support and maintenance
- firewalls and flood protection (traffic management)
- e-commerce licences and operating costs, including banking services
- telecommunications
- content and design updates

Timeframe

Even if your website is to be a small static site, the timeframe for the entire development is likely to be three months or longer, typically six months. How will this impact on internal staff involved? Think about whether it will be advantageous to hold regular team meetings to manage the project, or if email and phone communication will be the most efficient method. Meetings and short presentations are recommended to help communicate ideas and thinking, show examples, and encourage feedback and debate.

Project team

Most web managers will need to work with at least one other company or freelance contractor on the website development project. Finding the right people to work with can be difficult, but it is the key to a successful project. You will need to have in your team, not necessarily on an in-house or full-time basis, the following skills:

- project management: overseeing the entire project and liaising with all members of the team and other parties such as the host Internet Service Provider (ISP) and relevant organisations
- proposal/brief writing: identifying the site's objectives and target audience, outlining the content and functionality, and developing a development, design and technical brief
- web development: depending on the technical complexity of the site, the skills required will begin with HTML (hyper text mark-up language) programming and could extend into other programming skills

- web architecture: planning the site's technical and navigational structure and organising the information
- design: creating a cohesive look-and-feel that is consistent with your organisation and reflects the site's purpose
- content creation and management: compiling all text copy and other content (photographs, video, audio) that will populate the finished site, and delivering all of this in a suitable format and process to the designer and developer
- site population: inputting the content into page templates, database or other framework created by the designer and developer
- quality assurance and testing: a thorough check of the entire site for errors and bugs
- content management: developing processes and systems prior to live date so that updating can begin smoothly once the site has been launched

Depending on the size and complexity of your site, you may be able to find one person or company externally who has most of these skills, and others internally who have some of the skills or are willing to learn them. If you don't have an existing relationship with a web development or design company or freelancer, start by doing the research suggested in the budget paragraph above. This should lead you to potential partners. If your project is for a static or a medium-sized interactive website, you may find that one or two freelancers can provide everything you need at a better price than a web development company. However, most web development companies draw on full-time employees as well as associates or freelancers, and can provide end-to-end website development services if you want a one-stop shop.

Web development company checklist

Begin first by following company guidelines on procurement procedures and obtain competitive quotes from more than one company. Once the preferred company or companies are identified, ask:

- ☐ how long has this company existed?
- ☐ what sites have they created and what do you like or dislike about them?
- ☐ will they allocate a project manager or account manager to your site development, and are you happy to work with this person?
- ☐ how will they keep the project on track?
- ☐ what do they expect of you? How many meetings? Where?
- ☐ have they introduced you to all the people who would be working on the website, and are you able to work with them?
- ☐ what sort of reporting and communication processes are they proposing for the development?
- ☐ how do they propose to evaluate success?

Beware of working with graphic designers. Some have made the effort to retrain for this different discipline, but many organisations with problematical websites can point to fundamental issues stemming from the work of the designers.

'Unfortunately, we have hired a generation of web designers who don't know anything about computing, or the principles on which the web is based, or the reasons for its success. In fact most of them are not web designers at all: they are graphic designers, or print designers, who have strayed into an area they don't understand. The worst of all are the trendies who think things should be "cool" rather than functional.'
Jack Schofield, Editor, Guardian On-Line

Planning web content and maintenance

Planning the content is one of the most important aspects of a web development project. Content is often underestimated by creators of websites as being merely the text that fills the gaps in the new website. However, the strategic decisions about the content and the management of the resources required to produce and maintain it are two of the most important responsibilities of the web manager.

Responsibility needs to be assigned for:

- coordinating the content at a high level (sourcing, compiling and commissioning)
- briefing content providers about the specific requirements of writing for the web
- generating new content
- editing the content to prepare for publishing on the web

It is very important that the web manager understands that repurposing text from printed brochures or press materials to provide content for a website is not a viable solution. The development of content should apply the different requirements of writing for the web.

Resources

Web Design on a Shoestring, Carrie Bickner, New Riders, 2003
Professional Web Site Design from Start to Finish, Anne-Marie Concepcion, F&W Publications, 2002

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.

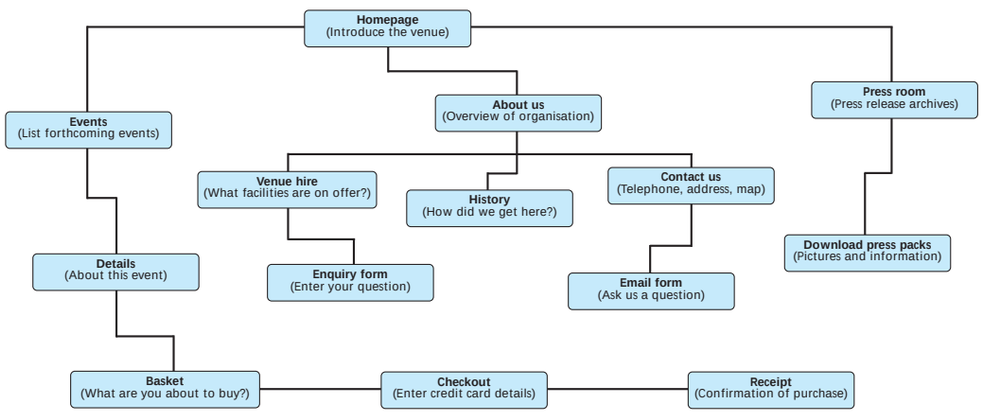
Investing more time at the beginning to present a fully completed, thought-through development brief, containing all the required information, eliminates misunderstandings at the outset and creates a clear framework for the work. This initial planning is easier while you are still in a strategic, not 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.

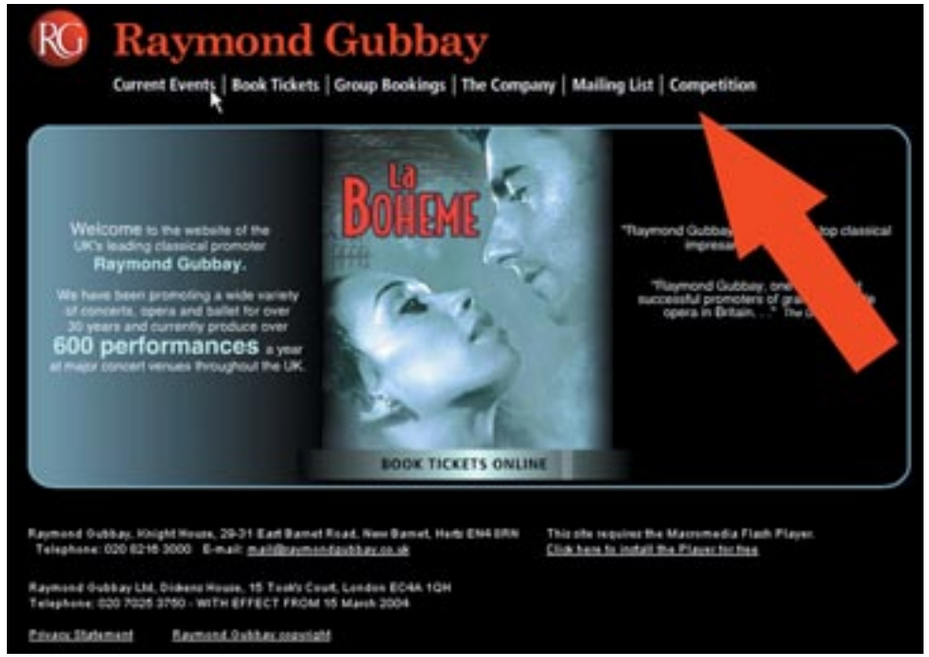
Sample site map



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.

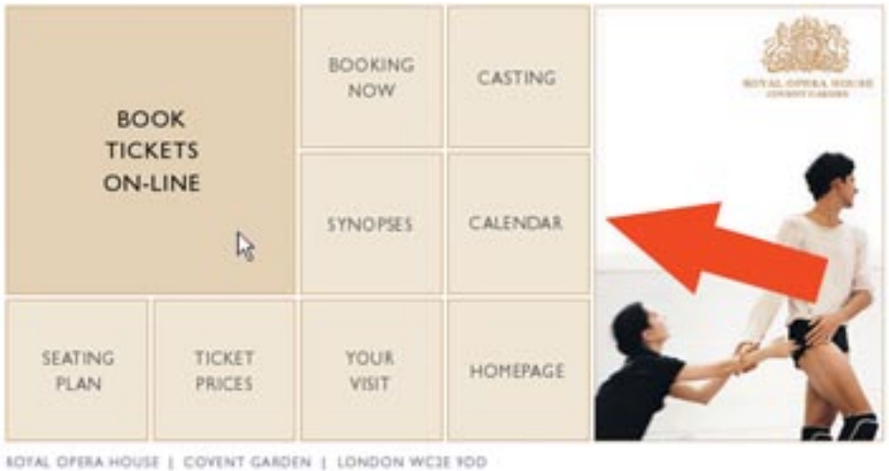
The following pages illustrate various ways of displaying navigation information.

www.nationaltrust.org.uk



www.raymondgubbay.co.uk

www.csm.linst.ac.uk



www.royalopera.org

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).

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) 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). 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).

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

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). 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), 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) sponsors the hosting of the Magdalena Project website, www.themagdalenaproject.org, which is based in Wales.

Internet magazine (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
JimWorld – services, tools and resources: www.jimworld.com
Internet magazine: www.internet-magazine.com/
UK Directory of ISPs: 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

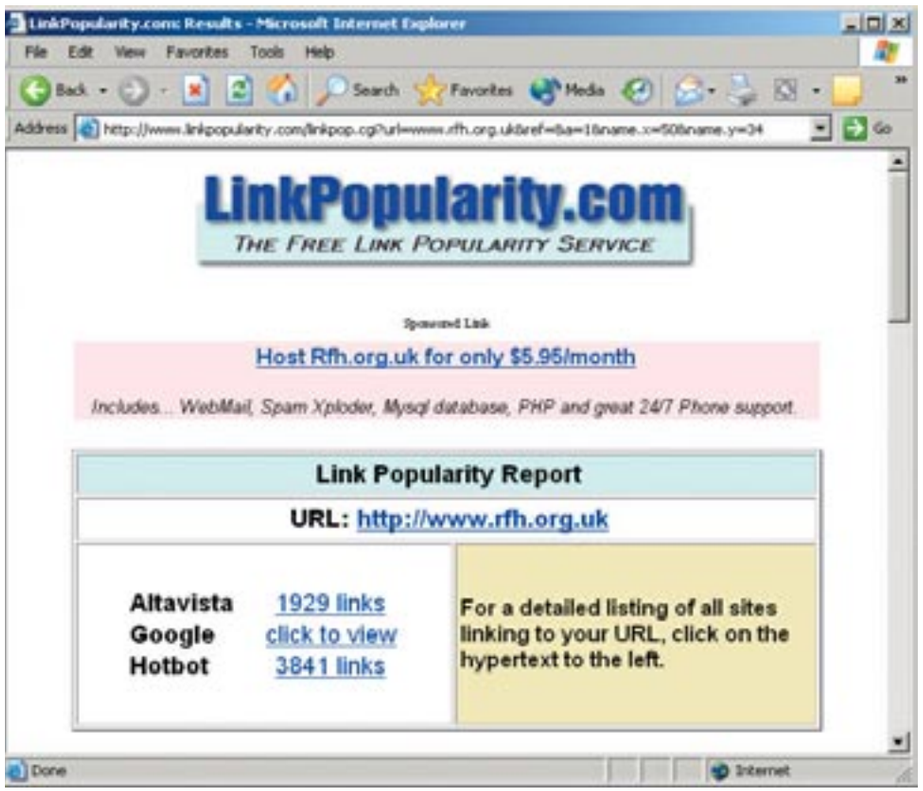
How you can monitor the success of your website and evaluate if it is achieving your objectives

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 and 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, 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.

Easyspace

Web Server Statistics for

www.blackheathhalls.com

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

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

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
Link Popularity Check: 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

Appendixes

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.

Broken links Links that go to pages that do not exist or are no longer available.

Browser A program used to view web pages. The most popular browsers are Microsoft Internet Explorer and Netscape.

Cache 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.

CGI Common Gateway Interface – a popular system for handling information entered into forms on a website.

Client A technical term for somebody receiving data from the web, normally the visitor to a website – half of the client/server relationship.

CMS 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.

Content The text, images, sound clips and video that people visit a website for, as opposed to the infrastructure that delivers it.

Cookies 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.

Crawlers Software used by search engines to browse the web, recording and indexing information about the content of pages, also sometimes called robots.

CSS 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.

Developers Computer programmers.

Dialup A connection to the Internet that uses a standard telephone line.

Dither 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).

Domain name 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.

Dot.com boom A period in the late 1990s that saw extensive investment in online businesses with unproven potential.

Download To receive files or information from a web server.

DPI Dots Per Inch (see Resolution).

Early adopters People who are quick to embrace new technology.

E-commerce Business that primarily takes place on the Internet.

FAQ Frequently Asked Questions – a page or set of pages containing the answers to the most commonly asked questions about a website.

Firewall A device or piece of software designed to protect your computer or network from unauthorised access.

Flash 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.

Font A typeface or lettering style.

FTP File Transfer Protocol – the normal method used by administrators to send files to and from a web server.

Fulfilment In e-commerce, fulfilment is the delivery of goods ordered. Many companies specialise in providing fulfilment services to online businesses.

Functionality The aspects of a website that *do* something, eg a search engine.

GIF 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.

Home page 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.

Hosting 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.

HTML HyperText Markup Language – the simple formatting language used for most web pages. HTML file names end in the extension .htm or .html

HTTP HyperText Transfer Protocol – the standard method of delivering content over the Internet from a server to a client.

Hyperlink 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'.

Internet A global network of computers that communicate using the same system of addresses (URLs).

Intranet An internal network that uses software like that used on the Internet to display information to users within an organisation.

IP address 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

ISDN 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.

ISOC The Internet Society – an international group dedicated to the continuing development of the infrastructure of the Internet.

ISP Internet Service Provider – a company that provides email, Internet access and hosting services.

Java A programming language devised by Sun bearing many superficial similarities to C and C++, not to be confused with JavaScript.

JavaScript A simple programming language designed to add functionality to web pages. Not to be confused with Java.

JPEG (JPG) 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.

JSP 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.

Leased line A fixed network connection between two locations, usually between an office and an ISP. The fastest (and most expensive) type of Internet connection.

Link See Hyperlink.

Link popularity 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.

Metadata Literally, information about information. On a web page, metadata is the information that describes the content of that page.

Metatags 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.

Modem Modulator and Demodulator – a device that allows computers to communicate with each other using normal telephone lines, most frequently used for dialup Internet access.

MPEG Moving Pictures Expert Group – a standard format commonly used to transmit video over the Internet.

Multimedia Information presented in multiple formats, eg text, images, audio and video.

Navigation The menus, tabs and buttons used to move around a website.

Netiquette A set of conventions for politely communicating online.

Open source '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.

Page views 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.

Palette 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.

PDF 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.

PHP Hypertext Pre-processor – an open source programming language used to create dynamic web pages from a database.

Populate To fill a website with content or insert data into fields in forms on a website.

Pop-ups 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.

Protocol A set of standards by which two devices (eg computers) communicate with each other.

QuickTime A video format devised for Apple Macintosh computers.

Resolution 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.

Robots See Crawlers.

Sans serif A term that describes a font with no extra ornamental strokes added to the end of lines, eg Arial or Helvetica.

Server (web server) A computer that 'serves' a website to visitors. They are usually owned or maintained by hosting companies.

Silver surfers Internet users over retirement age.

SMS Short Message Service – the facility on GSM networks used to send text messages of 160 characters between mobile phones.

Spam Unsolicited email, usually commercial marketing materials. Also used to describe inappropriate commercial or promotional material posted on message boards.

Splash page 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.

SQL Structured Query Language – a standard method of communicating with a database. SQL is used by numerous commercially available database products.

SSL Secure Sockets Layer – a widely adopted system, developed by Netscape, for the secure encryption of data in commercial transactions online.

Streaming 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.

Tags In HTML and XML, tags are instructions contained within <pointed brackets> that tell software what that text is and how it should be displayed.

Thumbnail A small version of an image, often linked to a larger one.

Title 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.

Usability	The extent to which a website can be used intuitively without learning how.
Upload	To send files or information to a web server.
URL	Uniform Resource Locator – the standard addressing system used on the web, also the specific address of a file or page eg www.ticketing.org.uk
Validation	Several bodies including the W3C offer online validation services that check that web pages meet the numerous standards for online compatibility and accessibility.
Vector graphics	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.
W3C	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 (www.w3.org).
WAI	Web Accessibility Initiative – a W3C project to promote accessibility online through technology, guidelines, tools, education, research and development.
Watermark	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.
Webmaster	The person in charge of a website.
WWW	World Wide Web – the part of the Internet that delivers hyperlinked pages.
WYSIWYG	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.
XML	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

Data Protection Act 1998: www.informationcommissioner.gov.uk

PageResource.com: www.pageresource.com

The Customer Expectation Gap, Michael Reene, 2002

SitePoint: www.sitepoint.com

Web Developer's Virtual Library: www.wdvl.com

Web Page Design for Designers: 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

Arts Marketing Association

The professional development body for those promoting the arts and cultural industries. For details see 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 audiencies to the arts, which ran between 1998 and 2003. Details can be found at www.artscouncil.org.uk/newaudiences along with practical tool kits and advice on developing audiences.

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